



Government of Newfoundland and Labrador
Department of Municipal Affairs and Environment

CERTIFICATE OF APPROVAL

Pursuant to the Environmental Protection Act, SNL 2002, Sections 16, 78 and 83.

Issued: December 1, 2017
Expiration: December 31, 2022

Approval No: WMS 17-12-001
File No: 839.CRS.001

Approval Holder: Central Regional Service Board
P.O. Box 254
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Attention: Mr. Ed Evans, C.A.O.

Re: Approval to operate a Regional Waste Management Facility to serve the Central Newfoundland Region

Approval is hereby given for the continued operation of a Regional Waste Management Facility located at Norris Arm North, including an engineered lined landfill for the disposal of municipal solid waste; a second landfill cell to accommodate incoming municipal solid waste from the Western, Northern Peninsula, Green Bay and Coast of Bays Regions; a permanent Household Hazardous Waste (HHW) depot; and a Construction and Demolition (C & D) landfill.

This approval does not release the holder from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies. Approval from the Department of Municipal Affairs and Environment (the Department) shall be obtained prior to any significant change in the design, construction, installation, or operation of the facility, including any future expansion of the works. This certificate shall not be sold, assigned, transferred, leased, mortgaged, sublet or otherwise alienated by the holder without obtaining written prior approval from the Minister.

This approval is subject to the terms and conditions attached hereto, as may be revised from time to time by the Department. Failure to comply with any of the terms and conditions may render this certificate of approval null and void, may require Central Newfoundland Waste Management (CNWM) to cease all activities associated with this certificate of approval, may place the CNWM and its agent(s) in violation of the *Environmental Protection Act*, SNL., 2002, c. E-14-2, and will hold the CNWM responsible for taking such remedial measures as may be prescribed by the Department. The Department reserves the right to add, delete, modify or revoke this approval at any time.


MINISTER

General

1. The Central Newfoundland Waste Management (CNWM) facility is intended to serve the municipal solid waste management of the Central, Western, Northern Peninsula, Green Bay and Coast of Bay Regions of the Province. Where a waste material presents a management problem, consultation with the Department is required to make accommodations, and achieve a solution.
2. Copies of all environmental standards/guidance documents are posted to the Department's website. www.env.gov.nl.ca/env/env_protection/waste/index.html
3. If different from the terms and conditions set out in the Department's environmental standards, those directly stated in the Certificate of Approval (Approval) shall apply.
4. A copy of this Approval shall be kept on site at all times.
5. All responsible personnel who are directly involved with operation and maintenance of the facility shall be provided copies of this Approval and shall be fully aware of the terms and conditions pertaining.
6. Separate approvals or an amendment to this Approval will be required for other waste management activities and/or facilities at this site.
7. The CNWM shall advise the Department or Service NL of any new participants joining or proposing to leave the regional waste management facility.
8. The CNWM shall immediately notify the Department or Service NL in writing of any change in the legal name, address, ownership, or facility operator's associated with the site.
9. Any proposed development within 3.0 km of the site shall be referred to the Department for review.
10. The CNWM shall develop a Municipal Solid Waste Management and Public Education Plan with respect to segregation of hazardous household waste; recyclable waste, and reutilization of C & D debris. Information regarding the education plan and advances in this regard shall be included in the annual report for the facility, and updates provided as changes and advancements are made.
11. Notwithstanding the content of this Certificate of Approval, where options for waste treatment/disposal are limited, the Department shall be consulted regarding accommodation of the waste.

Financial Assurance

12. The CNWM is responsible to ensure that appropriate and adequate financial assurances and/or environmental impairment liability and/or pollution abatement assurance and automotive insurance policies are in place for all operators contracted to support the operations of this waste management facility.

Application Submissions

13. The Central Regional Service Board (CRSB) submitted the following in support of this approval:
 - 1) 2016 CRSB Annual Report which includes: information on tonnage of residual waste, hazardous waste, C & D debris and recyclable materials by type/category received from each of seven transfer stations feeding into the site; and by source and locality; a summary of spills, upsets and complaints for 2016; and information on any procedural and operational

- changes, and updates with respect to staff training; and
- 2) a letter requesting renewals of Certificates of Approval for the engineered landfill (herein), HHW Depot, C & D Landfill; seven transfer stations and waste recovery facilities for the Town of Change Islands and the Town of St. Brendan's.

Legislation Standards and Guidelines

14. The activities associated with this facility may involve, but not be limited to, the following provincial Acts and Regulations as amended:
- *Environmental Protection Act RSNL, 2002 as amended*
 - *Air Pollution Control Regulations, 2004*
 - *Storage and Handling of Gasoline and Associated Products Regulations, 2003*
 - *Used Oil Control Regulations, 2002*
 - *Halocarbon Regulations, 2005*
 - *Pesticides Control Regulations, 2007*
 - *Water Resources Act, 2002 as amended*
 - *Environmental Control Water and Sewage Regulations, 2003.*
 - *Occupational Health and Safety Act RSNL, 1990*
 - *Dangerous Goods Transportation Act, 2006*
 - *Municipalities Act, 1999*
 - *Regional Service Board Act, 1990*
 - *Transportation and Works Act, 1995 (and Highway specifications as amended)*
15. The activities associated with this facility may involve, but not be limited to, the following Federal Acts and Regulations as enforced by the respective regulatory agencies:
- *Canadian Environmental Protection Act and Regulations*
 - *Transportation of Dangerous Goods Act and Regulations*
 - *Fisheries Act*
 - *National Fire Code*
 - *Health of Animals Act*
 - *Fertilizers Act*

Quality Control/Quality Assurance

16. Facility design, construction and operation must incorporate acceptable quality control/ quality assurance (QC/QA) protocols and provide for changes if necessary to maintain and improve performance. Appropriate protocol will include testing and inspection procedures and reports, with a deficiency summary, itemized corrections and any other information requested by the Department. Consideration shall be given to implementation of an environmental management system following the "Plan- Do- Check- Revise where necessary" scheme with a view to continual improvement.

Site and Facility Construction/Maintenance

17. Environmentally sound practices are required in all aspects of construction and ongoing maintenance activities, including facility construction and landscaping. This includes: appropriate storage, recycling and disposal of litter, debris, hazardous or special waste material, waste dangerous goods and other waste associated with construction and ongoing maintenance activities.
18. Erosion and sediment control measures are to be installed and maintained as required, such that watercourses or water resources adjacent to and downstream of the site are protected from siltation. The *Environmental Protection Act* prohibits release of a material that may cause an adverse effect.

19. All areas exposed during construction, and any temporary diversion or control structures such as berms, ditches, etc., shall be stabilized as soon as practical.
20. When dewatering of construction areas is required, the water must not be discharged directly to a watercourse or water resource, nor to a conveyance (a ditch, culvert, manhole) that may lead to a watercourse or water resource without confirmation to meet discharge limits.
21. Grubbing and excavated material shall be used for ongoing site rehabilitation, or stored for future use in a manner that will not result in sedimentation of adjacent and downstream watercourses or water resources.
22. Sufficient area at the weigh scales, for incoming materials and for safe movement and queuing of vehicles and equipment, shall be maintained throughout the site.
23. Site access roads shall be maintained to minimize dust generation. The use of dust suppressants other than water or calcium chloride shall require approval of the Director. CNWM shall use best management practices when applying calcium chloride or any other approved dust suppressant.
24. The Department reserves the right to require the installation of infrastructure for further treatment of releases to the environment where the discharge limit(s) is/are exceeded.
25. All necessary engineering documentation/facility plans, drawings and specifications shall be submitted to, and approved in writing, by the Department prior to the construction, modification or expansion of 1) additional containment cells, 2) landfill gas management systems, 3) sludge handling facilities, 4) leachate treatment systems, 5) facilities for processing recyclables or managing organics, 6) storage of waste including household hazardous waste, 7) special waste disposal cells/locations, or any other construction activity at the facility.

Operation and Maintenance of a Regional MSW Landfill

26. Unsupervised landfill disposal is not permitted. Incoming waste shall be routinely scrutinized to ensure unacceptable waste is not received at the site.
27. Regular and uniform compaction of waste is recommended to maximize utilization of air space and minimize voids.
28. The CNWM shall ensure that all exposed waste disposed to containment cells is covered with a minimum of 150 mm of clean soil (or alternate daily cover that has been pre-approved in writing by the Department), as a minimum, at the end of each operating day.
29. Intermediate cover, which is placed when a cell is filled, shall consist of at least 450 mm depth of soil and shall be enhanced to the standard for final cover if not overfilled within one year of placement.

Operation and Maintenance of a Construction and Demolition Landfill

30. Central Newfoundland Waste Management (CNWM) has designated a former quarry located at the Norris Arm North Regional Waste Management Facility for disposal of inert construction and demolition (C & D) waste from the Central Region of the Province. Where a waste material presents a

management problem, consultation with the Department is required.

31. Compliance with the Environmental Standards for Construction and Demolition Waste Disposal Sites (GD-PPD-050.3) is required.
32. Only inert C & D debris may be disposed at the site.
33. Incoming waste shall be routinely scrutinized to ensure unacceptable waste is not received at the site. Unacceptable waste includes C & D debris that is clearly contaminated with municipal solid waste, organic waste or potentially hazardous industrial waste, and it shall be redirected to an appropriate part of the regional waste management facility; or as recommended in the facility contingency plan; or as determined in consultation with the Department and other responsible agencies as applicable.
34. CNWM shall provide supervision when any material is being disposed at the c&d facility, including the areas for temporary storage for materials management and recyclables.
35. Storage of material for reuse or recycling may be conducted in a safe manner as long as the material remains in a usable condition. Details of on-site storage inventory and of transfer or processing shall be provided to the Department as part of the annual report.
36. Temporary stockpiling of incoming material shall be restricted to levels considered safe for pile stability, occupational health and safety considerations, and to minimize risk from fire.
37. C & D debris shall be compacted in cells separated by layers of cover material at least every three months or for every 1000 cubic metres of material. Waste placement and covering shall take place so that exposed surface area does not exceed 2000 square metres at any one time. Guidelines with respect to intermediate and final cover apply where utilization of the site may be interrupted.
38. Debris containing drywall is not to be used for landfill cover to avoid the production of hydrogen sulfide under wet anaerobic conditions.
39. A "special waste" disposal area may be designated for the disposal of demolition debris that could present an occupational health and safety hazard due to airborne contaminants from dust if containment is disrupted. Material of this nature may be contaminated with among other things low levels of lead based paint, wood and construction dust, fibreglass and asbestos containing material. The debris shall be secondarily contained by wrapping in uncompromised six mm polyethylene. Signage and precautions shall be put in place to permanently demark this area and prevent re-excavation.
40. Additional information on management of specific waste streams at the C & D landfill site is provided in Appendices A, B, C and D.

Operation and Maintenance of a Household Hazardous Waste Depot

41. CNWM has designated a management and collection site for household hazardous waste located at the Norris Arm North Regional Waste Management Facility. The site consists of an asphalt pad with enclosed trailer containment storage areas where hazardous materials are accepted from area residents, and appropriately contained, stored and packaged for transportation to approved recycling and/or final disposal locations by a licensed hazardous materials transporter. Onsite staff are trained in hazardous materials management, occupational safety and emergency response and oversee all waste received at

and shipped from the site.

42. Compliance with the Department's most recent version of GD-PPD-059 Environmental Standards for Permanent Household Hazardous Waste Depots is required.
43. Separate approvals or an amendment to this Approval will be required for additional storage, management or processing of waste at this site.
44. Staff shall be trained in the handling of hazardous waste, and the associated workplace hazards; shall be properly equipped with and trained in the use of Personal Protective Equipment; shall abide by applicable occupational health and safety guidelines and legislation at all times; and, shall be familiar with environmental health, safety and emergency contingency plans, spill or accidental release response protocols, equipment and contact information.
45. Clear signage shall be in place, and information shall be made available to the public on safe containment, segregation and disposal practices for hazardous household products and resultant waste materials.
46. Only hazardous waste from residential households, or residential in origin may be accepted for management and transfer to appropriate disposal at this site. Only household hazardous waste (HHW) which can be safely stored, and appropriately recycled or disposed is to be accepted.
47. Sufficient area shall be maintained for safe movement of vehicles, and operation of equipment.
48. The CNWM shall provide supervision when any material is being disposed to or removed from the facility to ensure unacceptable waste is not received at the site.
49. Only HHW that can be safely stored and appropriately recycled or disposed shall be accepted. Detailed records of hazardous waste materials that are redirected or rejected shall be maintained.
50. A written policy on waste acceptance including a list of acceptable and unacceptable hazardous waste by category, volume and means of containment must be established. This will also include provision to reject and redirect any excluded waste. The facility contingency plan shall address waste redirection.
51. Questions regarding the acceptability of a waste material shall be directed to the Regional Service NL or to the Department. Due to the hazardous nature of materials stored at the depot, the 'precautionary principle' shall prevail.
52. Where it is considered reasonably safe to do so, established methods and procedures shall be adhered to determine the hazardous nature of waste materials of unknown origin or mixtures. Only adequately trained personnel shall conduct these established methods and procedures.
53. The following shall NOT be accepted at the HHW depot:
 - a) biomedical wastes;
 - b) sharps;
 - c) asbestos containing material
 - d) radioactive material (including low level radioactive material or naturally occurring

radioactive materials (NORMs), with the exception of residential household smoke detectors;

- e) organic waste
- f) special waste;
- g) international waste;
- h) unidentifiable or unclassifiable materials.

- 57. Storage structures must comply with national and municipal fire codes and building codes.
- 58. All holding tanks for used oil shall be approved by Service NL as per the *Used Oil Control Regulations*.
- 59. Spill containment areas must be designed to keep incompatible materials separated and be constructed of materials that are compatible with the stored waste. The secondary containment areas must have the capacity for the total volume of waste storage capacity.

Operations and Maintenance Manuals/Plans

- 54. The CNWM shall develop and maintain Operations and Maintenance Manuals/Plans in accordance with the Department's General Environmental Standards for MSW Management Facilities/Systems specific to each facility associated with the Regional Site/System.
- 55. All site operations are to be conducted in accordance with up-to-date facility-specific operations plans approved by the Department. Changes to operations shall be noted in the facility annual report and updates filed with the Department as appropriate. The goal is to always maintain a high level of operational efficiency with minimal adverse environmental impact. A non-exhaustive list of operations and maintenance manual inclusions is provided in the applicable Department Environmental Standards documents as posted on the Departmental website. The purpose of the Facility Operations Plan is to ensure facility operators and employees are trained and are clear on how daily operations proceed, that routine maintenance is conducted, and that contingency plans are appropriately enacted.
- 56. Details of any non-compliant material brought to any part of the facility and removed at the inspection/holding area shall be recorded including: date of delivery, material type and quantity, origin and owner, name of transporter, transport vehicle identification and contact information. A contingency plan shall be in place to ensure that non-compliant material is refused and appropriately redirected.

Landfill Gas Management

- 57. Landfill gas collection work and equipment, if and when installed, shall be in accordance with the latest versions of the Code for Digester Gas and Landfill Gas Installations CAN/CGA-B105-M93 and CAN/CSA-B149.3.

Surface Water Management

- 58. The CNWM shall ensure that site run-on is minimized by appropriate drainage ditching and sloping; and that run-off from the site does not detrimentally impact off-site receptors.
- 59. The CNWM shall ensure that surface water at the site that has not been in contact with leachate or solid waste, bypasses the leachate collection-storage-treatment system, and is directed to the engineered wetland or the storm sewer drainage system from the site. Any water discharged from the

- site shall meet discharge water criteria.
60. Side slopes of disposal areas shall be properly stabilized and maintained to limit erosion; and any final cover applied shall be sloped to ensure positive drainage and prevent pooling of water on the surface.
 61. No authority is granted by this Approval to enable the discharge of surface water beyond the property boundary and onto adjoining lands without the authorization of the affected landowner(s). It is the responsibility of the CNWM to ensure that the authorization of said landowner(s) is current and valid. Failure to retain said authorization may result in this Approval being null and void.
 62. The Department shall be advised where it is necessary to construct a sedimentation pond to treat runoff from the site.
 63. Sampling sites for discharge of surface water runoff shall be approved by the Department, and shall not be moved, relocated or otherwise altered without written permission.
 64. The Department reserves the right to require changes to the sampling program where deemed necessary.
 65. The CNWM shall be required to mitigate significant adverse impacts to receiving watercourses which are impacted as a result of point source and non-point source discharges attributed to the facility.

Leachate System Management

66. Any changes or alterations to the leachate collection system shall be submitted to the Department for review and prior approval.
67. The leachate collection system shall be capable of maintaining a maximum head of 300 mm above the liner excluding the leachate sumps, during routine operations and be sloped to allow the leachate to drain.
68. The leachate collection system shall:
 - a. be of suitable infrastructure to handle storage, treatment, and discharge volumes anticipated;
 - b. be hydraulically separate from the facility's storm water system;
 - c. function year round;
 - d. function effectively throughout the lifespan of the landfill;
 - e. be equipped to record instantaneous and total flows;
 - f. have storage capacity to accommodate a 100 year storm event for the drainage basin;
 - g. be chemically compatible with the waste and leachate characteristics;
 - h. provide access for inspection, monitoring flow and head; controlling flow and cleaning;
 - i. function effectively under dynamic and static loading events for all development phases;
 - j. use geosynthetic fabrics specified for leachate generation/ flow into post-closure phase; and
 - k. be designed to prevent the passage of fine sediment into and any blockage of piping systems.
69. All leak detection systems shall be equipped with high level indicator alarms. Staff shall be trained for response procedures once an alarm is sounded. These details shall be included in the Facility Operations Plan. Any leachate collected as a result of liner malfunction shall not be recirculated unless approved by the Department in a contingency plan.

70. Provision shall be made to characterize and address leachate quality that may exceed the installed wetland treatment capacity. The Department may be consulted on this issue to ensure that discharge water quality criteria are adhered to.

Discharge Water Quality

71. Water discharged from the site shall meet criteria limits as set out in the *Environmental Control Water and Sewage Regulations, 2003*, or be within acceptable limits as per the latest edition of the *Canadian Environmental Quality Guidelines (CEQG)* for the protection of Freshwater Aquatic Life (FAL).
72. Effluent discharge criteria are defined in the following table, Table 1. Discharge water not meeting these criteria shall be treated to meet criteria limits prior to discharge.

Table 1: Effluent Discharge criteria (all units are mg/L unless otherwise noted)			
Parameter	Maximum Allowable Range	Parameter	Maximum Allowable Range
Total Dissolved Solids (TDS)	1000	Mercury	0.005
Total Suspended Solids (TSS)	30	Nickel	0.5
Total Petroleum Hydrocarbon (TPH)	15	Nitrates	10
Arsenic	0.5	Ammonia	2.0
Barium	5.0	Phenols	0.1
Boron	5.0	Phosphates (total as P ₂ O ₅)	1.0
Cadmium	0.05	Selenium	0.01
Chromium	1.0	Sulfides	0.5
Copper	0.3	Silver	0.05
Cyanide	0.025	Zinc	0.5
Iron	10	pH	5.5 – 9.0 pH units
Lead	0.2	Radium 226	0.37 Bq/L

73. When discharging any water to fresh water bodies consideration shall be given to critical periods for resident, anadromous, and catadromous fish. Critical periods are those periods during which species of fish are known to migrate, spawn, incubate or hatch. Consult with the Department of Fisheries and Oceans Canada at (709) 772-5488 in this regard.
74. For any wastewater discharges to a sewer which does not lead to a sewage treatment facility, the limits established under Schedule A of the *Environmental Control Water and Sewage Regulations, 2003* apply.

Effluent Monitoring Program

75. CNWM shall perform an Effluent Monitoring Program as per the schedule listed in Table 2 below. Analytical results shall be submitted as per the Reporting section.

Table 2: Effluent Monitoring Schedule		
Location	Parameters	Frequency
SW-9 (Final discharge point)	pH, TSS, nitrate, phosphorous, BOD	Monthly
	Water Chemistry Analysis	Quarterly
Influent from Landfill	pH, TSS, nitrate, phosphorous, BOD	Monthly

TERMS AND CONDITIONS FOR APPROVAL NO. WMS 17-12-001

Effluent from landfill	pH, TSS, nitrate, phosphorous, BOD	Monthly
Lift Station	pH, TSS, nitrate, phosphorous, BOD	Monthly

Water Chemistry Analysis

76. Four times per calendar year and not less than thirty (30) days apart, CNWM shall perform Water Quality Analysis as per Table 3. Refer to Table 3 for the locations and required parameters. Analytical results shall be submitted as per the Reporting section. Sampling shall commence as soon as sites become accessible.

Ref No:	Location	Parameters
	847-SW1-Background	General Parameters: temperature, dissolved oxygen (DO), nitrate + nitrite, nitrate, nitrite, pH, TSS, colour, sodium, potassium, calcium, sulphide, magnesium, ammonia, alkalinity, sulphate, chloride, turbidity, reactive silica, orthophosphate, phosphorous, DOC, conductance, TDS (calculated), phenolics, carbonate (CaCO ₃), hardness (CaCO ₃), bicarbonate (CaCO ₃) Metals Scan: aluminium, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, mercury, nickel, selenium, silver, strontium, thallium, tin, titanium, uranium, vanadium, zinc Note that TSS is not required for groundwater i.e. MW locations.
	SW1 to SW9	
	MWH to MWL	

Sampling, Laboratory Analysis and QA/QC

77. Unless otherwise approved by the Department, surface, groundwater and leachate sampling shall be conducted, as a minimum, according to methods described in *Sampling of Water and Wastewater-Industrial Effluent Applications GD-PPD-066*.
78. Unless otherwise stated herein, all liquid and solids analysis performed pursuant to this Approval shall be done by a contracted commercial or in-house laboratory as per the *Accredited and Certified Laboratory Policy (PD:PP2001-01.01)*.
79. The location of each sampling point shall remain consistent over the life of the monitoring programs. Using a GPS or similar device, the northing and easting of each sampling location shall be recorded and submitted to the Department.

Monitoring Alteration

80. The Department has the authority to alter the monitoring programs or require additional testing at any time when:
- a) pollutants might be released to the surrounding environment without being detected;
 - b) an adverse environmental effect may occur; or
 - c) it is no longer necessary to maintain the current frequency of sampling and/or the monitoring of parameters.
81. The CNWM may, at any time, request that the monitoring program or requirements of this Approval be altered by:
- a) requesting the change in writing to the Director; and

b) providing sufficient justification, as determined by the Director.

82. The CNWM shall bear all expenses incurred in carrying out environmental monitoring required under the terms and conditions of this Approval.
83. Any new and relevant information respecting any adverse effect that results or may result, from any activity to which the Approval relates, and that comes to attention after the issuance of the Approval shall be submitted to the Department in a timely manner.
84. The requirements of this Approval shall remain in effect until altered, in writing, by the Department.

Non-Compliance

85. The Department and/or Service NL shall be notified immediately of any incidents of non-compliance with this Approval.

Further Assessment

86. The Minister may at any time, with reasonable notice, require the CNWM to conduct or have conducted environmental studies, site assessments, sampling, testing, or investigations where, based upon reasonable and probable grounds, the Minister is of the opinion that the waste management facility may have had, or has the potential to have, an adverse effect on the environment.

Environmental Emergency Health and Safety Contingency (EHS)

87. The CNWM shall maintain a contingency plan for environmental and health and safety emergencies on file with Service NL and the Department and provide annual updates. An updated copy of the contingency plan shall be kept on site at all times.
88. For after-hours emergencies and spill reports call: **1-800-563-9089 or (709) 772-2083.**
89. All appropriate operations training and health and safety procedures shall be constantly maintained at the site in accordance with applicable legislation and the Department's environmental standards for the waste management facility in question.
90. Incidents that could occur and would require specific response planning include: contingency for unacceptable waste; equipment failure; waste or hazardous materials incidents/ spills; fire; air quality or odour problems, vector infestation. In the event of problems with wildlife encounters (e.g. black bears); the **District office of the Department of Justice & Public Safety should be contacted at (709) 729-8377 for encounters east of the Bay D'Espoir Highway. For wildlife encounters west of the Bay D'Espoir Highway, contact (709) 637-4068. These numbers are operated on a 24/7 basis.**

Environmental, Aesthetic, Nuisance, and Housekeeping

91. Existing tree screens, outside the firebreak, that may conceal the site from public view are to be maintained.
92. Access roads to the site shall be kept free of waste material and litter shall be controlled at all times.
93. Supervision shall be provided for all reception, placement, managing and, where applicable covering of waste at the facility.

94. The waste material disposal area shall be fenced to contain wind-blown debris and litter accumulations shall be cleared regularly from the fencing and the surrounding area.
95. All vehicles transporting waste and debris to, from, or on-site shall be enclosed, or covered with close fitting tarpaulins to prevent waste and debris from spilling, and that they have tailgates and boxes that are sealed against leakage.
96. A program to manage and control vectors, rodents, birds and wildlife that may scavenge or develop populations associated with the waste management facility shall be developed.

Prohibitions and Restrictions

97. Prohibitions refer to materials that shall not be accepted for disposal at this waste management facility. Materials are banned from disposal when they have characteristics that make them a risk to workers or to the environment. Materials are banned for disposal when suitable waste diversion services are available which include re-use, recycling, and reduction of the amount of material that goes to landfill. It is the responsibility of site managers and staff to decline acceptance of material when unacceptable material is openly visible and identifiable.

It is not expected that site managers, inspectors or staff would search through MSW where banned material is suspected but not openly visible and identifiable, since this could create potential risks to worker health and safety.

Materials banned for landfill disposal may be handled or stored in designated areas of the facility where protocols for safe handling and storage are defined and approved by the Department in separate Certificate of Approvals (e.g., C & D waste, HHW).

98. Operational restrictions ensure that modern waste management practices are implemented. Similar to disposal bans, they aim to minimize adverse environmental effects, enhance worker health and safety, and implement best practices in modern waste management.
99. **Prohibitions – Disposal Bans:**

The following material shall NOT be accepted for disposal:

- a) Beverage containers suitable for reuse and recycling as defined by Multi-Materials Stewardship Board (MMSB) programs;
- b) Used tires covered by MMSB 'Used Tire Recycling Program';
- c) Waste Paint as covered by MMSB Programs;
- d) Electronic goods covered by a stewardship program shall not be disposed to landfill. This material may be collected on behalf of the organization responsible, or redirected to an approved collection point. Contact information, a list of accepted products and service providers in NL is provided at <http://www.mmsb.nl.ca/recyclingprograms/electronic-waste/> . Electronic waste that is damaged (e.g. broken monitors and cathode ray tubes), or dismantled to potentially expose hazardous constituents, is considered to be hazardous waste.;
- e) Bulk liquids of any kind. (With the exception of used oil, which may be accepted where a registered and approved used oil storage tank system is in place.)
- f) Household Hazardous Waste;
- g) Biomedical Waste;

- h) Specified Risk Material as defined in Waste Management Strategy guidance documents Appendix (http://www.env.gov.nl.ca/env/env_protection/waste/appendix_d_definitions.pdf). It includes the skull, brain, trigeminal ganglia (nerves attached to the brain), eyes, tonsils, spinal cord, and dorsal root ganglia (nerves attached to the spinal cord) of cattle aged 30 months or older, and the distal ileum (portion of the small intestine) of cattle of all ages. These cattle tissues, if infected are capable of transmitting bovine spongiform encephalopathy (BSE), or mad cow disease if added to animal feed, pet food or fertilizer.
- i) Refrigeration, air conditioning and fire extinguishing equipment which contain regulated substances, as defined in the *Halocarbon Regulations* Schedules A-E. These materials may be acceptable when protocols are in place, as detailed in the section 101. (h).
- j) Fuel Storage Tanks except when protocols are in place for proper handling storage, and disposal; as detailed in the section 101. (i).
- k) NORMS which might be found in drilling or excavating materials.
- l) Radioactive material is banned from disposal and is separately regulated by the Canadian Nuclear Safety Commission. Radioactive material is found in household material such as smoke detectors.;
- m) Recyclable material destined or suitable for recovery at the Material Recovery Facility.
- n) Waste streams that are part of a legislated recycling or diversion program shall not be accepted for disposal unless approved by the Department.
- o) Any mixture or combination of the above restricted waste is also restricted or prohibited.

100. Operational Restrictions:

- There shall be no incineration or open burning of any kind.
- Only waste from the area of service identified in the approval may be received at the facility unless specifically authorized by Service NL and approved by the CNWM.
- All waste transporters and vehicles utilizing the waste management facility must cover or tie down waste in accordance with the *Cargo Securement Regulations (CSR)* under the *Highway Traffic Act*.
- All vehicles entering CNWM facilities shall adhere to the *CSR*.
- The CNWM shall establish and implement a program to educate waste transporters on the requirements of the *CSR*.
- The CNWM shall work with the Department to develop a plan for compliance with the *CSR*, which may include such measures as denying access to non-compliant vehicles.
- The CNWM may be required to report non-compliance with the *CSR* to regional enforcement agencies, subject to the provisions of the plan established under iii).

101. Exceptions to disposal bans where management protocol apply:

- a. All non-program tires shall be accepted for disposal at the C & D Landfill. Non program tires include all-terrain (ATV), or off the road (OTR) vehicle tires, tires used on rolling stock equipment used in the agricultural, forestry, industrial/construction and mining industries. These tires are not collected under the Used Tire Recycling Program by the MMSB. If not approved for specific recycling applications, disposal to landfill is acceptable.
- b. An exception may be made for the collection and storage of small quantities of smoke detectors that contain radioactive material. This material can be accepted at household hazardous waste depots only with prior approval from the Department.
- c. Special waste is defined by Appendix D of waste management strategy guidance document GD-PPD-063.3 as any waste material that requires special treatment or disposal precautions, due to its nature, quantity, volume, potential to react and/or potential to produce an adverse

effect. Examples include, animal carcasses/ mortalities or road kill, asbestos containing material, fish plant waste, commercial or industrial waste streams etc. Special waste shall be accepted only upon prior approval from Service NL. Service NL will define the safe handling and disposal guidelines, technical recommendations, and roles of other regulatory agencies which shall be adhered to in all cases.

- d. Asbestos containing material (ACM) containing friable asbestos, accepted for disposal at the facility, shall be directed to the Construction and Demolition Landfill and handled by personnel who are trained and properly equipped with personal protective clothing and respirators. ACM shall be managed in accordance with the guidance document entitled: Asbestos Waste Disposal (GD-PPD-033.1).
http://www.env.gov.nl.ca/env/env_protection/waste/guidancedocs/asbestoswastedisposal.pdf
- e. Acceptance of tires under the Used Tire Recycling Programs for temporary storage is limited to 100 tires per site with the prior approval of the Department. The MMSB provides a collection service and shall be contacted at 1-800-901-6672. Additional information on tire storage can be found on the Departmental website. Storage by MMSB of surplus used tires is regulated under a separate certificate of approval.
- f. Vehicle wrecks and scrap metal shall be directed to recognized metal salvage and recycling operations.
- g. White metal wastes, such as freezers, refrigerators and stoves may be appropriately stockpiled in a separate area, pending at least semi-annual transport to a recycling operation. Metals shall be stockpiled in a neat and tidy fashion and not exceed 90% storage capacity. Additional information is found in the Environmental Standards for Transfer Stations.
http://www.env.gov.nl.ca/env/env_protection/waste/transfer_stations_july2010.pdf
- h. Equipment containing regulated substances such as halocarbons, can be stored for recycling at a waste disposal site if the regulated substance (s) is (are) recovered by a person approved under the *Halocarbon Regulations* and shall be labelled "Halocarbon Free".
- i. Fuel storage tanks (commercial or residential) must be drained of product prior to entering the site and shall only be accepted at the metal storage area. The CNWM must submit a plan if draining of any fluids is undertaken and stored on site. If deemed unacceptable for recycling, prior to landfilling, fuel tanks and drums shall have confirmation that they have been purged of product, tank bottom sludge and vapour. The tank must also be cut in half or sufficient openings cut in the tank to prevent the accumulation of vapour and to accommodate visual inspection. If CNWM would like to develop a fuel storage tank management program, the Department shall be contacted to amend or issue an approval.

The Department reserves the right to amend this approval, to ban disposal of waste streams where and when recycling and diversion programs exist as per amendments to the *Waste Management Regulations* and the *Waste Diversion Regulations*. Any recyclable or waste material that is banned from landfill disposal shall be appropriately redirected.

Notwithstanding all of the above, where options for waste treatment/disposal are limited, the Department shall be consulted regarding accommodation of the waste.

Site Security and Signage

102. Unauthorized access to the waste management site shall be controlled. Measures may include fencing (wire mesh with a maximum opening of 20 cm), and shall include a secure gate or barrier at the site entrance (minimum opening of 8.5 m) with appropriate, highly visible signage to inform the public of acceptable waste materials, hours of operation, telephone number for contact and

containing a "No Scavenging" stipulation.

103. An operator shall be kept on duty when and if the site is open to the public. The gate must be locked shut when the operator is not in attendance.
104. Areas shall be allocated and signs posted designating separate areas for the transfer, temporary storage and recycling or disposal of construction debris, white goods, municipal solid waste, and other approved waste as applicable.
105. A firebreak may be required around the perimeter of the site, please check with the authority having jurisdiction.

Noise

106. The CNWM shall manage noise levels at the facility so as to comply with recommended guidelines under the *Occupational Health and Safety Act*.
107. Complaints about noise from nearby area residents (off-site) shall be responded to and details recorded.
108. If complaints regarding noise from facility operations on or off the site are received, monitoring of sound levels may be required by the Department, and mitigation measures may be required.

Air Emissions

109. Any kind of incineration or open burning is strictly prohibited. The CNWM shall comply with the *Air Pollution Control Regulations, 2004* at all times.
110. Dust generation shall be minimized on site.
111. Odour control measures shall be incorporated into the facility.
112. Numerical or quantitative limits on odour may be established at the discretion of the Department if odour impacts beyond the property boundaries are deemed to be excessive.
113. Standard procedures to address odour complaints associated with the facility shall be established as part of the Operations Manual and would include:
 - a. Immediately investigate the cause of the complaint and undertake immediate and appropriate action, if necessary, to correct the problem.
 - b. Record all odour complaints and document the date, time, name, address and telephone number of the individual lodging the complaint. The record shall also state any cause of the odour and the action taken to correct the problem.
 - c. Record wind direction, wind speed, temperature, humidity and other atmospheric conditions at the time of the occurrence which resulted in a complaint.
 - d. Records of odour complaints shall be made available to the Department upon request.
114. A plan to reduce or cease odour generation shall be submitted at the request of the Department.

Service NL

115. Through a Memorandum-of-Understanding the Department has authorized Service NL to act on its behalf in inspecting and/or auditing the operation of waste management facilities, for compliance under this approval and all applicable provincial Acts and Regulations. The Regional Service NL Office may be used as the local point of contact in all cases. Service NL may contact the Department as necessary for review and consultation on monitoring results, inspections, reports, and changes or amendments to the Approval.

Reporting

116. Monthly reports containing the environmental compliance monitoring and sampling information required in this Approval shall be received by the Director in digital format within 30 calendar days of the reporting month. All related laboratory reports shall be submitted with the monthly report in XML format and Adobe Portable Document Format (PDF). Digital report submissions shall be uploaded through the Department's Environmental Data Management System web portal. The Pollution Prevention Division shall provide details of the portal web address and submission requirements.
117. The annual report shall be submitted to the Department by January 31, each year summarizing facility activities of the previous year. The information to be submitted is described in the Department's Environmental Standards and includes as follows and where applicable.
- a. quantity, type, source (origin) and carrier of waste received;
 - b. quantity and type of materials recycled;
 - c. quantity of residual material received at or transferred to the regional landfill
 - d. quantity and type of waste dangerous goods removed and the final disposal site;
 - e. records of any waste diversion;
 - f. a summary of the water quality monitoring results for the sedimentation pond, surface water, and groundwater monitoring program, if applicable. Data must be tabulated in spreadsheet format and include a comparison to relevant guidelines;
 - g. updated drawings showing the monitoring well locations, latest contours and groundwater flow direction;
 - h. an assessment, where applicable, of the environmental effects monitoring program by a qualified consultant;
 - i. a summary of any upsets or spills at the facility;
 - j. all records of non-compliance and fees charged for non-compliance incidents in tabular format
 - k. any changes in procedure or operations;
 - l. any changes or updates with respect to staffing and training;
 - m. a summary of all education programs implemented or initiated; and
 - n. any other information deemed necessary by the Department.
118. The annual report shall also include:
- a. A discussion and evaluation of incidents, complaints, actions, results, residual impact and path forward.
 - b. Disposal Records for: special waste including the origin and description for; bulk liquids; biosolids, fish/animal processing waste, Asbestos Contaminated Waste; potentially hazardous waste and International Waste.
 - c. Environmental monitoring records including:

- i) Dates and results of all sampling conducted at the facility; and confirmation of calibration of field equipment used at the facility, before and after each sampling event, or as considered reasonable by the department, the CNWM and the equipment manufacturer.
- ii) An evaluation and discussion of surface water and groundwater monitoring results as they may be affected by hydrogeology, landfill leachate and/or surface water runoff from the site, and potential/ resultant impacts, and mitigation of impacts.
- iii) An evaluation of environmental monitoring results, comparing results from the previous and current calendar years and historical records, and making recommendations for future monitoring, groundwater well installation or other work at the facility.
- iv) All analyses, review and reports shall be completed by a professional engineer or geoscientist (qualified professional).

119. Any operational difficulties with potential environmental implications must be immediately reported to Service NL. The nature of the operational difficulty as well as the mitigation measures shall be included in the yearly report.

120. All incidents of:

- Contingency Plan implementation;
- non-conformance of any condition within this approval;
- spillage or leakage of a regulated substance;
- leachate or wastewater discharge suspected to have exceeded criteria limits
- verbal/written complaints of an environmental nature from the public, any response, mitigation or corrective action e.g. due to air quality, odour or noise.
- any incidence of vandalism or illegal dumping at or near the site.

shall be immediately reported, within one working day, to a person, message manager or facsimile machine at Service NL by phoning or faxing.

Central Region – Service NL (Gander)

P.O. Box 2222

A1V 2N9

Telephone (709) 256-1420

Facsimile: (709) 256-1438

121. A written incident report including a detailed description of the incident, summary of contributing factors and an action plan to prevent future incidents of a similar nature, shall be submitted to the respective Regional Director of Service NL. The action plan shall include a description of actions already taken and future actions to be implemented, and shall be submitted within thirty days of the date of the initial incident.

Certificate of Completion

122. Seven (7) days after completion of any new facility, a signed and stamped letter from a Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL) registered engineering company shall be submitted to the Department verifying that the facility was constructed as per the engineering as-built plans and specifications. The Department shall also be notified at least two weeks in advance of commissioning of each facility and before the Regional Facility is open to the public to allow for inspections to be arranged.

Decommissioning

123. An approved alternative disposal or transfer location must be identified prior to closure and decommissioning.
124. A detailed decommissioning plan must be submitted to the Department 6 months prior to the planned date of final site closure. Decommissioning details must address site security, the removal of remaining material and on-site infrastructure, and financial arrangements for any future environmental monitoring requirements, and outline potential future uses for the site.

Expiration

125. This approval expires on December 31, 2022.
126. Should the CNWM wish to continue to operate beyond this expiry date, a written request shall be submitted to the Department for the renewal of this approval. Such request shall be made at least three months prior to expiration.

c.c. Dan Michielsen, Director
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- Appendix A Construction & Demolition Debris
Appendix B Treated Wood Disposal
Appendix C Asbestos Waste Disposal GD-PPD-33.1
Appendix D Lead Based Paint Disposal

Appendix A

Construction & Demolition Debris - management of specific waste streams

- a) Any sharp objects like nails, small pieces of metal, glass, plastics, litter and other wind-blown debris, shall be collected daily and controlled at the site to maintain a safe environment.
- b) Metals shall be redirected to licensed metal salvage agents where facilities exist.
- c) Other “contaminants of concern” may include mercury (Hg) vapours associated with fluorescent light fixtures, and PCBs contained in older lighting ballasts. Normally these items would be identified as hazardous materials and removed prior to a demolition, but if such items are identified in the waste stream, they must be removed to hazardous materials storage area for appropriate recycling and/or disposal.
- d) Reusable and recyclable material such as: uncoated wood, wallboard, asphalt shingles, metal, cupboards, carpets, countertops and other homogenous waste streams; may be stockpiled in separate locations to facilitate reuse and recycling where approved options exist.
- e) Acceptable recycling options for wood include: mulching/ chipping of organic material for landscape purposes, or bulking agents for compost, or for fuel.
- f) Asphalt shingles may be chipped and used as a road amendment at the Regional Waste Management Site; and/or processed into asphalt grit and asphalt flake where the recycling option exists.
- g) Treated wood from residential sources shall be disposed at municipal solid waste (MSW) engineered lined landfill. Commercial generators of treated wood are required to conduct testing as per the “Disposal of Treated Wood August 2013 guideline” as attached in Appendix B. If there are no exceedances for the specified criteria in the guideline the treated wood shall be disposed into the regular tipping face of the landfill. If there are exceedances further consultation is required with the Department. Appropriate reuse of treated wood is recommended where possible.
- h) Wall board may be added in limited quantities to compost where applicable.
- i) All non-program tires shall be accepted for disposal at the C & D landfill. Non program tires include all-terrain (ATV), or off the road (OTR) vehicle tires, tires used on rolling stock equipment used in the agricultural, forestry, industrial/construction and mining industries. These tires are not collected under the Used Tire Recycling Program by the Multimaterial Stewardship board (MMSB). If not approved for specific recycling applications, disposal to landfill is acceptable.
- j) Any asbestos containing material (ACM) containing friable asbestos, accepted for disposal at the facility, shall be handled by personnel who are trained and properly equipped with personal protective clothing and respirators. The ACM shall be wetted and fully contained in sealed, uncompromised double 6 mil polyethylene bags. The bags/secondary containment shall be labelled “Waste Asbestos UN2590”. The material shall be landfilled at a dedicated location that is permanently marked to avoid any re-excavation, and covered immediately. Disposal of ACM would normally be to “special waste” area of the engineered, lined landfill. However, with appropriate precautions, ACM may be disposed to a “special waste” area of the C & D landfill. All handling of ACM shall be supervised and a sufficient quantity of wetting agent shall be available in the event of

a containment breach. "Friable asbestos" is waste material containing asbestos fibre or asbestos dust in a concentration greater than 1% by weight that is not tightly bound within a solid matrix such that it is easily crumbled by hand. A copy of the department's policy directive for Asbestos Waste Disposal (GD-PPD 33.1) as may be accessed at the Department's website, and is attached as Appendix C. A record of ACM disposal shall be maintained.

- k) An exemption is allowed for leaded paint debris from residential sources which may be disposed to the C & D landfill or to the MSW landfill. For commercial or industrial structures, where a hazardous materials assessment has been completed prior to demolition of structures, the departmental policy on sampling, analysis and subsequent disposal of lead based paint and painted debris shall be followed. The policy is attached as Appendix D of this document and any questions can be referred to the regional Service NL or to the Department. The accepted limit for lead based paint disposal to landfill is 5000 ppm, or 5 mg/ L, as determined by USEPA Method 1311 Toxicity Characteristic Leaching Procedure.
- l) The Department reserves the right to amend the approval to ban disposal of waste streams where and when recycling and diversion programs exist. Any recyclable or waste material that is banned from landfill disposal shall be appropriately redirected.
- m) Notwithstanding all of the above, where options for waste treatment/disposal are limited, the Department shall be consulted regarding accommodation of the waste.

Appendix B – Treated Wood Disposal

Disposal of Treated Wood (August 2013)

The Department and its agents at Service NL (SNL) have responsibilities for protecting, conserving and enhancing the natural environment. A portion of this responsibility is related to the management of Waste Dangerous Goods/Hazardous Waste (WDG/HW) in the Province. As per Part VIII of the Environmental Protection Act the Minister has power to control dangerous goods and waste dangerous goods. Authority extends to classifying and designating toxic substances as dangerous goods and curtailing or banning their manufacture, use and release.

Treated wood products include products such as telephone poles, railroad ties, and pressure treated lumber waste that are generated by residential, commercial and industrial sectors. Treated wood waste is considered a waste dangerous good/hazardous waste (WDG/HW) when certain contaminants are present at or above specified limits. The test method used to make this determination is called the Toxicity Characteristic Leaching Procedure, or TCLP. The regulatory levels for the contaminant generally associated with treated wood are specified in the chart below.

Type of Treated Wood	WDG/Hazardous Waste Number and Contaminant	Regulatory Level (mg/l)
Inorganic Preservatives: "greenish" in color, wood is heavy.	L4 - Arsenic	2.5
	L10-Chromium	5.0
Creosote Formulation: brown to dark brown in color; may be coated with tar; has a "smoky", chemical odor. (Chlorophenolic formulations have similar distinguishing characteristics)	L-46 -m-cresol, L-47- o-cresol, L-48 - p-cresol and total cresol	200.0 for each
	L37 Benzo(a)pyrene	0.001
Chlorophenolic Formulation	L84-Pentachlorophenol	6.00

Sampling requirements is intended for relatively large quantities of material from commercial sources. For each grouping (utility poles; wharf cribbing, penstocks etc.), 1-3 composite samples shall be collected and analyzed.

For sampling purposes generators shall contact an accredited laboratory for sampling preparation. The lab report shall be submitted to the department.

Reports shall be emailed to: joanhann@gov.nl.ca for review or at the address below:

**Director, Pollution Prevention Division
Department of Environment and Conservation**

P.O. Box 8700

St, John's, NL

A1B 4J6

Telephone: (709) 729-2556

Facsimile: (709) 729-6969

Municipal and industrial landfills in this province are not permitted to accept WDG/HW. All WDG/HW waste shall be managed appropriately and transported by certified hazardous waste transporters to approved hazardous waste disposal facilities, currently all located outside the province. Generators of WDG/HW are required to be registered with the Department (no fee) prior to transport. All WDG/HW shall be manifested during transport and copies forwarded to the Department.

Appendix C - Asbestos Waste Disposal GD-PPD-33.1



**Department of Environment and Climate Change
Pollution Prevention Division**

Guidance Document

Title: Asbestos Waste Disposal
Prepared By: Craig Bugden
Issue Date: October 6, 2004
Amended: October 6, 2016
Approved By: _____
Dan Michielsen, Director

**Asbestos Waste Disposal
GD-PPD-033.1**

TABLE OF CONTENTS

SUBJECT 25

OBJECTIVE 25

BACKGROUND 25

DEFINITIONS 25

LEGISLATION..... 3

GENERAL CONSIDERATIONS4

**HANDLING AND
TRANSPORT.....4**

TEMPORARY STORAGE.....5

PROCEDURE.....5

DISPOSAL.....6

**ASBESTOS WASTE DISPOSAL
FORM.....7**

SUBJECT

Asbestos Waste Disposal

OBJECTIVE

To prevent exposure to asbestos waste and to ensure that the handling, storage, collection, transportation and disposal of these wastes does not represent a health hazard to humans or a threat to the environment.

BACKGROUND

Asbestosis of the lung, lung cancer and mesothelioma, a rare cancer of the pleural lining, have been associated with exposures to airborne asbestos fibres. As a result, the use of asbestos has been restricted. Where asbestos products are in use, and where decommissioning/refit activities are planned or in progress, a concerted effort must be made to minimize exposures for those individuals involved in handling, storage, collection, transporting and disposing of the products. The handling, transport and disposal protocols outlined herein are intended to minimize or eliminate exposure risks to human health and to environmental receptors.

The Department of Environment & Climate Change is responsible for the provisions of the *Environmental Protection Act, 2002* within the Province. Service NL is empowered to provide specific approval, inspection and enforcement services of this Act on behalf of the Department.

LEGISLATION

Environment Protection Act, 2002

The Occupational Health and Safety Act

Asbestos Abatement Regulations, 1998 (or as amended) ("the Regulations")

Highway Traffic Act

DEFINITIONS

Approved Waste Disposal Site:

A site designated for the disposal of waste for which a valid certificate of approval is in place, having been issued under the *Environmental Protection Act, 2002*.

Asbestos :

A generic term referring to any of the following fibrous silicates: actinolite, amosite, anthophyllite, chrysotile, crocidolite or tremolite.

Asbestos Waste:

Waste material containing "non-friable" and/or "friable" asbestos in a concentration greater than 1% asbestos by dry weight. Friable asbestos is asbestos in a form that when dry can be crumbled, pulverized or reduced to powder by hand pressure.

Department:

Means the Department of Environment and Climate Change, Pollution Prevention Division.

Exposure:

Exposure to airborne respirable asbestos fibres or asbestos dust, whether originating from asbestos minerals, materials or products.

Generator:

The owner of the land, facilities, equipment and/or buildings from which asbestos waste is generated, or alternatively the asbestos abatement contractor undertaking the work on behalf of the owner.

Service NL:

Department authorized to act on behalf of the Minister of Environment and Climate Change under the provisions of the *Environmental Protection Act, 2002*.

GENERAL CONSIDERATIONS

Asbestos waste shall be disposed of only at an approved waste disposal site. It is illegal to dump/discard or otherwise dispose of asbestos waste in any area which is not an approved waste disposal site as described under provisions of the *Environmental Protection Act, 2002* and in accordance with provisions of this policy. Failure to comply with the provisions of this Guidance Document will place the person (s) responsible in violation of the *Environmental Protection Act, 2002* and make the person(s) responsible for taking any remedial measures as may be prescribed by the Department.

Any person(s) engaged in the removal and/or disposal of asbestos waste is required to operate under the provisions of the Asbestos Abatement Regulations. A valid asbestos abatement contractor's certificate (available from the OHS Branch of Service NL) is required to engage in asbestos removal activity in accordance with section 6 of the Regulations.

The Regulations are under the authority of the Occupational Health and Safety Act (O-3 RSN 1990) and are administered by the Occupational Health and Safety Branch of Service NL. Where there is a conflict between this document and the Regulations, the requirements of the Regulations shall apply.

Administration of this policy shall be by Service NL on behalf of the Department.

Any determination of asbestos content required by the Department shall be conducted by accredited laboratories that have demonstrated competence in the analysis of asbestos.

HANDLING AND TRANSPORT

The Generator shall ensure that all agents or contractors have received the necessary training as per Section 7 of the Regulations and are informed, in writing, of the risks associated with handling such wastes. The Generator will also apply personal health and safety protocols in handling, transporting and disposal.

Asbestos waste shall be completely wetted with water and securely enclosed in a polyethylene bag/wrap having a thickness of not less than 6 mil, and then securely enclosed within a second polyethylene bag/wrap having a thickness of not less than 6 mil prior to transport (i.e. "double bagged"). For mixed wastes containing asbestos waste, the mixed waste shall be completely wetted with water and placed in a transport vehicle equipped with a disposable polyethylene liner having a thickness of at least 12 mil, after which the waste material will be securely enclosed inside the liner prior to transport. The outside surfaces of all bags/wraps/liners containing asbestos waste shall be completely free of asbestos waste before transport to an approved waste disposal site. All bags/wraps/liners used to store or transport asbestos waste shall be completely free of punctures, tears or leaks. All asbestos waste shall prominently display a tag or label indicating "**Asbestos Waste**" or "**Asbestos Contaminated Material**".

In addition to being securely enclosed in polyethylene bags/wraps/liners, asbestos waste shall be transported in a completely enclosed vehicle, or the vehicle shall be equipped with a tarpaulin or similar equipment such that the asbestos waste is prevented from escaping during transport.

All asbestos waste must be transported to an approved waste disposal site.

Transporters of asbestos waste must hold a valid Certificate of Approval, to operate a waste management system, under provisions of the *Environmental Protection Act, 2002*.

TEMPORARY STORAGE

Temporary storage of asbestos waste is permitted at an approved location for a maximum period of two (2) weeks, provided that:

- a) The direct haul of the material to an approved waste disposal site is not possible due to operational constraints at that site, and
- b) It is not possible to store the waste temporarily on the site where the waste originated.

PROCEDURE

Requests for and prior approval for the disposal of asbestos waste at an approved waste disposal site shall be obtained from the owner/operator in writing.

All requests for asbestos waste disposal shall be recorded on the prescribed form entitled, **Asbestos Waste Disposal Request Form** (attached) and submitted to Service NL.

Service NL shall maintain a record of all asbestos waste disposal requests on behalf of the Pollution Prevention Division, Department of Environment and Climate Change.

Records and statistics shall be provided by Service NL to the Department upon written request.

DISPOSAL

Asbestos waste shall be considered **Special Waste** and may be land filled, in a designated special waste area, in

TERMS AND CONDITIONS FOR APPROVAL NO. WMS 17-12-001

an approved waste disposal site, with the written permission of the owner/operator.

Asbestos waste shall be backfilled with a minimum 0.6 metres of compacted fill material on the day of disposal.

The owner/operator of the waste disposal site shall ensure the boundaries of the asbestos waste disposal area are clearly defined and that an all-weather sign is posted. The disposal location shall be plotted on a scale drawing or plan. The plot plan must be filed with the regional office of Service NL and the site owner/operator.

The owner/operator of the waste disposal site shall ensure that backfilled asbestos waste is not disturbed in the future.

Appendix D- Lead Based Paint Disposal

Management of Disposal of Construction, Abatement and Demolition Waste Containing Lead-Based Paint

Date Issued December 2010

The Department follows the lead of the USEPA to reduce exposure by facilitating removal of lead based paint/ and or debris for landfill disposal. The landfill disposal limit for total lead in lead based paint is 5000 ppm.

There are options for removal of lead based paint e.g. sandblasting etc. but the OHS exposure risk is high and the volume of hazardous material is also increased. The goal of removing lead coated materials from common use is to reduce exposure, which is why landfilling as opposed to something like sandblasting the material is the preferred option

In removing such paint, precautions must be taken to restrict personal exposure, properly contain the waste and prevent releases to the environment

The Department recommends that any flaking or easily removed paint with high lead content be removed first). As with the total lead analysis, a minimum of three (3) representative samples shall be taken of the waste material. For the TCLP, each sample should ideally weigh 50 grams, and must at a minimum weigh 2.5 grams.

If the mean concentration of the flaked paint samples does not exceed 5000 mg/kg, the waste material is not considered hazardous and may be disposed of in an approved waste disposal site, provided that the owner/operator is willing to accept such waste and the local Government Service Centre (GSC) has agreed with the disposal of the waste at the site

If total lead exceeds 5000 ppm, a Toxicity Characteristic Leaching Procedure (leachate test) is conducted, the leachate limit for lead is 5 ppm for landfill disposal. As with the total lead analysis, a minimum of three (3) representative samples shall be taken of the waste material.

If the mean of the TCLP results indicates a leachate concentration of 5 mg/L or less of lead, the material may be disposed of in an approved waste disposal site.

If the mean leachate concentration of lead is greater than 5 mg/L, then the waste material is considered a hazardous waste and will not be approved for disposal in a waste disposal site in this Province. Transporters of hazardous waste shall have an approval issued by the Department, and shipping documentation for Transport Canada and Environment Canada will be required. Completed waste manifests shall be submitted to the Department prior to the shipment of hazardous wastes. The Department may be contacted for further information on these requirements. Please contact Joan Hann (709) 729-1771.

LEADED DEBRIS:

A minimum of 3 representative samples shall be taken of debris that contains or is suspected to contain lead-

based paint. Depending on the amount and nature of the debris, a greater number of samples may be desirable to provide adequate representation of the entire bulk of the debris.

Leaded debris typically includes a mixture of painted and unpainted material, and may include a non-homogenous mixture of a variety of materials (e.g., wood, metal, concrete, brick, plaster, etc.). In such situations, a representative sample of the waste material shall consist of a collection of each major component of the waste (e.g., foundation, drywall, siding, baseboard, trim, roof, windows, doors, insulation, etc.), in the same weight proportions as they are found in the bulk of the debris. A core sample of each component, including the substrate and surface paint if present, shall be combined in the correct proportion to form the representative composite sample. Each core sample shall be sized large enough such that the resulting weight of the composite sample is at least 50 grams.

The representative composite samples shall be sent to an accredited laboratory to be tested for TCLP.

For large amounts of heterogeneous debris, challenges may exist in obtaining representative samples of manageable size. For example, the TCLP requires the samples to be of a certain particle size (i.e. capable of passing through a 9.5 mm standard sieve) (U.S. EPA 1992). Depending on the nature of each component of the sample, different procedures may be required to obtain the required size reduction (e.g., crushing, cutting or grinding).

Analytical laboratories may not be equipped to crush and homogenize large samples. Composite samples shall be compiled, crushed and homogenized prior to sending to the lab. Each representative sample should be sent to the lab in a 250 mL jar.

If the mean of the TCLP results indicates a leachate concentration of 5 mg/L or less of lead, the entire amount of debris shall be considered non-hazardous and may be disposed of in an approved waste disposal site.

If the mean leachate concentration of lead is greater than 5 mg/L it would have to be disposed as hazardous waste. HW isn't permitted to be disposed of at waste disposal sites in the Province. This waste will have to be transported by a licensed carrier for disposal to hazardous waste landfill.

With regards to abatement procedures for Lead Based Paint, Occupational Health and Safety specialists with Service-NL should be contacted.

