

Inuvik Emergency Response Plan






 <p>NORTHWEST TERRITORIES POWER CORPORATION <i>Empowering Communities</i></p>	<p>Health & Safety Management System Form: Inuvik Emergency Response Plan</p>	Page 1 of 21
	<p>Monitor: Director, Health, Safety & Environment</p>	Form #: 11.2

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1 Site Details

1.1 Community Information

The community of Inuvik (68⁰ 21'N and 133⁰ 43'W) is situated 1086 km northwest of Yellowknife on the east channel of the Mackenzie River delta. The community has a population of 3,243 (2006 Census).

Inuvik is accessible year round by air. It is also accessible year round by road (the Dempster Highway) except during break-up and freeze-up.

1.2 Site Description

The regional administration office is separated from the power plant facility and is located on the first floor of the GNWT MACA building, across the street from the NTPC LNG Site.

The Facility (see Figure 1.2.1) is located on the west side of Inuvik near the east bank of the Mackenzie River, and is surrounded with a chain-link fence. Access to the Facility is through a number of vehicle gates around the property; however the main gate is on the west side of the property between the office and the EMD Plant.

The Facility consists of the regional warehouse building located on the southeast side of the property, the EMD Plant on the northwest side, and the K-Plant east of the EMD Plant. A storage shed sits north of the K-Plant. There is one diesel tank (Tank F) northwest of the K-Plant (Tank A and Tank B were removed in 2007 and Tank C was removed in 2015). Two Liquefied Natural Gas (LNG) tanks now site in the LNG site next to Tank F (see Figure 1.2.3).

The Line Yard, a large storage compound for poles, transformers, and other materials, is located two kilometres southeast of the Facility. This compound contains a number of wooden storage platforms and a garage used for line vehicles.

Figure 1.2.1 – Inuvik Plant Site Diagram

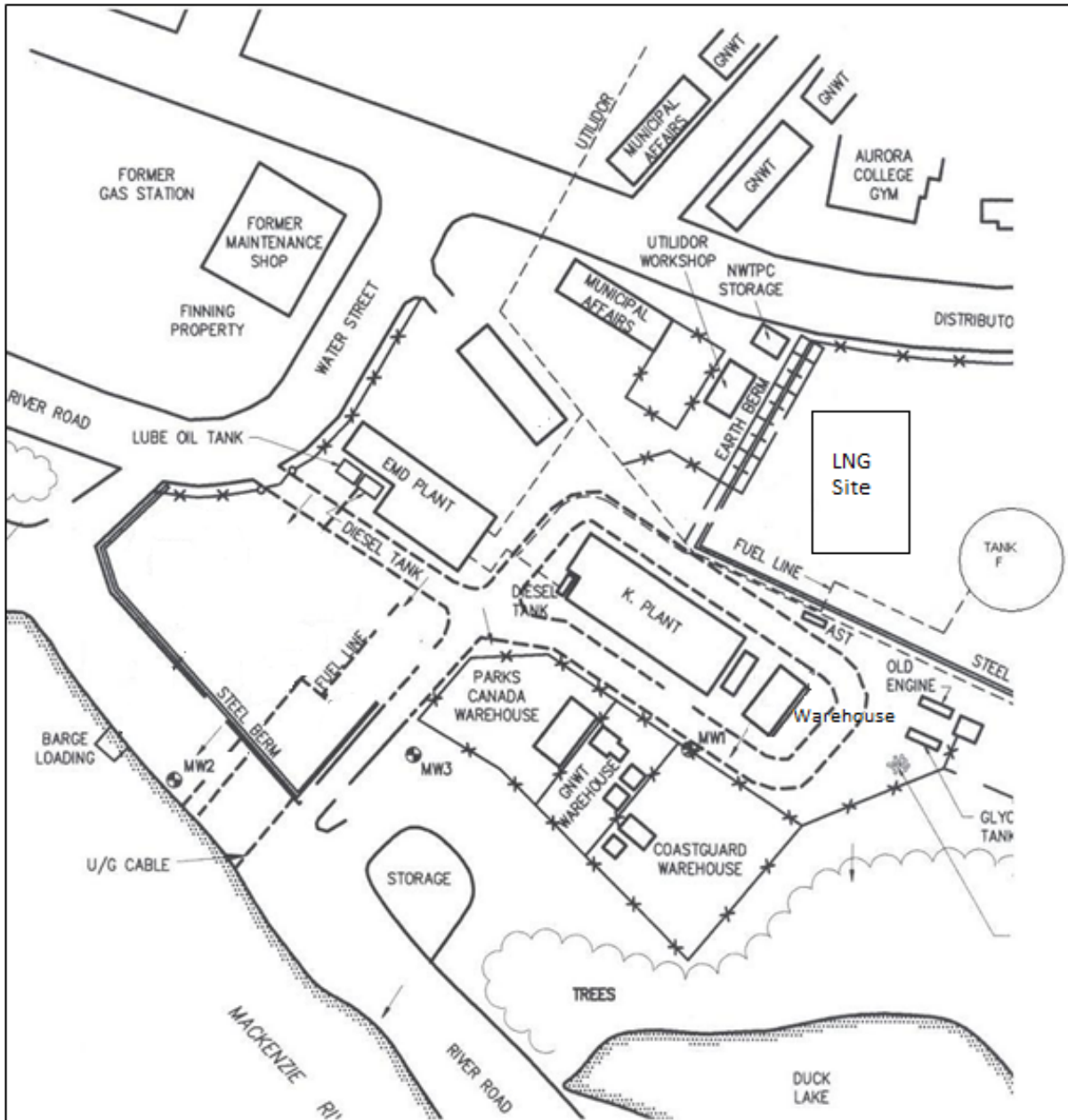


Figure 1.2.2 – EMD Plant



Figure 1.2.3 – Inuvik Plant Site Aerial Photo



2 Emergency Contact List

2.1 List of NTPC Personnel & Contacts

- A list of contact information for NTPC personnel to be used only in the event of an emergency is available on the NTPC Intranet (i.e. PowerLine) on the Health & Safety Management System page next to Element 11
(<http://powerline.ntpc.com/file/1585/download?token=kBBI6kwn>)

2.2 List of Local Emergency Contacts

- The following parties may be of assistance in responding to an emergency.

Contact	Phone
Emergency	9-1-1
NTPC System Control	867-669-3370
RCMP	867-777-1111
Fire Department	867-777-2222
Health Center	867-777-8000
Ambulance	867-777-4444
Town of Inuvik	867-777-8600
WSCC	1-800-661-0792
24-Hour Spill Line	867-920-8130
ENR Fire Operations	877-698-3473
GNWT Emergency Measures Organization	867-920-2303
NorthwesTel	867-920-3535

2.3 List of Third Party Contacts

- Additional heavy equipment is available within the Town of Inuvik:
 - Town of Inuvik - 867-777-8600
 - Northwind Industries Ltd. - 867-777-2426
 - E. Gruben's Transport Ltd. - 855-673-7001

2.4 Emergency Notification Procedures

- When you call to request assistance from an emergency responder (e.g., RCMP, Fire Department, ambulance) remember to:
 - Stay calm.

- Be prepared to answer the following questions:
 - What is your name?
 - Where is the emergency located?
 - What is the emergency (e.g., fire, medical, spill, etc.)?
 - Are there any injuries?
 - How did it happen?
 - When did it happen?
- Do not hang up until instructed to do so by the dispatcher.
- You do not need to know all the answers to these questions, but quickly gather as much information as you can.
- Provide a telephone number or safe location where the emergency responders can call or meet you, and wait for the responders at the safe location.

3 List of Equipment Available for Response

This facility maintains the following equipment available for use in emergencies.

Equipment	Location
First aid kits	1 located in the Customer Service office kitchen 1 located in the LNG control building 1 located in the Warehouse 2 located on the main floor of the K-Plant by each door 2 located on the main floor of the EMD plant 1 located in the Mechanics Shop 1 located in the EMD Plant control room
Fire extinguishers	4 located at the LNG site entrance 1 located in the LNG control building 2 located in the Diesel fuel transfer station 16 located on the main floor of the EMD Plant 2 located on the Control Room level of the EMD Plant 13 located on the main floor of the K-Plant 1 located on the Mezzanine level of the K-Plant 1 located in the MCC Room of the K-Plant

	4 located in the Warehouse
AED	1 located in the Customer Service office 1 located in the EMD Plant control room 1 located in the K-Plant
Eyewash stations	3 located on the main floor of the EMD Plant 2 located on the main floor or the K-Plant 1 located in the warehouse 1 located in the LNG control building
Sorbents	Large and small spill kits are located in EMD plant and the K-Plant. 1 Large spill kit (Overpack drum) is located at the Diesel Fuel Transfer station 1 Large spill kit (Overpack drum) is located at the Barge fuel transfer station Additional sorbent material and overpack drums are located in the Spill Response trailer
Shovels, vacuums, and other recovery equipment	2 vacuums located in EMD plant 2 vacuums located in the K-Plant Shovels, rakes, etc. are located in the Spill Response trailer Water pumps located in the EMD plant
Salvage drums and other temporary containers	Empty 204 L drums are located outside the warehouse
Self-contained breathing apparatus	Available from the Yellowknife warehouse
Respirators	Workers have their own personal respirators Additional respirators located in the EMD plant
Personal protective equipment.	Additional PPE (goggles, rubber gloves, tyvex suites, etc.) located in the plant and the warehouse

4 Spill Response

In the case of a spill of hazardous material refer to the Inuvik Spill Response Plan. Hard copies are located at the plant and digital copies are located on the PowerLine.

<http://powerline.ntpc.com/divisions/health-safety-environment/environment/spill-response-plans>

5 Communication and Site Access Information

5.1 Communications

- Reliable communications are vital during an emergency response. Establish reliable communication between the Incident Commander and onsite responders as soon as possible.
- In the event of a communications outage (i.e., loss of NorthwesTel phone, cell, email service) the On-Scene Commander shall make every effort to contact the Incident Commander or Operations Chief as soon as it is safe to do so. Satellite phones are available:
 - Director, Thermal Division
 - Line Shop (T&D Department)
 - Control Room (3 units)
 - RCMP
- Landline and cell phone communication is available from NorthwesTel. All major buildings (plants, office, warehouse, line shop, etc.) have at least one phone.

5.2 Access by Road

- Road access via the Dempster Highway is available year round.

5.3 Access by Air

- A 6000 ft asphalt airstrip is located in Inuvik. Charter and regular scheduled air services are available year round.

6 Medical Emergencies

6.1 Medical Emergency

- Ensure your own safety in the situation.
- Tend to the injured person(s) as required following first aid procedures.
- If required contact medical services to get an ambulance to attend.
- Assist the injured person to a medical centre/hospital for treatment by a doctor.
- Remain with the injured person(s) until medical aid arrives or you have reached a medical centre/hospital.

6.2 Guidelines for Summoning an Ambulance

- It is important to have a plan in place to call for an ambulance if one is required. Designate one person to be the main point of contact with emergency services.

- Call 867-777-4444 to summon an ambulance in Inuvik.
- The ambulance dispatcher will need to know:
 - it is a workplace accident
 - the complete company address (may need to include more specific directions or details)
 - site/contact telephone number
 - if first aid is attending, en route, or not available
 - description of the accident
 - number of casualties
 - are casualties conscious or unconscious
 - provide a brief description of the injuries
- It is also important to designate an individual to meet the ambulance at a predetermined location (same as given to ambulance dispatcher) to escort them to the accident area.

6.3 Providing Emergency First Aid Assistance

The following instructions serve as a reminder for certified Workers providing emergency assistance.

6.3.1 To Give Cardiopulmonary Resuscitation (CPR) (causality is not breathing and not responsive)

- Check the person and the person's ABCs (Airway, Breathing, Circulation).
- If the person is unresponsive and not breathing normally, call EMS/9-1-1 and get an AED or have someone else do this. Place both of your hands on the centre of the person's chest.
- Do 30 chest compressions: Push deeply and steadily
- Open the airway by tilting the head back and lifting the chin.
- Place a barrier device over the person's mouth and nose, or place your mouth over the person's mouth and plug the person's nose.
- Give 2 breaths
- Repeat cycles of 30 chest compressions and 2 breaths.
- Continue CPR until an AED arrives, you are not able to safely perform CPR anymore, or more advanced care takes over.

6.3.2 Abdominal Thrust for Choking Causality

- If the person cannot speak, cough, or breathe or is making a high-pitched noise, immediately begin care for choking.
- Alternate between any two of the following methods until the object comes out: back blows, abdominal thrusts, and chest thrusts. Continue providing care until the object comes out or the person begins to breathe or cough. If the person becomes unresponsive, call EMS/9-1-1 and begin CPR, starting with chest compressions.
- **BACK BLOWS**
 - From behind, place one arm across the person's chest; and

- Bend the person forward and deliver up to five (5) firm blows between the shoulder blades
- **ABDOMINAL THRUSTS**
 - From behind, place your fist just above the belly button.
 - Give up to five (5) quick, inward and upward thrusts
- **CHEST THRUSTS**
 - From behind, place your fist in the middle of the person's chest with your thumb facing inward and place your other hand over your fist.
 - Give up to five (5) chest thrusts by pulling straight back.

6.3.3 To Stop Bleeding

- Call medical assistance/ambulance
- Apply pressure directly onto the wound with a sterile gauze, clean handkerchief, or medical gloves
- Maintain a steady pressure
- If the casualty is bleeding from an arm or leg, elevate it
- Stay with the casualty until help arrives

7 Injury Communication Protocol

- Communication of information regarding emergencies shall be done as per section 5 and is the responsibility of either the emergency response authority (i.e., Manager, Director, or President; depending on the level of emergency) or the Communications Manager.
- In the event of a serious injury to an employee while on duty, the communication protocol shown in Figure 1 shall be followed.
- In the event of the death of an employee while on duty, the communication protocol shown in Figure 2 shall be followed.

Figure 1: Communication Flowchart for Serious Injury of Employee while on Duty

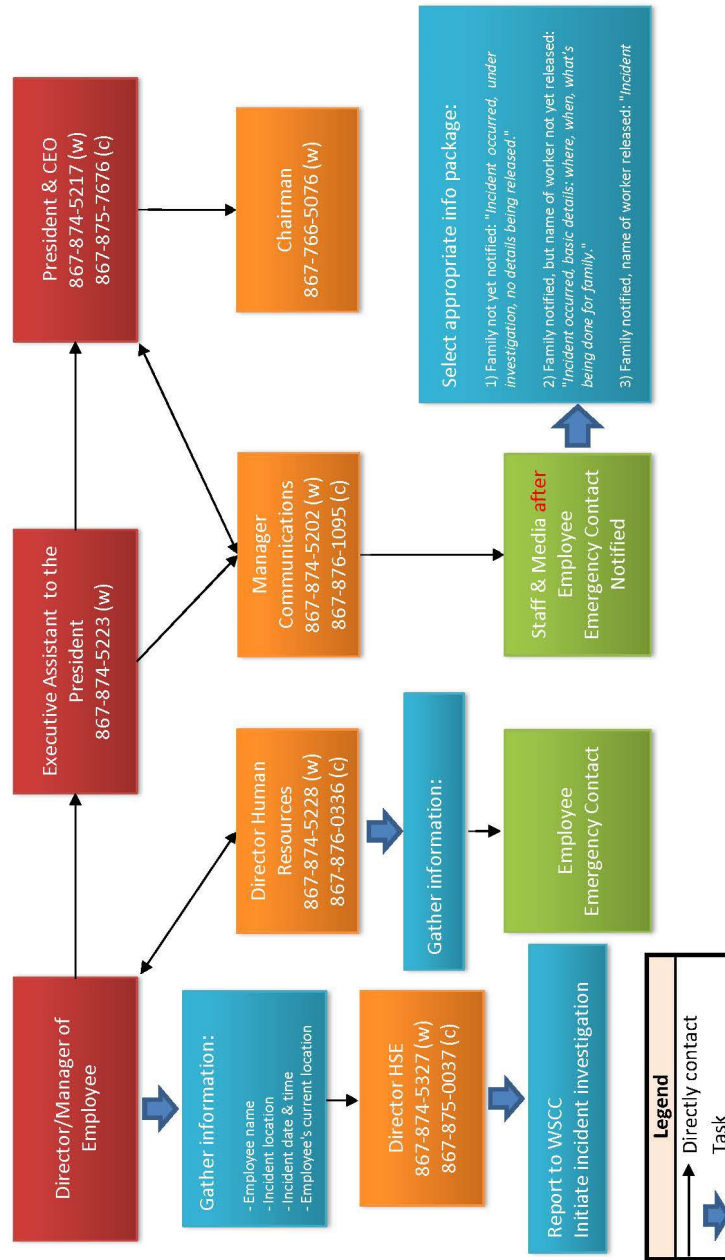
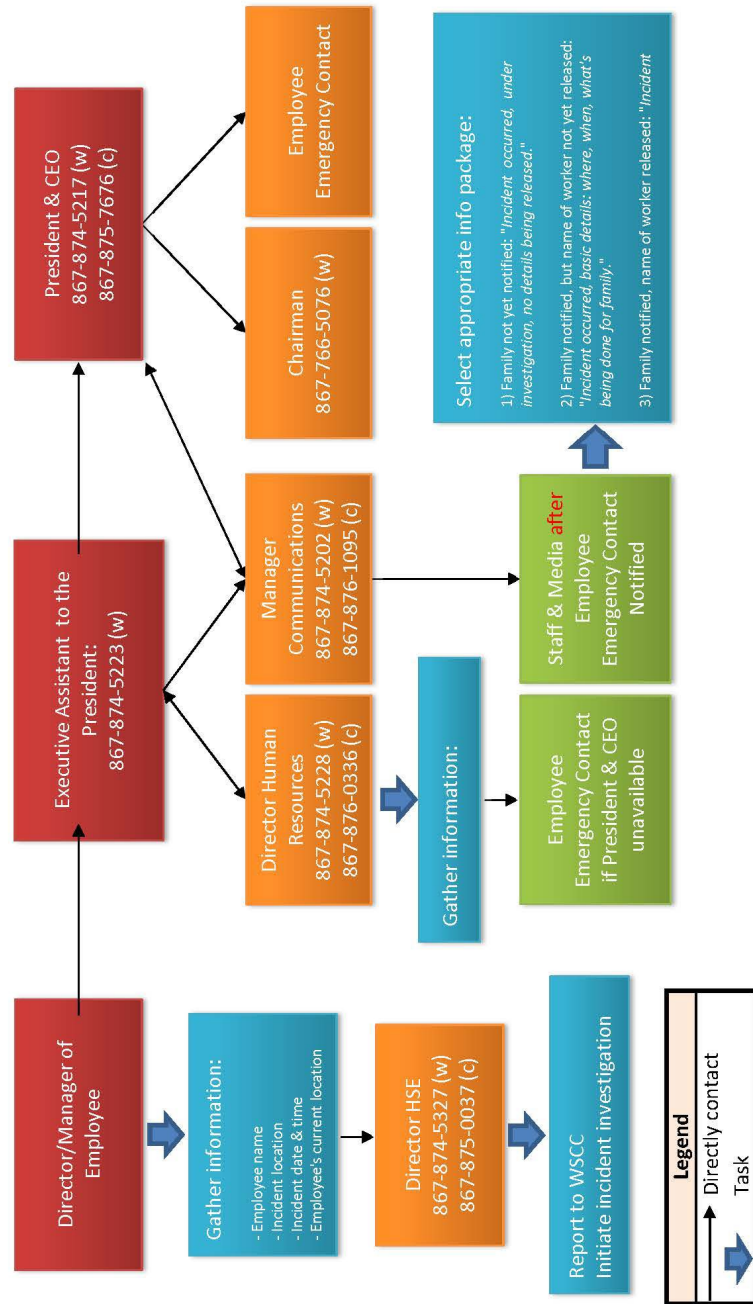


Figure 2: Communication Flowchart for Death of Employee while on Duty



8 Building Evacuation

8.1 General Evacuation Procedures

When evacuating your building or work area:

- Stay calm, do not rush, and do not panic.
- Safely stop your work.
- Gather your personal belongings if it is safe to do so. (Reminder: take prescription medications out with you if at all possible; it may be hours before you are allowed back in the site/building.)
- If safe, close your office door and window, but do not lock them.
- Use the nearest safe stairs and proceed to the nearest exit.
- Proceed to the designated Muster Point.
- Wait for any instructions from emergency responders.
- Do not re-enter the building or work area until you have been instructed to do so by the emergency responders.

8.2 Muster Point

The Muster Point is located next to the main vehicle gate located next to the EMD parking area.

8.3 Site Warden

Site Warden responsibilities include:

- In an emergency situation at the Plant Site or Line Yard ensure the appropriate emergency services have been notified and brief emergency personnel on their arrival.
- During a site evacuation conduct a search of the site to ensure that all employees have left the site before leaving the site themselves.
- Assist people who require help evacuating the site.
- Confer at the Muster Point, maintain contact with emergency personnel, conduct an employee roll call and inform employees of the situation.
- Have first aid training.
- The Plant Operator is the Site Warden for the Plant Site and the Power Lineperson Lead Hand is the Site Warden for the Line Yard.

8.4 Floor Warden

Floor Warden responsibilities include:

- During an evacuation of the office conduct a search of the floor to ensure that all employees have left the building before leaving the building themselves.
- Assist people who require help evacuating the building.
- Confer at the Muster Point, maintain contact with emergency personnel, conduct an employee roll call and inform employees of the situation.
- Have first aid training.
- The Manager, Generation Support is the Floor Warden

9 Fire Emergencies

9.1 Fire in the Plant

- From a safe location contact the Fire Department to provide details of the situation.
- If you have been trained in the use of a portable fire extinguisher and are able to safely extinguish the fire, do so. Be sure you have a safe exit from the area and leave if one extinguisher does not put out the fire.
- If safe to do so close all fuel valves entering the plant buildings as well as the valves on the main fuel tanks.
- Evacuate the building as soon as the alarm sounds or signs of an uncontrolled fire are noticed.
- On your way out, warn others nearby.
- Move away from fire and smoke. Close doors and windows if time permits and safe to do so.
- Touch closed doors before opening. Do not open them if they are hot.
- Use stairs only; do not use elevators.
- Move well away from the building and go to the designated Muster Point.
- Do not re-enter the building or work area until you have been instructed to do so by the emergency responders.
- For information on fire prevention refer to *SWP 1.04: Fire Prevention*.

9.2 Using a Fire Extinguisher

- If you have been trained and it is safe to do so, you may fight small, contained fires with a fire extinguisher.
- Fire extinguisher instructions:
 - **P** Pull safety pin from handle.
 - **A** Aim at base of fire.
 - **S** Squeeze the trigger handle.
 - **S** Sweep from side to side at base of fire.
- For proper use of a fire extinguisher refer to *SWP 1.22: Fire Extinguishers*.

9.3 If Trapped in a Room

- If possible wet and place cloth material around or under the door to prevent smoke from entering the room
- Close as many doors as possible between you and the fire
- Signal someone outside for help (e.g., phone, yelling, etc.)

9.4 If Caught in Smoke

- Drop to hands and knees and crawl toward exit
- Stay low, as smoke will rise to ceiling level
- Hold your breath as much as possible

- Breathe shallowly through nose, and hold a shirt or towel over your mouth and nose to act as a filter

9.5 If Forced to Advance through Flames

- Hold your breath
- Move quickly
- Cover your head and hair
- Keep your head down and your eyes closed as much as possible

10 Forest Fires

10.1 Forest Fires near a Plant Site

- A forest fire that threatens the Town of Inuvik could result in damage to the power plant and the distribution system.
- Fire could impact the generation and/or distribution of power at the Inuvik power plant and also impact transportation to and from site.
- The lead agency for response to forest fires in the NWT is the Government of the Northwest Territories Department of Environment and Natural Resources, Fire Operations Division.
- In the event of a forest fire that threatens the Town of Inuvik the lead agency will be the Territorial Emergency Response Committee (TERC).
- If workers are exposed to high levels of smoke, workers shall use appropriate respiratory protection as per *SWP: 4.09: Respiratory Protective Equipment*.
- If possible move fuel sources away from the plants.
- If possible move electrical equipment to metal storage containers (e.g., sea-cans, open-top drums, etc.).
- In forest fire situations that threaten communities, unless directed by TERC, NTPC shall keep generation and distribution systems energized for as long as possible. This will aid emergency services in their actions, communications and resources. The local power plant shall remain operational and manned until TERC authorizes the shutdown.
- TERC makes the recommendation as to whether evacuation of NTPC staff from the plant site is required. Evacuation will be coordinated by TERC.
- NTPC shall monitor conditions to ensure employees are not exposed to unreasonable risks while maintaining operations.
- Immediately report any damages or personal injury to the responsible Manager.
- If evacuation of the site is necessary all fuel valves shall be closed and the plant shut down.

11 Earthquake

11.1 Workers inside a Building

- Duck under the nearest sturdy object and hold onto it until the shaking stops. If you are not near a sturdy object, make yourself as small as possible and cover your head and neck.
- If you stand in a doorway, brace yourself against the frame and watch out for a swinging door or other people.
- Avoid windows, filing cabinets, bookcases and other heavy objects that could fall or shatter.
- Stay under cover until the shaking stops and leave the building once safe to do so.

11.2 Workers outside a Building

- Move away from trees, signs, buildings, electrical poles and wires.
- Protect your head with your arms from falling debris.
- Move away from fire and smoke.
- Proceed to the Muster Point if safe, or proceed to a pre-designated alternate assembly area.

12 Severe Storms

- Heavy rainfall or snowfall, high winds, and/or heavy icing conditions can result in injury hazards, building and equipment damage, major power outages, communications failures, and road washouts.
- If severe weather conditions are forecasted or experienced, local staff shall:
 - Keep abreast of forecasts and storm developments;
 - Report conditions to the responsible Manager.
 - Do not undertake work or travel if conditions are too hazardous; and
 - Immediately report any storm damage or personal injury to the responsible Manager.

13 Floods

- Flood conditions can result in injury hazards, building and equipment damage, power outages, communications failures, and road washouts.
- If flooding is forecasted or experienced, local staff shall:
 - Report conditions to the responsible Manager.
 - Close valves to the main fuel tanks. Leave day tank valve open for use.
 - Move, seal and/or secure hazardous materials to prevent spills.
 - Move electrical equipment (e.g., breakers) off the floor to prevent damage;
 - Do not undertake work or travel if conditions are too hazardous;
 - Maintain communication with emergency services.

- In the event that flooding threatens the Town of Inuvik the lead agency will be the Territorial Emergency Response Committee (TERC).
- Unless directed by TERC, NTPC shall keep generation and distribution systems energized for as long as possible. This will aid emergency services in their actions, communications and resources. The local power plant shall remain operational and manned until TERC authorizes the shutdown.
- TERC makes the recommendation as to whether evacuation of NTPC staff from the plant site is required. Evacuation will be coordinated by TERC.
- NTPC shall monitor conditions to ensure employees are not exposed to unreasonable risks while maintaining operations.
- Immediately report any damages or personal injury to the responsible Manager.
- If evacuation of the site is necessary all fuel valves shall be closed and the plant shut down.

14 Bomb Threats and Suspicious Parcels

14.1 Person Receiving a Bomb Threat by Phone

- If a telephone bomb threat is received, the person receiving the call should:
 - Keep the caller on line as long as possible in order to gather as much information as possible. Ask caller to repeat message. Try to record every word spoken by caller.
 - If caller does not indicate the location of the bomb or time of detonation, ask caller for this information.
 - Listen closely to voice: sex, voice quality, accent, or speech impediment.
 - Pay particular attention to background noises such as motors running or music that could give a clue to location from which the call is made.
 - Notify the Plant Superintendent/Operator, who shall then notify:
 - RCMP
 - Manager
 - HSE Director
- Evacuate the building, under supervision of the responsible Manager, as soon as possible. If necessary and under the discretion of the responsible Manager, pull the fire alarm to ensure all employees evacuate the building as soon as possible.

14.2 Characteristics of Suspicious Packages and Envelopes

- Look for inappropriate or unusual labeling characteristics, which may include:
 - Excessive postage
 - Strange return address or no return address
 - Incorrect titles or title without a name
 - Not addressed to a specific person
 - Marked with restrictions such as "Personal," "Confidential," or "Do not x-ray"
 - Marked with any threatening language

- Postmarked from a city or other location that does not match the return address.
- Look for unusual pack appearance characteristics, which may include:
 - Powdery substance felt through or appearing on the package or envelope
 - Oily stains, discolorations, or odor
 - Lopsided or uneven envelope
 - Excessive packaging material such as masking tape, string, etc.
- Look for other suspicious signs, which may include:
 - Excessive weight
 - Strange noises
 - Protruding wires or aluminum foil

14.3 Person Finding a Suspicious Parcel

- Under no circumstances will any employee attempt to touch, move or dispose of a suspicious object on NTPC premises.
- Do not shake or empty the contents of any suspicious package or envelope.
- Do not carry the package or envelope, show it to others or allow others to examine it.
- Put the package or envelope down on a stable surface; do not sniff, touch, taste, or look closely at it or at any contents which may have spilled.
- Alert others in the area about the suspicious package or envelope. Leave the area, close any doors, and take actions to prevent others from entering the area. If possible, shut off the ventilation system.
- Wash hands with soap and water to prevent spreading potentially infectious material to face or skin. Seek additional instructions for exposed or potentially exposed persons.
- Notify your Manager and await instructions. If told to evacuate, follow specific instructions, as the usual evacuation procedures may not apply.

15 Powerline Down Where Accessible

At NTPC the safety of employees, contractors, and the public is of paramount importance. All fallen powerlines shall be treated as live and therefore dangerous.

Where an NTPC powerline is down and accessible to the public NTPC shall affect an immediate and unhindered response in accordance with the following directives:

1. DO NOT GO WITHIN 10 METERS OF THE DOWNED POWERLINE

2. ATTENDANT:

- a. Contact the RCMP, fire department, or another NTPC employee to provide/act as the attendant.
- b. Post an attendant at the site. The attendant shall ensure no people enter the secure area except qualified NTPC personnel.

- c. Barricades and/or caution tape may be used in addition to the attendant to keep people away from the hazard.
 - d. The attendant shall make every reasonable effort to remain in place until the hazard is controlled.
3. **SWITCHING:**
- a. Qualified Workers will perform the necessary switching to de-energize the line as per NTPC Work Protection Code.
4. **NOTIFICATION:**
- a. Notify the Generation Support Manager of the incident.
 - b. The Generation Support Manager shall notify the Transmission and Distribution Division who shall send Workers to repair the line.
5. **RETURN TO SERVICE**
- a. Once the line is repaired a qualified Worker will re-energize the line.

Development

Name	Position	Date
Prepared by: J. Clark	Environmental Analyst	Jan. 25, 2017
Reviewed by: A. Crowther	Health & Safety Coordinator	Feb. 01, 2017
Approved by: E. Smith	Director, Health, Safety & Environment	Feb. 03, 2017

Revision History

#	Revised Sections	Description of Revisions	Revised by (name, position)	Approved by (name, position)	Issue Date
01	2.2, 3, 6.1, 9.3	Update to declaration guidelines, communication and site/area warden	J. Clark, Env. Analyst	E. Smith, Director HSE	4/25/18
02	2.2, 3	Included 9-1-1, removed section 3 Emergency Declaration.	T. Perkins, Env, Analyst	J. Clark, Senior HSE Policy Coordinator	04/24/20
03	6.3, 7	Updated to latest Red Cross Standards, Updated figures 1 and 2.	T. Perkins, Env. Analyst	E. Smith, Director HSE	03/02/21
04	-	Review all	T. Perkins, Env. Analyst	D. Dewar, Director HSE	02/02/22
05					
06					
07					