Some propane cylinders however are designed for horizontal use and are to be stored and transported on their side (Nova Scotia Department of Environment and Labour, 2006; Propane Gas Association of Canada, 2010). If the Site Operator is unsure what type of cylinder is onsite, or for further information regarding safe disposal methods of propane cylinders and tanks contact the Propane Gas Association of Canada toll free at 1-877-784-4636.

3.1.6.12 *Ozone Depleting Substances*

Ozone depleting substances (ie. refrigerants) are chemicals that when released into the atmosphere, have a negative effect on the ozone layer. These chemicals are commonly found in refrigerators, freezers, automobile air conditioning units, air conditioning equipment, etc (Environmental Protection Service, Department of Sustainable Development, Government of Nunavut, 2002). When these items are ready to be landfilled, all ozone depleting substances must be removed from them. Ozone depleting substances must be removed only by a certified technician (Environmental Protection Service, Department of Sustainable Development, Government of Nunavut, 2002). If a certified technician is not available, the Hamlet should contact the Environmental Protection Service, Government of Nunavut to develop a plan for removal and disposal of ozone depleting substances from the landfill. The following paragraphs describe the collection, storage and disposal methods for refrigerants from both ELVs and appliances. For further information refer to the Environmental Guideline for Ozone Depleting Substances (Environmental Protection Service, Department of Sustainable Development, Government of Nunavut, 2002) located on the Department of Environment, Government of Nunavut website at http://env.gov.nu.ca/node/82#Guideline%20Documents.

Refrigerants – Appliances

Refrigerants must be removed by a certified technician trained for this task. The Hamlet will hire a contractor trained in the removal of refrigerants from appliances to go to the Hamlet once per year and remove these substances from appliances stored in the bulky metals site. Prior to the contractor arriving in Hall Beach, Hamlet crews will ensure that all old appliances are all grouped in the designated white goods area. Refrigerants must not be vented into the atmosphere.

Collection

Refrigerants are found in refrigerators, freezers, window air conditioners and dehumidifiers. Removal of refrigerants must be performed only by a certified technician. Technicians must use an approved portable refrigerant recovery unit and follow approved procedures for removal of refrigerants from appliances. Venting of refrigerant into the atmosphere is unacceptable (Environment Canada, 2010).

Appliance dismantlers should also be aware that oil found in the appliance compressors may be contaminated with refrigerants. A certified refrigerant removal technician should be able to safely remove and dispose of refrigerants in the oil and the contaminated compressor oil (Environment Canada, 2010).

Stockpiling

Recovered refrigerant must be stored in an approved storage container for the transport of refrigerant materials. Different refrigerants should not be mixed and refrigerant containers that held one type of refrigerant should not be used to hold another type (Environment Canada, 2010). The refrigerant recovery technician must be knowledgeable of which containers are approved for the collection and transport of recovered refrigerant. Technicians must also keep a record of what type and how much refrigerant was removed. Storage containers must be labelled appropriately for transport.

Disposal

Waste refrigerant from appliances can be disposed of through the Refrigerant Management Canada™ program on a fee basis. This program was set up to safely collect and destroy refrigerant compounds without releasing them into the atmosphere. For more information on the program or for contact information on coordinating disposal of waste refrigerants please contact an RMC Collection Service Provider. Contact information for providers can be found on the Refrigerant Management Canada™ website: http://www.refrigerantmanagement.ca/index.php.

Refrigerants – Vehicles

Collection

Refrigerants should be removed after the battery has been removed and prior to removal of any other fluids or items from ELVs. This is to prevent an accidental release of refrigerants into the atmosphere.

Removal of refrigerants must be performed only by a certified technician. Technicians must use an approved portable refrigerant recovery unit to remove refrigerants from ELVs. They must also record the amount of refrigerant removed per vehicle. Once refrigerants have been removed, the technician must clearly label each vehicle as such (British Columbia Ministry of Environment, 2008).

Stockpiling

Refrigerants must be stored in approved, refillable storage containers. Refrigerants must not be vented to the atmosphere. Storage containers must be properly labelled and should be replaced or hydrostatically tested every five (5) years (British Columbia Ministry of Environment, 2008).

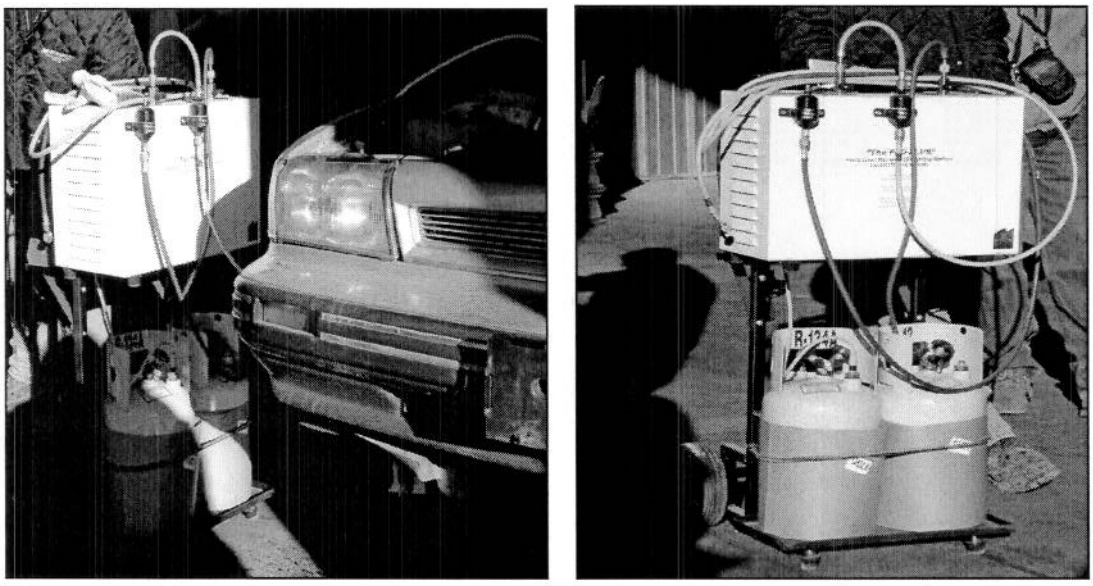

Figure 23. Refrigerant Evacuation Unit

Records of all refrigerants removed from ELVs must be maintained onsite. Records should contain the amount of refrigerant removed from each vehicle, the date it was removed, name of the certified technician who performed the recovery, registration number of the certified technician, whether the technician performed the service as an employee or agent of the business and the name of the business responsible for removal of refrigerant (British Columbia Ministry of Environment, 2008).

Disposal

Waste refrigerant from vehicles can be disposed of through the Refrigerant Management Canada™ program on a fee basis. This program was set up to safely collect and destroy refrigerant compounds without releasing them into the atmosphere. For more information on the program or for contact information on coordinating disposal of waste refrigerants please contact an RMC Collection Service Provider. Contact information for providers can be found on the Refrigerant Management Canada™ website: http://www.refrigerantmanagement.ca/index.php.

3.2 Site Records

Site records of all hazardous materials collected and stored at the solid waste facilities must be completed and kept at the Hamlet office as well as the Hamlet garage. According to Duong and Kent (1996), the following items must be recorded in the site records:

- Dates of hazardous waste collection;
- Date, description, volume and generator of wastes placed in the compound;
- Method of storage;
- Name of carrier removing wastes from the compound; and
- Copies of the forms for Transport of Dangerous Goods from persons removing wastes from site.

An example record sheet is included in Appendix B of this manual.

3.3 Safety Procedures

Hazardous wastes may be dangerous and it is imperative that appropriate safety and handling procedures are followed for each type of waste. For information regarding the safe handling and disposal practices please refer to the Department of Environment, Government of Nunavut website http://env.gov.nu.ca/node/82#Guideline%20Documents and the Vermont Department of Environmental Conservation website http://www.mercvt.org/ and contact the Workers' Safety and Compensation Commission toll free 1-877-404-4407.

3.4 Shipping Arrangements

Shipping arrangements may be made with Nunavut Eastern Arctic Shipping or Nunavut Sealink and Supply (NSSI) to ship material to Valleyfield (Montreal).

Shipping this material will require special provisions from the Department of Environment with the Government of Nunavut. The Department of Environment must be contacted a number of months before the scheduled shipping date as they will need to issue a manifest prior to shipping any hazardous waste material.

Contact Numbers for Shipping Companies:

Nunavut Eastern Arctic Shipping (NEAS)	1-877-225-6327
Nunavut Sealink and Supply (NSSI)	1-450-635-0833

Once the material is received in Montreal, the hazardous waste can be brought to one of two locations that handle hazardous waste:

Stablex: 1-450-430-9230 in Blainville Quebec

Or

Clean Harbors: 1-450-691-9610 in Mercier Quebec

Arrangements will have to be made with either company to accept the shipment at their facility.

3.5 Signage

The solid waste facility must have a sign posted at the entrance to inform the public of the location of the landfill and the bulky waste site. This sign must have the following information:

- Site name
- Materials/wastes accepted for landfill and recycling
- Materials/wastes banned from the site
- Penalties

Signs identifying the locations of all waste management piles should be posted in the landfill and bulky waste facility. These signs will be erected by Hamlet personnel in the appropriate areas.

Figure 24 Signs to be placed at the Solid Waste Facility

3.6 Waste Inspection

The checking of waste entering the facility is crucial to the safe and correct operation of the landfill. The site operator should carry out random checks of the waste entering the facility and random waste inspection in the disposal area. The following methods are employed to minimize the quantity of unacceptable waste which is disposed at the site and to direct the waste hauler to the correct disposal area:

- Site operators will be watchful for unacceptable or potentially hazardous wastes during unloading;
- When personnel encounters suspect waste in the disposal area, landfilling shall cease until the material is segregated and appropriate action is taken;

- The Site Operator will inform the hauler that a random check is to be performed. If the hauler refuses, the vehicle will not be permitted entry to the site, and will be selected for a check on its next visit. The Site Operator will record as much information as possible about haulers who refuse a random check;
- The selected hauler will be directed to an area near the active landfill area that is separate from all other incoming waste. Prior to dumping, the driver of the inspected vehicle will confirm the absence of unacceptable materials. An inspector (the Site Operator or a delegate) will examine the load for hazardous or unacceptable wastes. Completion and results of the inspections shall also be noted in the daily checklist.

3.7 Handling Unacceptable Waste

Unacceptable wastes may be classified as non-hazardous, potentially hazardous or unacceptable, and, depending on the time of discovery, may or may not be associated with a known hauler. Once a waste is suspected to be hazardous or unacceptable, the onus is on the hauler to demonstrate otherwise, or remove the waste, at their expense. Repeat deliverers of unacceptable or hazardous wastes may be banned from the site at the discretion of and for a period determined by the SAO.

The site attendant will notify the SAO of anyone dumping unacceptable or rejected waste at the landfill site. The report shall contain the following information:

- Vehicle license number
- Type of vehicle
- Date and time of incident
- Name of offender, if possible
- Material dumped, or rejected

3.8 Site Personnel Duties and Responsibilities

Senior Administrative Officer (SAO)

The Hamlet SAO is responsible for the overall operation of the landfill facility. The daily operation and maintenance of the landfill is the responsibility of the Public Works Foreman. Two or three people are employed by the Hamlet to operate the garbage collection vehicle.

The SAO reports directly to the Mayor and is responsible for the following:

- Supervises – Hamlet Crews

- Maintains Liaisons with: Clients (Private sector generators & Government agencies)
  Suppliers
  Nunavut Water Board

- The Hamlet SAO Shall:

1. Perform operations at the facility in accordance with the Landfill Operations & Maintenance Manual (latest approved version), applicable Engineering Drawings, the Operating Permit issued by the Nunavut Water Board;
2. Ensure that only acceptable wastes, as indicated on the approved list for disposal, are permitted at the site in consultation with regulatory agencies;
3. Prepare facility operating budgets and undertake staffing selections, and or contractors;
4. Communicate as required with regulatory agencies, including the forwarding of monitoring results;
5. Deal directly with the public, responding to disposal requests;
6. Coordinate site visits;
7. Maintain the environmental monitoring/sampling program;
8. Ensure that contractor receives required training;
9. Ensure that the site is maintained and operated in a clean and safe manner at all times, including regular collection of litter and compliance with Nunavut Safety Act and Regulations;
10. Coordinate the preparation of landfill areas for operation, and identifying the requirement for the establishment of surface water control measures.

Site Operator

The Site Operator is responsible for general site operation and maintenance requirements at the facility.

The Site Operator reports directly to the SAO and is responsible for the following:

- Supervises – Full-Time and Part-Time Assistants

- The Site Operator Shall:

1. Perform operations at the facility in accordance with the Landfill Operations & Maintenance Manual (latest approved version), applicable Engineering Drawings, and the Operating Permit issued by the Nunavut Water Board;
2. In consultation with the Site Owner, ensure that only acceptable wastes, as indicated on the approved list for disposal, are permitted at the site;
3. Prepare regularly scheduled reports (daily, weekly, monthly, annually) on progress and planning at the site;
4. Provide overall direction for daily site activities;
5. Conduct work in accordance with the Nunavut Safety Act and Regulations;
6. Be responsible for the operations and maintenance of the site machinery;
7. Make recommendations to the Site Owner for major and minor repair work required for site equipment as well as replacement of same;
8. Ensure that the site is maintained and operated in a clean and safe manner at all times, including regular collection of litter;
9. Ensure that solid waste is compacted and covered in accordance with the Landfill Operations & Maintenance Manual, burning of garbage is not allowed;
10. Coordinate snow removal and general maintenance for the access roads within the site and other areas as necessary;
11. Operate and maintain the surface water control structures and other site infrastructure;
12. Undertake site security checks, reporting any noted issues to the Site Owner;
13. Inspect the site access road on a regular basis to recover any accumulation of garbage or other debris;
14. In consultation with the Site Owner, maintain the completed portions of the landfill;
15. Ensure that adequate signage and traffic control devices are in place in coordination with the Site Owner;
16. Perform all duties related to the identification and recording of incoming vehicles, and inspection of incoming waste;
17. Answer incoming telephone calls and requests for information, directing such requests as required; and
18. Perform such other related duties as may be assigned from time to time by the Site Owner.

Site Assistants

The Site Assistants are responsible for tasks assigned to them by the Site Operator. These positions would typically address both ongoing and periodic general site operation and maintenance requirements.

The Site Assistants report directly to the Site Operator and is responsible for the following:

- The Site Assistants shall:

1. Perform duties as assigned by the Site Operator;
2. Conduct work in accordance with the Nunavut Safety Act and Regulations.

Personnel Training

The Hamlet is responsible for the training of staff. Solid Waste Facility staff should be trained to perform his or her job in a safe and environmentally responsible manner, in accordance with applicable regulations.

Given the nature of activities at the site, the SAO and Site Operator will serve as the facility's health and safety representative, and health and safety issues will be discussed as part of site meetings. All personnel should be familiar and abide by the Nunavut Safety Act and Regulations.

A review of this Operations and Maintenance Manual will be a prerequisite for any employee/contractor before being declared eligible for work at the landfill.

The contractor is required to comply with all laws and regulations affecting the execution of the work at the site, including all applicable Federal, Territorial and local laws and regulations pertaining to socio-economic and environmental matters.

4 MAINTENANCE PROCEDURES

Proper maintenance of a landfill is crucial to ensuring the efficient operation of all the components. Activities can be divided into two categories: storage/collection maintenance and site maintenance.

4.1 Storage Maintenance

As the first step in the waste collection process, residential and commercial storage containers should be adequately maintained. The following points should be considered:

- Private burning of wastes within the Hamlet boundaries should be discouraged as the smoke and fire hazards generally outweigh any benefit from reducing the volume of waste;
- Garbage containers should be covered to prevent wind blown debris from littering the community and to prevent animals from getting into the garbage;
- Bulky wastes should not be left in residential areas for long periods due to aesthetic and safety concerns.

4.2 Collection Maintenance

The waste collection vehicle should be maintained in good operating condition to ensure the collection service is not interrupted for extended periods. Other maintenance considerations include the following:

- The collection vehicle should be equipped with a shovel to clean up accidental spills during collection;
- The collection vehicle should be cleaned periodically.

4.3 Equipment Maintenance

Regular vehicle maintenance is to be performed on all Hamlet-owned equipment. This should include but is not limited to regular:

- oil changes
- fluid changes
- checking of tire pressure
- greasing
- brake pad replacement
- cleaning
- periodic maintenance requirements as set out by the equipment manufacturer

4.4 Building

The landfill operator building (Hamlet operation garage and garage where the garbage truck is stored) should be inspected regularly by the operator to observe signs of building deterioration or problems with heating, roof, etc. Any problems should be immediately reported to the SAO.

4.5 Fencing

Partial fencing is currently in place around the solid waste facility. However, it does not surround the entire site and is in poor condition. It is recommended that the existing fence is repaired/replaced as appropriate and that additional fencing is installed to include the full perimeter of the site. Fencing must be regularly inspected and repairs must be completed as necessary to ensure that it remains in good condition.

4.6 Access Road Maintenance

Basic road maintenance is to be conducted as follows:

- At least twice per year, the road is to be graded to smooth and reshape the surface;
- During the winter, snow is to be removed to ensure unrestricted access to the site for the garbage collection vehicles.

4.7 Nuisance Control

4.7.1 Litter Control

Litter can be a significant problem at municipal solid waste disposal sites. Litter control is best accomplished by a combination of proper disposal operations, litter retaining fences, and a litter picking program. A clean, litter-free appearance will be maintained at the site at all times, not only for public relations, but also for efficient operation of the landfill. Poor litter control attracts unwanted scavengers and contributes to surface drainage problems by blocking ditches and culverts.

In summary, litter control measures shall include:

- Regular (weekly) covering of wastes in the active disposal area;
- Litter collection fencing located around the active fill area to catch blowing litter;
- A litter collection schedule shall be directed by the Site Operator;
- Litter on fencing, on site roadways, in ditches and adjacent properties shall be monitored and collected on a minimum monthly basis;
- Where possible, vegetation can be used as a screen to block wind.

4.7.2 Odour Control

Odours will be controlled at the facility by implementation of the following daily measures:

- Daily granular cover material shall be applied at the active disposal area;
- Routine site inspections to identify and eliminate localized surface water ponding and/or surface water drainage problems.

4.7.3 Bird Control

Solid waste disposal facilities attract birds due to the availability of food. This landfill facility is located near the airport and therefore bird control is very important. The landfill operators should make a daily note of how many birds are in and around the landfill. The intent of this is to keep a general record of bird populations and to determine whether the number of birds in and around the landfill is increasing or decreasing. Control measures to minimize the presence of birds shall include:

- Covering of compacted waste daily;
- Collecting litter;
- If this does not seem to minimize the amount of birds in the area then a noise device such as propane cannons and screechers may be required to discourage birds from the site.

4.8 Indiscriminate Dumping

Waste will be disposed at designated areas at the facility (bulky waste, wood products, tires, metals etc.) only. When indiscriminately dumped materials are discovered, they will be immediately relocated to the appropriate designated area.

4.9 Fire Maintenance

There is to be **NO** burning of waste at any time in the solid waste facility. There are no fire protection measures in place to prevent separate waste areas that must not be burned (eg. hazardous wastes, tires) from catching fire.

5 SAMPLING AND MONITORING PROGRAM

As per the conditions set out in the Hamlet's water licence, runoff from the solid waste facility must be monitored each year during the spring and summer. The following sections describe in detail how the program must be completed.

5.1 Program Description

Figure 25 shows the location of the sampling point for the solid waste facility, as required by the Hamlet's previous water licence (3BM-HAL0810). Samples should be taken at least once per year during periods of runoff or seepage; however, the Water Board may request that further sampling be completed. Sampling locations should be marked on-site with signs stating the numbering code of the location.

Note: It is acknowledged that there may be changes to the Sampling and Monitoring Program, once a new water licence is granted by the Nunavut Water Board.

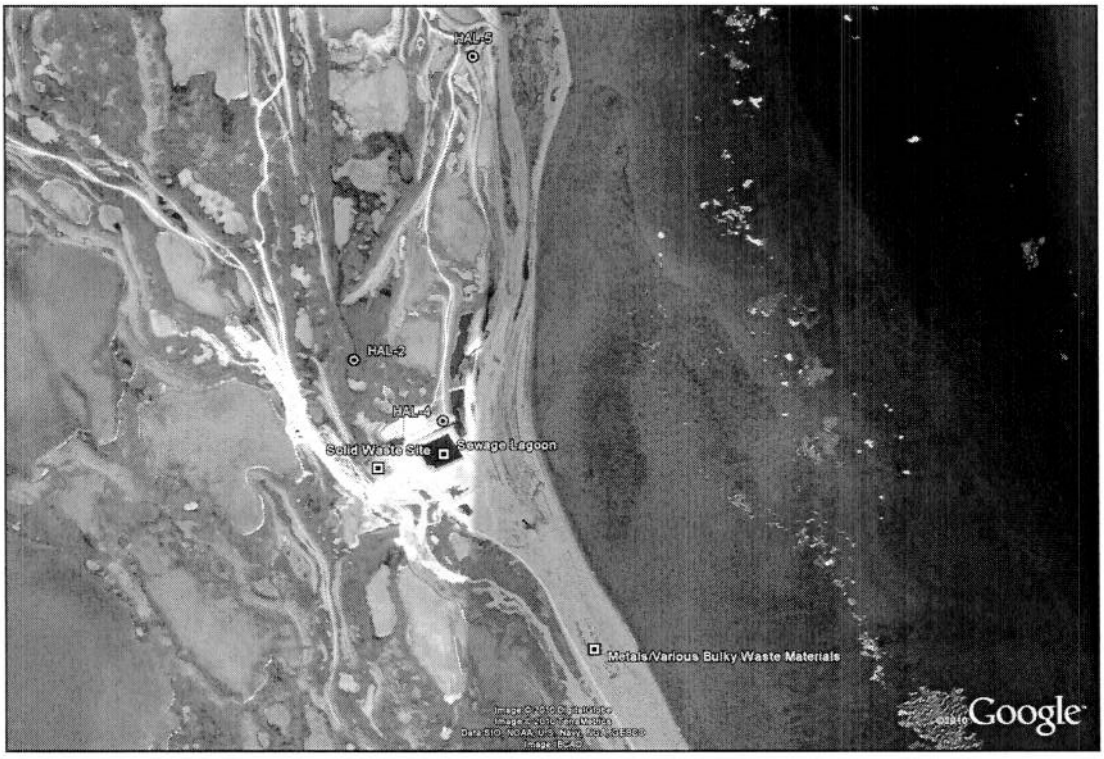

**Image taken from Google Earth Pro, December 2010*

Figure 25 Sampling Location for Solid Waste Facility (HAL-2)

***Note**: The location of sampling point HAL-2 is **estimated** as shown in Figure 25.*

Table 1 Sampling Point at the Solid Waste Facility

Monitoring Station	Description
HAL-2	Runoff from Solid Waste Disposal facility

At the solid waste facility, runoff samples will be collected from Monitoring Station HAL-2. The following is a list of parameters to be analyzed for the runoff sample.

Table 2 Parameters to be Analyzed at HAL-2

Total Petroleum Hydrocarbons (TPH)
Polycyclic Aromatic Hydrocarbons (PAH)
BTEX (Benzene, Toluene, Ethylbenzene, Xylene)
BOD (Biochemical Oxygen Demand)
pH
Total Suspended Solids
Nitrate-Nitrite
Total Phenols
Total Hardness
Sodium
Magnesium
Total Arsenic
Total Copper
Total Iron
Total Mercury
Fecal Coliforms
Conductivity
Ammonia Nitrogen
Total Alkalinity
Oil and Grease
Sulphate
Potassium
Calcium
Total Cadmium
Total Chromium
Total Lead
Total Nickel

All sampling, sample preservation and analysis is to be performed in accordance with methods approved by the Nunavut Water Board. All analysis must be completed in a Canadian Association of Environmental Analytical Laboratories (CAEAL) Certified Laboratory. Note that an example of one laboratory's sampling instructions is provided in Appendix E.

5.1.1 Record of Sampling Events

It is the responsibility of the Hamlet to file an Annual Report to the Nunavut Water Board no later than March 31st following the reported year. Appendix C contains a sample form pertaining to the monitoring

program of the solid waste facility. This form is to be filled out and included in the Annual Report as documented in the Operation and Maintenance Manual for the Hall Beach Sewage Treatment Facility.

5.2 Quality Assurance/Quality Control Plan for Solid Waste Monitoring Program

The Quality Assurance/Quality Control (QA/QC) Plan for sampling of the Solid Waste Treatment Facility has been developed using general QA/QC procedures. The plan includes sample collection procedures for grab samples collected from open water. Further detailed instruction may be required from the laboratory selected to perform analysis on the samples. Hamlet personnel responsible for sample collection are also responsible for contacting the lab prior to sample collection to ensure they have the proper instructions. They must also obtain a certificate from the lab stating that the lab is certified as a CAEAL Laboratory. Information in developing this plan was taken from *Quality Assurance (QA) and Quality Control (QC) Guidelines for use by Class "B" Licensees in Collecting Representative Water Samples in the Field and for Submission of a QA/QC Plan* (Department of Indian and Northern Affairs Canada, Water Resource Division and the Northwest Territories Water Board, July 1996); *Wastewater Sampling Instructions, Kitikmeot Region* (IEG Environmental, July 2005); and *Groundwater Well Sampling* (United States Environmental Protection Agency, January 1995).

5.2.1 Sample Collection

Please refer to Appendix D for instructions on collecting water samples.

5.2.2 Lab Analysis

Once the lab has received the samples, they will begin processing them. A report stating all results as well as the detection limits will be produced and sent to the Hamlet Office. The report will also state any problems that may have occurred during analysis of the samples.

6 SITE RECORDS

Copies of records pertaining to operation and maintenance of the solid waste facility should be kept at both the Hamlet Office and the Hamlet's Maintenance Garage. Information that must be included in these records (as per Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Facilities in the Northwest Territories, Duong and Kent, 1996) includes the following:

- Volumes of any effluent discharged to the environment through an accidental spill;
- Estimated volume of waste collected and the generator of the waste (eg. Residential) (both monthly and annually);
- Details of any maintenance undertaken at site;
- Record sheets;
- Visits by regulatory authorities;
- Copies of sampling and analysis reports of runoff from the solid waste facility;
- Copies of annual reports submitted to the NWB;
- Copy of the Hamlet's water licence;
- Copies of all manuals pertaining to the operation and maintenance of the Sewage Treatment System (i.e. Operation and Maintenance Manual, QA/QC Plan, Spill Contingency Plan, Abandonment and Restoration Plan, Sludge Management Plan); and
- Copies of spill reports and related regulations.

7 HEALTH AND SAFETY

7.1 Worker and Public Safety

As solid waste facility operations deal with a number of hazardous substances, employee and public safety are very important. Employers must ensure that their employees are trained in safe work practices for the facility. This may include but not be limited to special handling and storage requirements of hazardous materials, WHMIS, first aid, emergency procedures, etc. Employers must also provide employees with the necessary personal protective equipment (PPE) to complete their jobs in a safe manner. PPE and safety items that should be maintained onsite include:

- Approved safety boots (steel toe);
- Eye goggles;
- Gloves;
- Eye wash station;
- First aid kit;
- Fire extinguisher as approved by the Fire Marshall; and,
- Work coveralls.

The following safety procedures should be obeyed in order to minimize health risks to personnel working in and around solid waste facilities:

- Equipment is to be kept clean;
- Protective clothing such as gloves, eye goggles and boots should be worn at all times;
- Work clothes must be kept in a designated change room and employees are to change into them when they arrive for work. Work clothes must NOT be worn home. The Hamlet's PW&S Maintenance Garage should be equipped with laundry facilities to wash work coveralls onsite;
- Hands to be washed frequently; as a minimum before eating and after work; and
- Personnel should receive appropriate vaccinations and ensure they are kept up-to-date. Please contact the Department of Health for a list of the appropriate vaccinations.

Workers should also remove items from vehicles in the following order to prevent injury and environmental damage:

- Remove the battery first to de-energize the vehicle;
- Remove refrigerants to prevent accidental release into the environment;
- Remove gasoline in a well ventilated area to prevent the build up of fumes and decrease the risk of fire or explosion; and,
- Remove other hazardous materials.

Public safety must also be taken into consideration when operating a solid waste facility. All hazardous items must be kept in a secure location and away from public access. At the completion of each day, the site should be secured to prevent access.

7.2 Environmental Health and Safety

With the collection and storage of hazardous materials onsite, there is the potential for environmental contamination to occur. The following best practices should be used in order to mitigate potential spills and contamination (National Code of Practice, 2008 and British Columbia Ministry of Environment, 2008):

- Store all hazardous materials in approved containers with securely fitting lids;
- All containers holding hazardous materials should be placed within a secondary containment area;
- For End-of-Life Vehicles (ELVs), remove refrigerants after the battery has been removed, but before removal of any other fluids or parts to prevent accidental discharge into the environment;
- Remove gasoline outside of the dismantling area in a well ventilated area;
- Drip pans must be used at all times to catch fluids dripping from vehicles and to prevent spills;

- The dismantling area should have an adequate roof and concrete floor pad for easy clean up of spills and to prevent soil contamination. An alternate for smaller/temporary locations is to undertake work outdoors in dry warm weather only upon an impermeable working surface. The constructed temporary vehicle fluid recovery area should consist of, for example, a protective sand layer/poly liner/sand layer covered with a plywood working surface;
- Ensure water runoff does not flow through areas containing hazardous wastes;
- Spill kits must be available onsite;
- Ensure there is lime or bicarbonate of soda on hand to neutralize spilled battery acid; and,
- Dispose of all used spill cleanup material as hazardous wastes.

In order to follow the above best practices, the following equipment should be kept on hand (Minnesota Pollution Control Agency, 2002):

- Fire extinguishers should be available in all facility buildings. Please contact the Fire Marshal for specific type of fire extinguisher and code requirements;
- Safety equipment such as rubber or latex gloves and safety glasses;
- Absorbent materials such as rags, towels, sawdust, etc.;
- Containers to hold spilled waste and used absorbent materials;
- Shovels and/or scoops; and,
- Industrial spill clean-up products tailored for the clean up of oils and solvents may want to be used. This will be dependent on the operation of the facility and will have to be determined whether purchase of these items is warranted.

8 SITE ACCESS CONTROL

8.1 Contact Numbers

Contacts of those responsible for overseeing the operation and maintenance of the solid waste and bulky waste sites are as follows:

Contact Name	Office Contact Number	24 hr Contact Number
Anne Curley (SAO)	(867) 928-8829	Unavailable
David Crew (ASAO)	(867) 928-8829	Unavailable

8.2 Site Access

Currently, the solid waste facility is partially enclosed with a fence and site access is not controlled. It is recommended that the site be completely enclosed by a fence to limit public and wildlife access.

9 EMERGENCY RESPONSE

The Hamlet must be able to respond efficiently and effectively to all possible emergencies that may be encountered in the operation of the Hamlet's facilities. These include, but are not limited to fuel, chemical and wastewater spills as well as fires. Due to the nature of the Hamlet's facilities, burning or spillage of unknown or hazardous materials may occur. Only personnel who are properly trained to deal with these situations should respond to such emergencies.

Personnel must familiarize themselves with the emergency preparedness plans before an accident or emergency occurs. Copies of these plans must be kept in all sewage and solid waste disposal vehicles as well as in all common work areas. The following sections list contact numbers and outline procedures to follow in the event of an emergency.

9.1 Emergency Contact Numbers

The following is a list of contact numbers in the case of an emergency:

Fire Department:	(867) 928-8888
RCMP Detachment:	(867) 928-1111
24 Hour Spill Response Line:	(867) 920-8130

9.2 Spill Contingency Plan

A spill contingency plan has been created for activities associated with Hamlet operations including the sewage treatment system, solid waste facility, and storage and handling of hazardous materials. A copy of the plan should always be available at the Hamlet office and the Maintenance Garage. Hamlet personnel must familiarize themselves with the plan in order to respond quickly and effectively in the event of a spill.

9.3 Fire Response Plan

The Hamlet Fire Department is responsible for creating a contingency plan to deal with fires in the Hamlet. As burning of waste may produce harmful gases, special precautions should be taken when responding to fires in and around the solid waste facility. In the event of an uncontrolled fire in the Hamlet, the following steps should be taken:

- Immediately evacuate the area and go to the Hamlet's meeting place;
- Keep everyone including Hamlet personnel up-wind from the source; and
- Contact the Hamlet Fire Department at (867) 928-8888

9.4 Bear Safety

Solid Waste Facilities are an attractant for a number of wildlife species, especially bears. For this reason, it is imperative that all personnel working in and around the solid waste site be properly trained in bear safety. For information on polar bear safety please refer to the website http://dsp-psd.pwgsc.gc.ca/Collection/R62-342-2001E.pdf or contact Parks Canada, Western Arctic Field Unit at (867) 777-8800 or Auyuittuq and Quttinirpaaq National Parks at (867) 473-2500 or (867) 975-4673. For information on black bear and grizzly bear safety please refer to the Department of Environment and Natural Resources, Government of the Northwest Territories website: http://www.enr.gov.nt.ca/_live/pages/wpPages/Home.aspx.