

CITY OF IQALUIT

Emergency Response Plan (Revised Final)

Landfill and Waste Transfer Station

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TELEPHONE LISTING

To be posted at the Site Office, Scale House, Waste Transfer Station and Landfill Attendant Trailer **Revision Date: January 2020**

EMERGENCY:

General Emergency (RCMP)	867 979 1111			
GENERAL:				
Fire/Ambulance:				
Police: RCMP (general inquiry and assistance)	867 979 0123			
Government Agencies:				
Nunavut Department of Environment:				
Environmental Emergencies	867 920 8130			
Nunavut Department of Community and Government Services:				
Emergency Management	867 975 5320			
Nunavut Department of Health:				
Environmental Health Officer	867 975 4800			
After Hours Emergency	867 975 5772			
Nunavut Water Board (NWB)	867 360 6338			
Administration:				
Director of Engineering and Public Works (Matt Hamp)	office: 867 975 8509			
	cell: 897 222 2965			
Manager of Solid Waste (TBA)	867 979 XXXX			
Facility Supervisor (TBA)	867 979 XXXX			
Public Works Operations Superintendent	office: 867 979 5631			
	cell: 867 222 2956			



1.0 Introduction

The purpose of this Emergency Response Plan (ERP) is to provide guidance to facility personnel for responding to an emergency. This document has been prepared as part of an overarching Environmental Management Plan for the City of Iqaluit Landfill and Waste Transfer Station (WTS); this document provides further guidance on responding to environmental emergencies and can be used in conjunction with this ERP. These policies and procedures define how the City of Iqaluit (the City) will protect human health and the environment during the Operations and Closure Phases of the project. The ERP covers all aspects of emergency planning and response including types of emergencies, key contact information, notification processes, emergency procedures, and reporting. Mechanisms for updating the ERP have also been incorporated.

This plan must be reviewed by all employees, as part of their training, and at regular intervals (e.g., every 12 months) during operations.

During initial and future construction efforts at the Landfill and WTS, the primary contractor in charge of construction activities will be obliged to prepare a separate ERP outlining construction-specific hazards and related emergency procedures to be followed by site personnel. Due to changing conditions and the nature of construction operations, the hazards and procedures outlined in the construction phase ERP will differ significantly from those during the Operations Phase.

1.1 Scope of Plan

Location

This ERP applies to the Iqaluit Waste Management Facility (IWMF), including the Waste Transfer Station (WTS) and Landfill, Iqaluit, Nunavut.

Definitions

For the purposes of the ERP, an emergency is defined as any accident, incident, or unplanned event or situation that requires immediate and urgent action to prevent or minimize harm to persons, the environment, or property.

Individuals referred to by their titles, including the Chief Administrative Officer (CAO), Director of Engineering and Public Works (Director), Manager of Solid Waste (Manger), Facility Supervisor and Health and Safety Officer, are all employees of the City of Iqaluit.

Philosophy

No emergency response plan can identify every type of emergency, or predict the details of a given situation. This ERP will provide guidance for specific occurrences at the landfill site, and is designed to be



adaptable for future requirements. The procedures provided here should be implemented with due diligence, based on sound judgement and experience.

Prevention

Proper preventative measures, close monitoring, training, and effective management are the best lines of defence against accidents and emergencies. The most effective method for mitigating accidents and emergencies is through best management practices to reduce the likelihood of an occurrence.

Readiness

All personnel working at the site should be aware of and prepared for events covered in the ERP.

Priorities

The foremost priority of site personnel in the event of an emergency is the protection of themselves and other individuals, as well as the environment. The next priority is the protection of property.

Definition of an Emergency

For the purposes of this ERP, an emergency is defined as any accident, incident, unplanned event, or situation that requires immediate and urgent action to prevent or minimize harm to persons, the environment, or property.

1.2 **Individual Responsibilities**

It is the responsibility of all site personnel to follow safe practices and to be vigilant and prepared for potential emergencies. Management and individuals in designated roles have further responsibility to enable and monitor readiness.

It is the responsibility of the Manager to:

- Ensure the ERP is accessible and ready to be implemented in the event of an emergency;
- Ensure all staff are trained in the ERP contents and procedures;
- Prepare incident reports in the event of an emergency; and
- Assign the responsibilities of the Emergency Response Coordinator (ERC) to the designated individual or alternative employee.

It is the responsibility of the **ERC** to:

- Determine the urgency of an identified situation and whether it constitutes an emergency;
- Implement the elements of the ERP;
- Direct the activities of site personnel;
- Delegate responsibility to other site personnel, as required;
- Contact the relevant authorities;
- Inform and consult with the Manager and any other internal stakeholders; and
- Allocate the necessary resources to adequately respond to the emergency.



It is the responsibility of all site personnel to:

- Be familiar with the provisions of the ERP;
- Take direction from the ERC and his/her delegate (as applicable) during an emergency; and
- Be alert for and report the initial signs of potential.

It is the responsibility of the **first observer** of a potential emergency to:

- Rapidly assess any details that may be useful in describing the potential emergency;
- Take any immediate steps that may be safely performed to protect themselves, other persons and the environment, and to protect property, where possible;
- Notify a supervisor, the Landfill Manager and/or the ERC; and
- Wait for further instructions.

For all emergencies, day or night, all employees and contractors should report to the designated Muster Point (see Section 5). The Visitor Log, maintained at the Scale House, can be used to verify all employees, contractors and visitors are accounted for.

Notification Procedures 1.3

During an emergency or potential emergency, the chain of authority for designating the Emergency Coordinator is as follows:



If one of these individuals cannot be contacted immediately, the next highest person on the chain of authority should be contacted. Efforts should continue to be made to contact any unavailable individuals even if someone higher in the chain has been notified.

Emergency Coordinator

The Emergency Coordinator is that person highest in the chain of authority who is aware of the emergency and is present at the site. He or she will serve as Emergency Coordinator until succeeded by a person higher in the chain of authority.



If contacted while away from the site during an emergency, all individuals in the chain of authority will take reasonable steps to travel to the site immediately, and remain there until the situation is considered under control.

Emergency Numbers 1.4

The contacts and telephone numbers provided at the front of this document shall be posted near all telephones at the site, and are identical to those found prior to the Operations and Maintenance Manual Table of Contents. These numbers should also be stored on the cellular phones of all site personnel. The numbers are to be confirmed, updated, and reposted annually, with the revision date prominently indicated.

Levels of Response 1.5

Once an emergency has been confirmed and declared by the Emergency Coordinator, the steps outlined in this section will be implemented.

Based on the available information, the Emergency Coordinator will declare a Level III, a Level II, or a **Level I** emergency as defined below:

Level III: Continue Working and Monitor Communications

All personnel are to continue with their duties unless otherwise directed by the Emergency Coordinator, and shall constantly monitor communications for changes in the status of the emergency.

The ERC is to establish contact with all personnel on the site and inform them of the Level III status.

Gather at Designated Area

All personnel will abandon their duties in a controlled manner, and gather on-site at an area designated by the ERC.

Unless otherwise directed, personal property, including vehicles, is not to be collected.

Level I: **Evacuate**

All personnel will evacuate at the direction of the ERC, using the designated exit route and meeting at the designated gathering area beyond the site.

The existing communications network used during normal operations at the site will be used in the event of an emergency, including direct contact, two-way radio, or telephone (fixed, mobile, and cellular). Once an emergency is declared, all site personnel are to maintain an open communication line with the ERC at all times.



The on-site gathering areas used during a Level II emergency will normally be located at:

- Landfill:
 - At the intersection of the landfill access road and the Northwest Aggregate Deposit Access Road.
- WTS:
 - Either outside the Scale House or at the main site entrance gate. Any evacuation from the site will normally be conducted via the Kakivak Court with the Qaggamiut Road gate as an optional evacuation route.

If a Level I emergency is called before a Level II is called or completed, the ERC will announce the evacuation, the exit route and outside gathering area. Personnel will proceed directly to the outside gathering area while avoiding travel over the landfill or near the site of the emergency during the evacuation.

After evacuation, personnel are to remain at the off-site gathering area to be accounted for and shall wait until directed to re-enter the site or to leave.

The primary evacuation routes shall be the following:

- From the Landfill:
 - Via the landfill access road to the Northwest Aggregate Deposit Access Road, continuing to the Qaqqamiut Road.
- From the WTS;
 - Via the main gate to the Kakivak Court, continuing to Federal Road.

During Level II and Level I emergencies, and for as long as the situation is safe, a Gate Monitor will be posted at the main WTS and/or Landfill entrance gate. Non-site or non-emergency personnel (e.g., waste haulers, contractors, visitors, media) will NOT be permitted entry to the site during the emergency. The Emergency Coordinator may also choose to prevent any entry to the site during a Level III emergency. If conditions require the Gate Monitor to abandon the gate, the gate will be closed but not locked.

During Level II and Level I emergencies, the Emergency Coordinator will appoint a Site Clearer to direct non-site personnel to leave the site. The Site Clearer will contact all non-site personnel, record their names and/or license plate numbers, and direct them to leave immediately and to check with the Gate Monitor as they leave. The Site Clearer will then crosscheck the list of names and license plates with the Gate Monitor to ensure that all non-site personnel have left the site.

Public Relations 1.6

All communications with the public concerning the emergency, including media contact, will be conducted by the Manager or designate.



Types of Emergencies Covered by ERP 2.0

This ERP addresses the following emergencies at the City's facilities:

- Medical Emergencies;
- Vehicle Fires;
- **Building Fires**;
- Landfill Fires;
- Liquid/Chemical Spills;
- Gas Leaks/Suspicious Odours;
- Explosions;
- Extreme Weather Events;
- Power Outages;
- Dangerous Animal Encounters; and
- Violent Criminal Behaviour.

Other emergencies or other occurrences including environmental spills, stormwater impacts, and erosion/sediment control issues are included in the Environmental Protection Plan (EPP).



On-Site Emergency Equipment 3.0

As a minimum, the following emergency equipment and supplies are to be kept at the site at the indicated locations. All personnel are to familiarize themselves with their location and be trained in their operation.

- First aid kits All mobile equipment and buildings;
- Fire extinguishers All mobile equipment and buildings;
- Eyewash stations Waste Transfer Station, Landfill Attendant Trailer;
- Respirators Waste Transfer Station; and
- Oil absorbent materials All mobile equipment and buildings.

The Manager is responsible for maintaining emergency equipment and supplies. Equipment Operators are responsible for reporting any deficiencies with safety equipment and supplies associated with vehicles they operate. All site personnel are responsible for reporting observed deficiencies with any safety equipment and supplies.



4.0 Emergency Response Procedures

The following sections identify the recommended response to several contingency situations and emergencies. It can be expected that situations other than those described below may arise from time to time, and should be responded to in a manner appropriate for the emergency situation at that time.

4.1 Medical Emergencies

It is required that at least one member of the Landfill or WTS staff has been trained, and is current in Emergency First Aid and CPR.

In the case of a medical emergency, the staff member with Emergency First Aid Training will be informed and will generally follow the PRIORITY ACTION APPROACH outlined below for life-threatening situations:

- Take charge of the situation;
- Call out for help to attract bystanders;
- Assess the hazards;
- Make the area safe for the First Aiders and others;
- Identify himself or herself as a First Aider and ask the injured party if they can help;
- Assess the casualty for life-threatening conditions;
- Provide first aid for life-threatening conditions;
- Send someone to call for help and notify the ERC;
- Organize bystanders to:
 - Help make the area safe,
 - Ensure that all casualties have been discovered,
 - o Call ambulance, police, and other emergency personnel, and
 - Assist with first aid, as directed.

If the casualty has a suspected head or spinal injury, do not move the victim, but carefully steady and support the head and neck without moving the head before establishing responsiveness.

4.2 Vehicle Fires

All collection vehicles and landfill equipment shall be supplied with a fire extinguisher, as well as fire suppression systems in major landfill equipment.

The equipment operator will follow the procedure below in the case of an equipment/vehicle fire:

- Notify the ERC;
- Try to move the machine to an isolated area, but only if it is safe to do so from a personnel perspective;
- Shut down the machine; and



• ONLY IF THE OPERATOR DETERMINES THAT IT IS SAFE TO DO SO, use the supplied fire extinguisher to put out the fire.

The ERC will follow the procedure below in the case of vehicle fire:

- Take direction from the Emergency Services in responding to the fire; and
- Alert the Department of the Environment in the event that the vehicle has the potential to release contaminants to the environment, as a result of the fire and/or contains waste.

4.3 Building Fires

Fire extinguishers are strategically located in all buildings. If the fire is small, persons identifying the fire should try to put it out with a fire extinguisher. If the fire cannot be controlled or is severe when identified, the below procedure below should be followed:

- Notify the ERC and/or the closest Supervisor;
- Evacuate to the designated assembly area or muster point;
- ERC or Supervisor will report the fire to the local Emergency Services;
- Ensure clear access for arrival of Fire Department;
- Inform the Fire Department of any pertinent details of the fire (location, extent, cause, combustible materials, actions taken) and on-site firefighting resources (water supply, heavy equipment); and
- Assist only if, and as directed by, firefighting personnel.

4.4 Landfill Fires

Landfill fires can result from undetected hot loads that are landfilled. The following procedures will be followed upon identification of fire and notification of the Emergency Coordinator.

Assess the Situation. The employee first observing the potential or actual fire will:

- Determine the number, location, extent and possible cause of the landfill fire;
- Notify the ERC and all on-site Landfill staff;
- The ERC will contact the Fire Department, as necessary;
- Provide the Fire Department with as much information relating to the fire and its cause(s), as possible, to assist them in responding appropriately to the situation; and
- If multiple fire locations exist, the ERC will determine, as best as possible, the priority fires for fighting first. In this regard, the ERC will take direction once the Fire Department has arrived.

Prepare for Firefighting. The ERC will assign staff to:

- Prepare an area away from the working face to be clear of vegetation and waste (preferably virgin ground);
- Excavate soil nearby for use in smothering the fire, if insufficient cover material is at hand; and
- Assemble portable pumps and hoses.



Contain the Fire: The ERC will, in conjunction with direction from the Fire Department, assign staff to:

- Construct a fire break, as close to the burning area as possible, to limit surface spreading of the fire;
- Suppress flames with water;
- Push smouldering material to the clear area, while continuing to spray with water; and
- Smother the fire by adding soil and compacting.

Monitor the Situation: The ERC will assign staff to:

- Continue to monitor the fire site and smothered material following the apparent extinguishing of the fire; and
- Leave burnt material isolated and exposed for two days after extinguishing to ensure no subsequent outbreak of fire.

Liquid/Chemical Spills 4.5

The first observer will check the immediate area for any affected or injured personnel and will inform the ERC, as soon as possible.

The ERC will:

- Direct staff to take appropriate emergency environmental protection measures, such as placing booms or barriers around the spill to prevent liquid escape into the environment or into surface water bodies:
- Call the Nunavut Department of Environment Environmental Emergencies (867 920 8130), if the spilled substance quantity exceeds the minimum notification requirements (refer to the EPP);
- Notify the Department of Environment for the Government of Nunavut;
- In the event that liquids have reached surface water bodies, attempt to prevent further release to minimize the potential effects of the release;
- Take direction from the Department of Environment or their designated authority;
- Attempt to determine the cause of release and whether a risk of a further release exists; and
- Assess and potentially upgrade the level of the emergency, as necessary.

For additional information on spills and releases, please consult the EPP (Section 6.0).

Gas Leaks/Suspicious Odours 4.6

In the event you smell gas and suspect a leak immediately cease all operations. DO NOT SWITCH ON LIGHTS OR ANY ELECTRICAL EQUIPMENT. Do not turn switches on or off; leave them in the position they are in, as this action can generate sparks.

- Notify dispatch or the ERC;
- Evacuate the building/equipment by the nearest exit. Notify other building occupants to do so as well;



- Once outside, move away from the building and head to the designated waiting area to await further instructions; and
- Contact the Fire Department, as necessary.

Explosions 4.7

In the event of an explosion in a building, staff should take the following actions:

- Immediately take cover under tables, desks, or other such objects providing protection against flying glass or debris;
- Evacuate the immediate area of the explosion;
- Notify dispatch of the occurrence;
- Seek out and assist injured and disabled persons in evacuating the building. Exit via the nearest safe exit;
- Once outside, move to the designated assembly area;
- Await further instructions. Do not return to the building unless instructed to do so by the ERC;
- Ensure clear access for arrival of Fire Department. Keep roadways and walkways clear for emergency vehicles; and
- The ERC will inform emergency response personnel of any pertinent details of the explosion, such as location, extent, cause, combustible, or flammable materials in the area of the explosion and what actions are to be taken.

Extreme Weather Events 4.8

Extreme weather events might include snow storms, extreme cold warnings, ice storms or extremely high winds. If extreme weather events occur, the following actions will be taken:

- When a weather warning is issued by Environment Canada, the Superintendent of Public Works will consult with the appropriate authorities at Environment Canada to determine the anticipated severity and duration of the weather event;
- The Facility Supervisor will hold a planning meeting prior to a foul weather event to prepare and implement a foul weather action plan;
- Loose materials that can be blown around or damaged will be moved inside or tied down;
- Doors and windows will be secured; and
- Communication equipment will be checked.

4.9 **Power Outages**

Power outages will affect the operation of any weigh scales, pumping stations and ventilation systems for buildings, in addition to any normal operating systems therein. The loss of power does not necessarily constitute an emergency. Indoor gas detection and alarm systems (such as carbon monoxide monitors on tipping floors) will not be functional during a power outage. The procedure below will be



followed if a power outage exceeds five minutes and alternative ventilation cannot be activated (such as opening truck access doors):

- Staff will evacuate the buildings and gather at the designated assembly area; and
- Building re-entry will be allowed after power has been restored and indoor gas detection alarms are silenced.

It is acknowledged that the WTS is equipped with an emergency generator that should serve to mitigate issues associated with power outages.

4.10 **Dangerous Animal Encounters**

Certain animals can pose a danger to landfill staff or the public. In particular, polar bears and other bear species can cause serious injury or death as a result of contact with humans, and extreme care should be exercised when a bear is in the area. Bears are attracted to garbage and will readily enter landfills and other areas where garbage is stored in search of food. They can also become habituated to areas where food sources have been previously available.

In the event of a bear encounter, the following measures should be undertaken:

- Notify any and all personnel working in the area, as well as the ERC, of the presence of a bear;
- Contact the relevant authorities, if necessary;
- Do not approach bears for photography or any other reason! This leads to habituation and encourages more frequent encounters with humans; and
- If a bear approaches, a number of deterrents can be used to startle or frighten the bear away:
 - Rubber bullets,
 - Bean bag round,
 - Cracker shells,
 - Scare cartridges,
 - Pen launcher,
 - Pepper spray,
 - Noisemakers, and
 - Warning shots.
- Electric fencing and vehicles can also be effective deterrents to bear encounters.

Violent/Criminal Behaviour 4.11

If you observe a crime in progress or behaviour that you suspect is criminal, immediately notify police at 867 979 1111.

DO NOT APPROACH OR ATTEMPT TO APPREHEND THE PERSON(S) INVOLVED!



The following items are recommendations for dealing with robbery/assault:

- Cooperate, give the person exactly what they are looking for, nothing more;
- Try to notice distinguishing traits, such as clothing, race, height, weight, age, eye colour, facial hair, or other identifying features such as scars, moles, tattoos, eyewear, etc.;
- Pay attention to the type of weapon used, if applicable;
- Listen carefully to their voice for distinguishing characteristics (i.e., an accent, lisp, stutter);
- Record what direction they go after the confrontation. If they use a vehicle, record the licence plate number, and make and model of the vehicle;
- Notify the police by calling 867 979 1111 immediately after the person leaves. Stay on the telephone with the police dispatcher and provide additional information as changes in the situation occur, until the first police officer arrives at your location; and
- Cooperate fully with the police investigation.



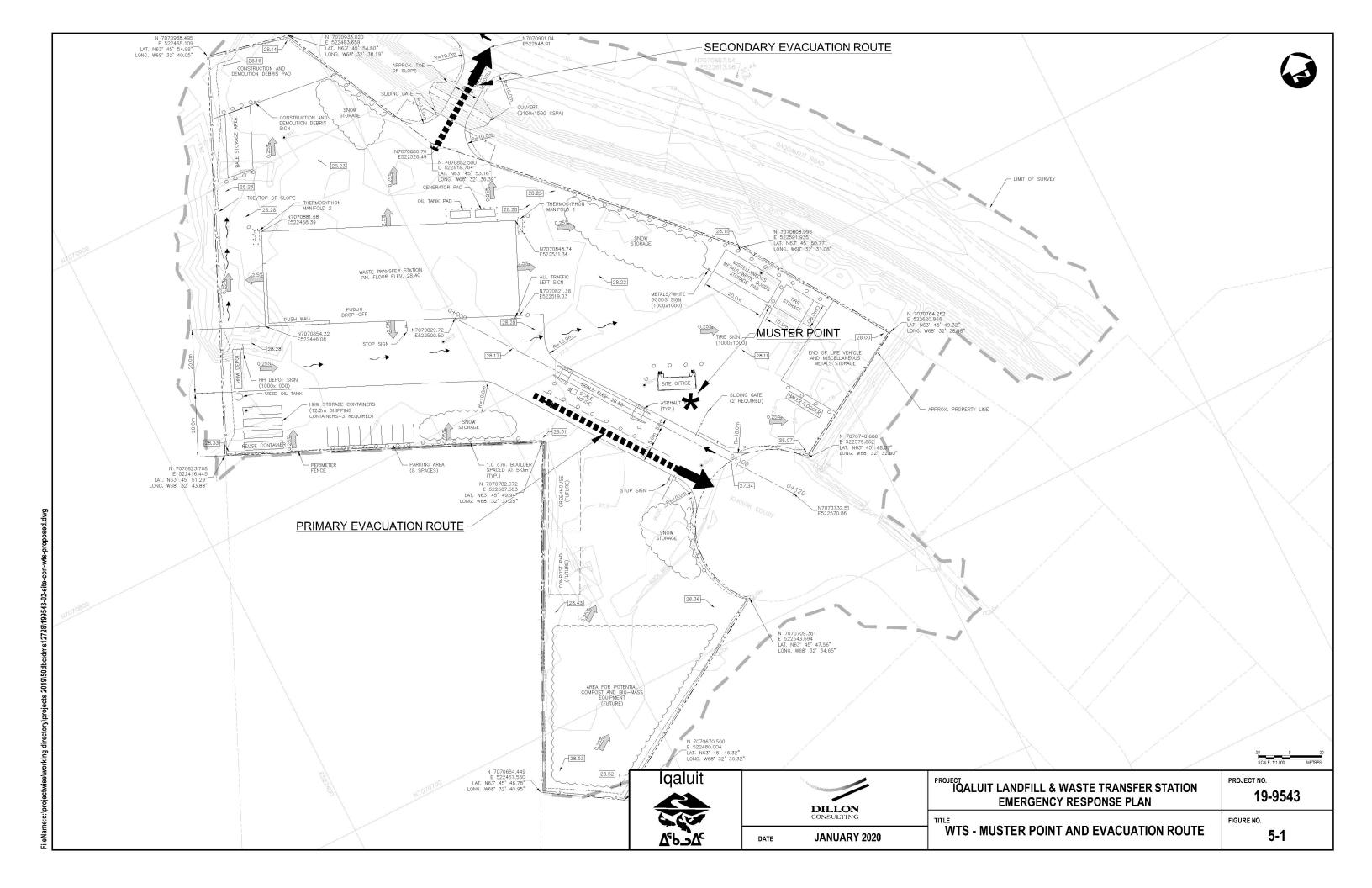
Evacuation Plan

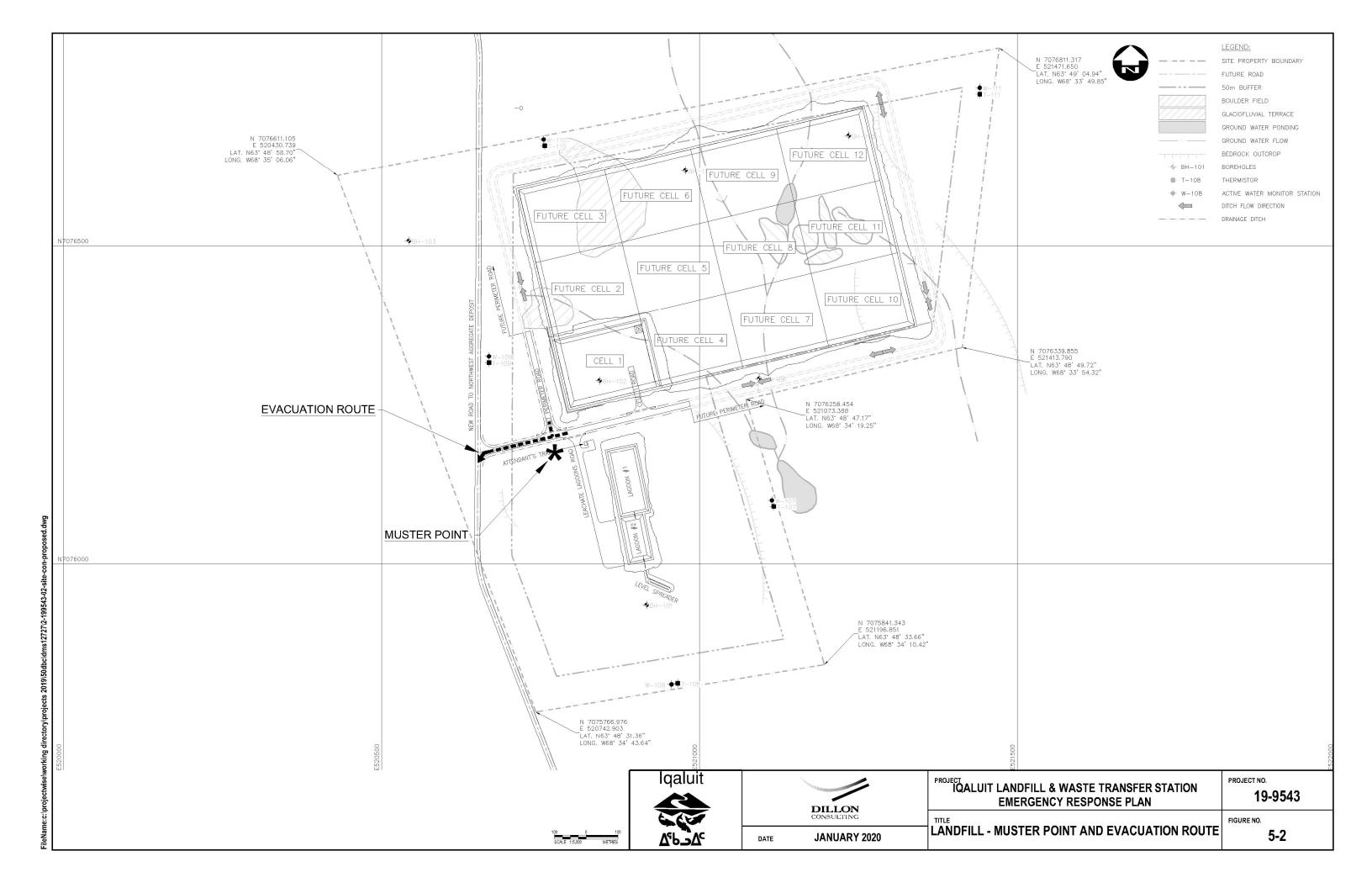
5.1 Evacuation Routes

5.0

Figures 5-1 and 5-2 identify evacuation routes and muster points for both the WTS and Landfill. In the event of an emergency where evacuation is required, move quickly and orderly to the muster point or designated assembly area, and await further instruction. Look around at the assembled people to determine if anyone is missing and inform the ERC, emergency services, or others, as applicable.







6.0

Emergency Response Plan Distribution and Updating

This ERP will be used as a training tool for all new staff upon hire. The ERP will be easily accessible at both the WTS Office and the Landfill Attendant Trailer. The ERP will be reviewed annually by the Manager of Solid Waste and updated for changes that have occurred over the previous year.



Post Emergency Review and Plan Assessment

Following an accident or incident outlined within the ERP, a review of the effectiveness of this plan will be conducted to identify any areas of improvement, if applicable. This assessment should be conducted by the Director of Engineering and Public Works, the Manager of Solid Waste and any other affected parties. Any improvements identified during this meeting should be made to the ERP, as soon as practicable, to ensure more effective emergency response if future incidents occur.



7.0

Readiness Review

Emergency Reporting 8.1

8.0

Brief but accurate records will be kept during an emergency situation by the ERC. This will assist in later analyses, reporting and plan revisions. Within five working days of the resolution of the event (i.e., when the event is no longer an emergency), the Director of Engineering and Public Works will provide the Nunavut Impact Review Board with a brief written report concerning the emergency. This report will include:

- An account of the circumstances that caused the emergency;
- An account of events during the emergency, including chronology;
- The current status of the site with respect to the emergency; and
- Measures to be taken to minimize similar occurrences.

An evaluation of the performance of coordinators, site personnel and the ERP during an emergency, and planned measures to address and identified inadequacies of the ERP shall be undertaken.

Simulation Exercises 8.2

A simulation exercise will be designed by the Manager of Solid Waste and conducted at intervals of 12 months. The purpose of the simulation exercise is to provide an opportunity for training and reiteration and test the readiness of the site, equipment, and associated personnel in the event of an emergency situation.

Each exercise may include any or all of the following, at the discretion of the Superintendent of Public Works:

- Establishing lines of authority;
- Arranging coordination and communication;
- Mobilizing personnel and equipment;
- Deploying personnel and equipment under controlled conditions (e.g., mock injuries, contained fires);
- Contacting external agencies; and
- Evacuation.

Each exercise will be arranged and executed in conjunction with the appropriate agencies. All efforts will be made to reduce the risk to personnel, environment and property to a minimum.

Each exercise may include simulation of one of the situations covered in this ERP. No exercise needs to be duplicated within a five year period.

