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3 July 2025

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RE: UPDATED MANAGEMENT PLANS FOR SOIL REMEDIATION AT THE FORMER WEST CHANNEL STAGING SITE, INUVIALUIT WATER BOARD WATER LICENCE N5L8-1846 – SHELL CANADA LIMITED

Please find attached the revised 2025 Emergency Response Plan (ERP) and the new Remedial Action Plan (RAP) Addendum 2 for Soil Remediation at the Former West Channel Staging Site, in the Inuvialuit Settlement Region, Northwest Territories (Water Licence N5L8-1846). The ERP has been updated with new barge information and current contact information and the RAP Addendum 2 has been prepared to document two modifications as approved by the Inuvialuit Water Board on 6 June 2025:

- replacement of the on-site water treatment system with the use of quench towers for contact water management; and
- the use of additional enhanced thermal conduction treatment cycles for on-site soil treatment.

As per Part B, Condition 12 of the Water Licence, the table below summarizes the updates to the plans.

Management Plan	Update	Section	Page
ERP	Added demobilization of Wurmlinger barge and replacement with the 802 barge camp, NT 1013 fuel barge and Radium 100 series barge (or similar) following spring freshet.	1.3	1 to 3
	Added approved modification that allows the treatment of soil on site through additional enhanced thermal conduction treatment cycles.	1.3	1 to 3
	Updated Table 2: Emergency Contact List	4.1	9 to 10
	Updated Figure A4	Appendix A	n/a
RAP Addendum 2	Added additional soil treatment cycles.	7.2.3	2
	Added quench towers for contact water management.	9.2.1	2 to 3

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Management Plan	Update	Section	Page
	Updated project schedule.	11.0	3 to 4

The attached has been prepared by WSP Canada Inc. (WSP) on our behalf and with our support. Should you have any questions or comments, please do not hesitate to reach out to Kyle Thompson or the WSP contact listed within the attached documents.

Sincerely,

Kyle Thompson
Sr. Program Manager, Legacy Soil & Groundwater
Shell Canada Limited
Office (403) 691-3174 ext. 3174
E-mail - Kyle.Thompson@shell.com

Attachments: Emergency Response Plan
Remedial Action Plan Addendum 2

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EMERGENCY RESPONSE PLAN

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REMEDIAL ACTION PLAN ADDENDUM 2

REPORT

Emergency Response Plan

Soil Remediation at the Former West Channel Staging Site
Inuvialuit Settlement Region, Northwest Territories

Submitted to:

Shell Canada Limited
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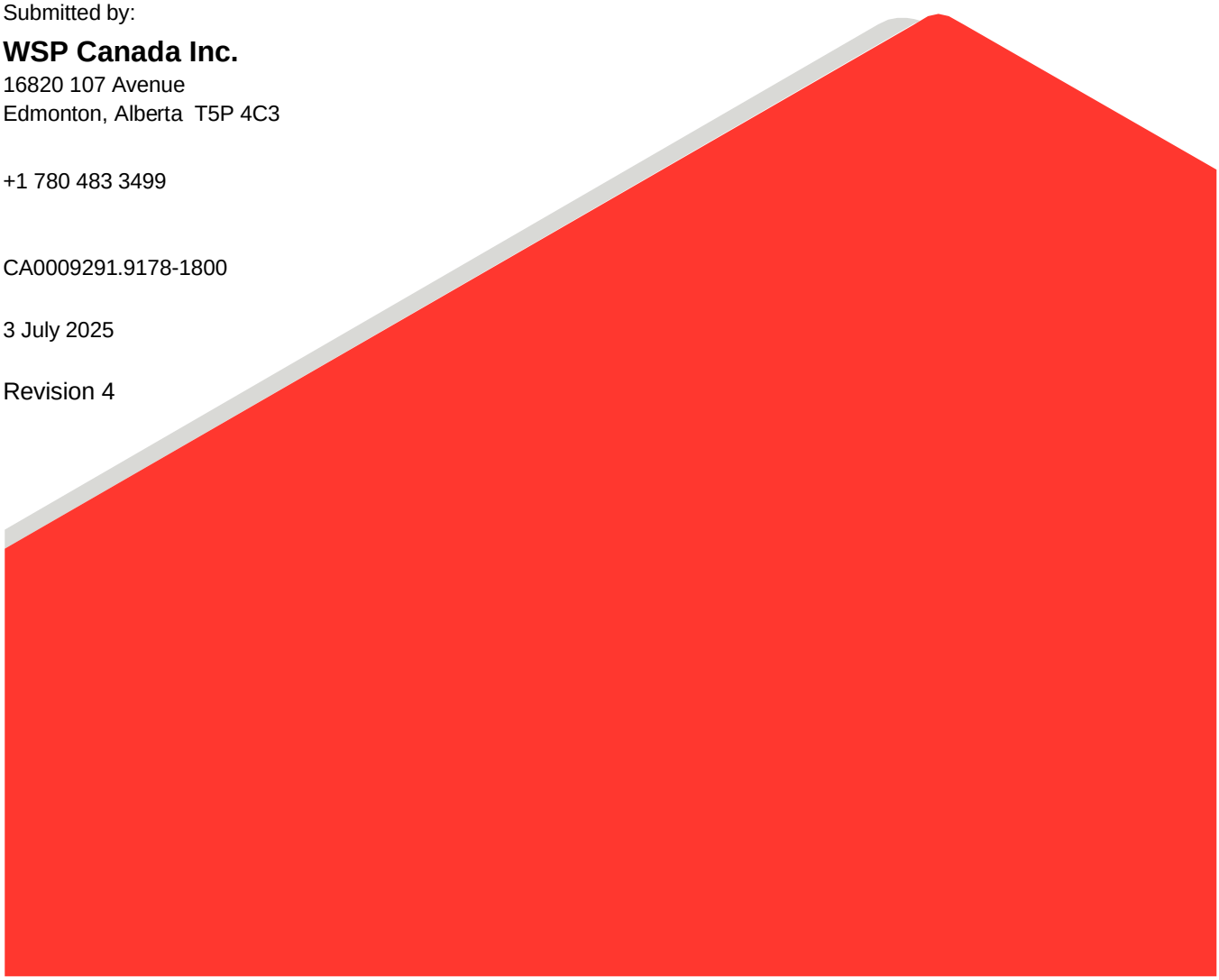
3 July 2025

Revision 4



Distribution List

1 Electronic Copy - Shell Canada Limited

1 Electronic Copy - WSP Canada Inc.

1 Electronic Copy - Environmental Impact Screening Committee

1 Electronic Copy - Inuvialuit Land Administration

1 Electronic Copy - Inuvialuit Water Board

Version History

Version Number	Date	Changes
0	15 November 2023	First version
1	18 December 2023	Text for the addition of a grounded ice sleigh camp near the Site, was added in the following sections: • Section 1.3 • Section 4.1 • Section 5.2 • Section 7.3 Text that referenced that no camp would be required was deleted from the following sections: • Section 1.2 • Section 1.3
2	23 May 2024	Updated text in Section 1.3 Project Summary to reflect change to a summer start, a barge camp instead of a sleigh camp, and increase to five ETC units. Updated Section 1.4 Project contact address for Shell. Updated Site Supervisor, Lead Field Technician and HSSE Advisor Lead contact information in Section 4.1. Updated Table 3: Minimum First Aid Requirements for the Site to align with NWT Occupational Health and Safety Regulations for first aid attendant requirements. Added response plan and equipment for a large fire scenario to Section 7.1 as per the Environmental Impact Screening Committee Decision Letter.
3	8 November 2024	Updated Table 2: Emergency Contact List
4	xx June 2025	Added demobilization of Wurmlinger barge and replacement with the 802 barge camp, NT 1013 fuel barge and Radium 100 series barge (or similar) following spring freshet to Section 1.3. Added approved modification that allows the treatment of soil on site through additional ETC treatment cycles to Section 1.3. Updated Table 2: Emergency Contact List Updated Figure A4 in Appendix A

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TABLES (in text)

FIGURES (in text)

APPENDICES

1.0 INTRODUCTION

1.1 Background

WSP Canada Inc. (WSP) has prepared this Emergency Response Plan (ERP; the Plan) on behalf of Shell Canada Limited (Shell) for the former West Channel staging site (the Site) approximately 35 kilometres (km) northwest of Aklavik, Northwest Territories (NWT). The purpose of this Plan is to preserve the safety of the crew, minimize the impact of emergencies to environment, property, equipment, and processes, and to restore normal operations as efficiently as possible during the ice road construction, remediation and transportation activities at the Sites (the Project).

The Plan will be effective upon its approval and will be implemented at the beginning of the field phase of the Project. Paper copies of this Plan will be available at the Site (through the Site Supervisor). All personnel will have access to paper and digital copies of the Plan. Prior to the commencement of work, the Plan will be distributed to personnel from Shell, WSP and their subcontractors.

Project details are provided in the following sections.

1.2 Location and Description

The former West Channel staging site is at latitude 68°28’33.0’’N and longitude 135°33’25.0’’W within the ISR, in the Mackenzie River Delta, NWT. The Site is approximately 35 km northwest of Aklavik (Figure A1, Appendix A).

Shell operated the Site as a former staging site and petroleum storage area for seismic exploration between 1971 and 1975. Historical infrastructure on the Site consisted of an aboveground storage tank farm, multiple powder mags, a building, four cap mags, camps and an outhouse (Figure A2, Appendix A).

1.3 Project Summary

The scope of work for the Project consists of the following activities:

- Mobilization of a barge camp and other equipment to the Site in June 2024.
- Vegetation clearing (e.g., willows and small growth brush) at the Site will be mainly conducted using an excavator equipped with a brushing head (or equivalent) with some minor hand clearing.
- Soil remediation will be completed, as follows:
  - The soil at the Site is proposed to be treated via enhanced thermal conduction (ETC) which involves transfer of a heated airstream (typically 300 to 450 degrees Celsius [ºC]) to petroleum hydrocarbon (PHC) contaminated soil to volatilize and subsequently destroy contaminants of concern (CoCs). The contaminated soil will be placed in a three-layer soil cell with perforated steel pipes running through each layer. Each layer of pipes will be connected to its own central manifold (three in total), which is connected to a dedicated air burner fueled by either diesel or propane. Prior to heating, a stainless-steel Quonset hut will be constructed over the soil cell as a means of capturing the off-gas that is generated by the heating. Throughout the process, the generated vapours will be channeled to a thermal oxidizer outside of the Quonset for destruction prior to atmospheric release. The thermal oxidizer will be operated within defined parameters and monitored to ensure the efficient and complete destruction of volatile organic compounds.

- The remedial footprint at the Site is estimated to be 4,300 square metres (m^2), corresponding to an approximate treatment volume of 20,000 cubic metres (m^3). Final remediation volumes will be confirmed through laboratory analysis of benzene, toluene, ethylbenzene, xylenes (BTEX), PHC fractions F1 to F4, and naphthalene in soil samples collected along the base and sidewalls during soil excavation.
- The treatment schedule for ETC is dependent on the required reduction in PHC mass to meet the site-specific soil quality objectives (SQOs). It is expected that by using five treatment units approximately 200 to 225 m^3 of soil will be treated per day. Based on the overall volume of impacted soil at the Site, it is estimated that the Project duration will be approximately 100 to 120 days, excluding mobilization (including access construction), staging/setup, and demobilization. The work will be staged such that while the five batches of soil are undergoing treatment, excavation and stockpiling will continue outside the Quonset hut.
- The permafrost at the base of the excavation will be insulated, as necessary, to limit deterioration if exposed. At a minimum, soil will be temporarily placed at the base of the excavation. Additional protection measures may be implemented as required.
- Soil samples will be collected for BTEX, PHC Fractions F1 to F4, and naphthalene from the treatment cells to confirm efficacy of treatment. Once these analyses have been completed, and the treated soil meets the SQOs the treated soil will be returned to the excavation. The soil will be aerated or hydrated as necessary, both to reduce the temperature of the soil and prepare it for revegetation. If required, water may be sourced from the West Channel following Fisheries and Oceans Canada's (DFO) 2020 Interim Code of Practice: End-of-Pipe Fish Protection Screens for Small Water Intakes in Freshwater or imported from a suitable off-site source.
- Once treatment of the initial batches has been completed, the Quonsets will be dismantled and reconstructed on the waiting stockpiles.

- If after the first treatment pass, the soil CoC concentrations remain above the site-specific SQOs, the soil will undergo further ETC treatment, with the treatment temperature and duration (or both) adjusted. Following additional ETC treatment, additional soil samples will be collected to verify CoC concentrations. Soil that cannot be treated to SQOs following multiple ETC treatment cycles will be stockpiled for off-site disposal at an approved facility in British Columbia or Alberta, via ice road or barge, depending on quantity and time of year.
- In early winter 2024/2025, an ice road extension will be constructed from the Inuvik to Aklavik public ice road to the Site to allow site access for the crew and equipment as well as off-site transport and disposal of domestic and industrial waste materials (Figure A3, Appendix A) for appropriate disposal at approved facilities.
- Prior to ice road construction, reconnaissance and ice profiling will be conducted to determine the ice thickness and conditions along the proposed route.
- Snow will be used to compact the snowpack ramp to access the Site. If required, water pumped from the river will be used to strengthen the snowpack ramp. Water pumping will follow the DFO 2020 Interim Code of Practice: End-of-Pipe Fish Protection Screens for Small Water Intakes in Freshwater.
- Accommodation for the crew will be in a barge camp consisting of sleeping rooms, kitchen and bathroom facilities, fuel storage and power generation, and water and sewage tanks. The barge camp will be anchored

on the West Channel point during the summer/fall and will be appropriately winterized and frozen-in at the Site for the winter (Figure A4, Appendix A). Non-potable water will be pumped from the West Channel, for use in barge toilets, and stored in the onboard heated water tank following DFO's 2020 Interim Code of Practice: End-of-Pipe Fish Protection Screens for Small Water Intakes in Freshwater. No wastewater will be deposited at the Site.

- Domestic waste generated will be temporarily stored in wildlife-proof containers on the barge and regularly transported for off-site disposal at an approved facility (e.g., in Inuvik). In addition, there may be construction waste (e.g., metals and lumber) that will be temporarily stored at the Site, then periodically transported, and disposed with the domestic waste.
- Fuel storage at the Site will be in appropriate fuel tanks and trucks for refueling of the equipment and ETC, fuel storage and refueling areas will be bermed. Drip trays and secondary containment will be used at fuel storage and refueling areas.
- Following the 2025 spring freshet, the barge camp at the Site (John Wurmlinger supplied by E. Grubens Transport Ltd. [EGT]) will be demobilized from the Site to undergo scheduled maintenance. The Wurmlinger barge camp will be replaced with the 802 barge camp, the NT 1013 fuel barge and a smaller barge (e.g. Radium 100 series, or similar) with sewage and potable water tanks which will be anchored on the West Channel point during the summer/fall 2025. These barges will be supplied through EGT.
- A maximum of 850,000 L of diesel will be stored in the integrated fuel tank on the NT 1013 fuel barge, plus up to 50,000 L of diesel in the integrated fuel tank abord the 802 barge. Hoses for fuel transfer will be inspected regularly and spill response equipment (e.g. spill kits and spill trays) will be stored on the barge.

1.4 Project Contacts

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1.5 Roles and Responsibilities

Shell is responsible for the overall content and success of this Plan. Shell's contractors are responsible for the implementation of this Plan and are expected to adhere to it. All personnel working on the Project, including Shell employees, contractors and consultants, will be made aware of this Plan.

2.0 EMERGENCY RESPONSE PLAN OBJECTIVE

The purpose of this Plan is to:

- Provide all Project staff (including subcontractors) with a list of identified potential emergencies.
- Assist the Project team in determining appropriate responses to potential emergency situations.
- Provide the Project team with established procedures and guidelines for emergency response.
- Provide the Project team with the tools needed to facilitate a quick and effective response to an emergency.
- Provide emergency response flowcharts and contact information to facilitate a quick and efficient response/evacuation if required.

2.1 Emergency Event

An emergency is any event that requires an immediate response to avert damage or threats, such as:

- Threats to the health and safety of our employees and/or our sub-contractors and visitors to the Site.
- Threats to or damage of the environment.
- Damage of the property or equipment.
- Threats to the reputation of our company and client.

If an emergency occurs during the Project, personnel involved must take the appropriate immediate action to protect their own personal safety, the safety of any other people involved and of the environment.

3.0 EMERGENCY RESPONSE TEAM RESPONSIBILITIES

3.1 WSP Site Supervisor

The WSP Site Supervisor ensures that all personnel on Site know and understand their responsibilities in the event of an emergency on Site as outlined within this Plan. They establish the muster points on the Site. The role and responsibilities of the WSP Site Supervisor include, but are not limited to the following:

- They are the primary contact for all personnel to report on-site emergencies. They will immediately assess the emergency and ensure that all emergency response procedures are followed according to the Plan.
- They will ensure all personnel are made aware of the emergency and will ensure when an injury has occurred that the injured party receives immediate and appropriate care required for their injury.
- They will communicate all incidents as soon as possible to the WSP Project Manager (PM).
- They will liaise with the Site Medic to arrange for off-site medical assistance, if required.
- They will lead the investigation process of all incidents.
- They will lead planned emergency response drills and debrief sessions.
- They will ensure this Plan is updated as appropriate and any changes are communicated to on-site personnel.

3.2 Site Medic

The Site Medic is responsible for inspecting and maintaining first aid equipment and supplies and ensuring adequate number of first aid kits for the number of personnel present at the Site. The Site Medic will provide injury/illness response and immediate care for an injured/ill worker. The Site Medic will assess and determine if an injured/ill person can be safely treated on site or requires emergency evacuation (vehicle, boat or air evacuation) from Site. The Site Medic and Site Supervisor will coordinate emergency response actions with off-site medical facilities and air ambulance if necessary. The Site Medic will document all injuries and illnesses in a confidential first aid log which will be kept on site and initiate care management. Complete Alcohol and Drugs testing will be performed by an approved laboratory in the NWT prior to Project commencement.

3.3 Medical Evacuation

The primary mode of access to the Site is along the proposed ice road (winter) and river (summer). If the injured worker can be safely transported within the capability of the Site Medic's training, the worker will be mobilized by ice road to the junction of the Inuvik-Aklavik public road, or by boat to Aklavik/Inuvik where they will be met by local emergency services or transported by the vehicle either to the Aklavik Health Centre or to the Inuvik Regional Hospital, based on the assessment completed by the Site Medic, the type and condition of the injury, and availability of an ambulance. If an emergency situation requires medical evacuation, an assessment of evacuating the injured worker by air will be made between the local emergency services with the support of the Site Medic and the Site Supervisor.

3.4 On-Site Personnel

All personnel are expected to promptly report all incidents and fit for duty concerns to the WSP Site Supervisor who will ensure the Plan is followed. Personnel are expected to know and understand how to respond in an emergency as per this Plan. All personnel must participate in planned emergency response drills. Any medical conditions that could jeopardize the health and well-being of personnel on site should be disclosed to the Site Medic prior to starting work such as allergies including stinging insects, prescription medication, fatigue, etc.

4.0 SITE EMERGENCY NOTIFICATION AND COMMUNICATION

During the Project execution, workers will travel along the proposed ice road (winter) or along the river (summer). Due to the remote nature of the work, the workers will be required to check-in with a designated contact person at two-hour intervals using hand-held radios, GPS-based two-way communication device or by satellite phone.

Prior to departing on the ice road or river, each person carrying a GPS- based two-way communication device must test the device and confirm communication loop by sending a text to all their designated contacts.

In the event of an emergency (medical and non-medical), the actions initiated by workers shall follow the procedures established in this ERP. Once all immediate actions have been taken to protect life, health and safety of workers, the emergency notification and communication protocol will be followed. The emergency notification and communication flowchart are included in Figure 1.

Two-way radios will be used as the primary source of communication while on site between crew members. Satellite phones will be the primary source for external communication as there is no cell reception on site. Additionally, there will be a backup Satellite phone and Satellite based emergency communication devices (inReach; Starlink). All injuries, illnesses and other incidents (e.g., near losses) will be reported to the Site Supervisor as soon as possible. All injuries and incidents will be documented and investigated as soon as practical. Investigations will be led by the Site Supervisor. The Shell Project Manager must be notified by the WSP Project Manager of all incidents following the matrix below (Table 1).

Table 1: On-Site Incident Communication and Reporting Matrix

Incident type	Monday to Friday	Weekends and Holidays

■ Near Loss
■ Security (theft, trespassing, vandalism)
■ Environmental spill (does not meet regulatory compliance)
■ Property/Equipment Damage
■ Injury No Treatment
■ Injury First Aid
	■ WSP Site Supervisor calls WSP PM
	■ WSP PM informs WSP Project Director (PD) and WSP Health, Safety, Security and Environment (HSSE) Advisor
	■ WSP PM calls Shell PM to report
	  ■ If no response, leave a voicemail and follow up with an email
	  ■ Follow-up with call to Shell PM
		■ WSP Site Supervisor calls WSP PM
		  ■ If no response, leave voicemail and follow up with email, cc WSP HSSE Advisor and WSP PD
		  ■ Call WSP PD
		■ WSP PM/PD to call Shell PM to report
		  ■ If no response, leave voicemail and follow up with email
		  ■ Follow-up with call to Shell PM
		■ WSP PM/PD to ensure incident notification escalates the following business day

Incident type	Monday to Friday	Weekends and Holidays
■ Loss Medical Treatment ■ Environmental Spill (regulatory non-compliance) ■ Discharge of Firearm ■ Missing Person ■ Fire/Explosion ■ Site Evacuation	■ WSP Site Supervisor calls WSP PM ■ WSP PM informs WSP PD and WSP HSSE Advisor ■ WSP PM calls Shell PM to report ▪ If no response, leave a voicemail and follow up with an email and subsequent call on the following day ▪ Follow-up with call to Shell PM	

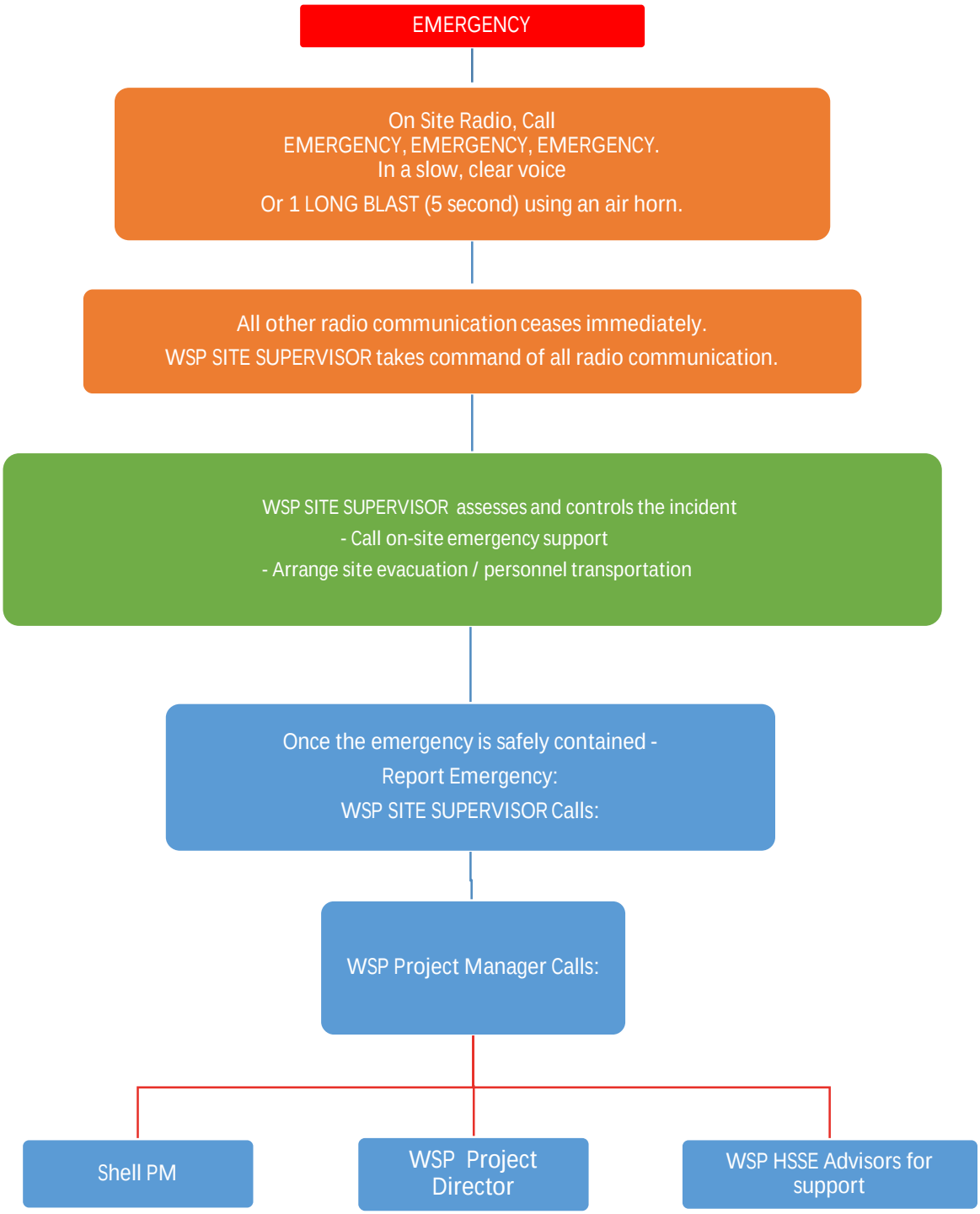


Figure 1: Emergency Notification and Communication Flowchart

4.1 Emergency Contact List

West Channel Site Location: (68° 28' 33.0" N latitude and 135° 33' 25.0" W longitude)

Table 2: Emergency Contact List

Emergency Contacts		Number
Inuvik Regional Hospital		(867) 777-8000
Aklavik Health Centre		(867) 978-2516
Aklavik RCMP		(867) 978-1111
Aklavik Fire – Emergency Line		(867) 978-2222
Canadian Coast Guard Search and Rescue (24 hr)[a]		(800) 267-7270
Canadian Coast Central Regional Headquarters		(855) 209-1976 or *16 on a cell phone
Inuvik Public Health Centre		(867) 777-7246
NWT 24-Hour Spill Report Line		(867) 920-8130
Environment and Climate Change – Regional Office		(867) 678-8091 ext. 53661
Wildlife Emergencies (24 hr)		(867) 678-0289
To Report a Wildfire (24 hr)		(877) 698-3473
Work Care (consultation for work related injuries/illnesses for WSP)		(833) 977-8001
NWT WSCC Incident & Injury Reporting Line		(800) 661-0792
Poison Control Centre		(800) 332-1414
WSP Emergency Contacts	**Name**	**Number**
Site Supervisor	Todd Bonin Shane Reber	Cell: (587)-439-5244 Cell: (587)-726-0169
Lead Field Technicians	Lisa Switzer Elizabeth Lenkic	Cell: (226) 376-2812 Cell: (548) 468-0723
Project Manager	Scott McLean Franziska Hawes	Cell: (604) 679-5538 Cell: (604) 720-4603
Project Director	Patrick Kalita Joseph Hyrich	Cell: (780) 239-1420 Cell: (204) 588-8288
HSSE Advisor	Brian Kinsella	Cell: (368) 882-0239
HSSE Leader	Darren Nippers	Cell: (403) 472-0425
Global Shell Safety Support	Darren Nippers	Cell: (403) 472-0425
Human Resources	Stephanie Ozowa	Office: (403) 466-6555

Shell Emergency Contacts	Name	Number
Project Manager	Kyle Thompson	Office: (403) 691-3174 ext. 3174 Cell: (403) 801-6438
Subcontractor Emergency Contacts	**Name**	**Number**
E.G.T Manager	Douglas Saunders	Cell: (867) 678-0045
Crew Boat	Dean Lennie	Cell: (867) 678-0778 Satellite: 011-8816-314-66480
Medic(s)	Gord Robinson Patrick Boomer	Cell: (902) 371-3466
Camp Master	Scott Martin John Nutting	Satellite/inReach: TBD

Notes:

a) Canadian Coast Guard Search and Rescue is connected with the Joint Rescue Coordination Centre Trenton and share Communication and Traffic Services radio systems.

b) Note that a final version of the Plan will be submitted prior to mobilization.

TBD – to be determined

4.2 Muster Point and Warming Trailer Area

Figure 2 depicts the Muster Point and warming trailer location.

Figure 2: Proposed Muster Point and Warming Trailer Placement

West Channel Project Area Coordinates for Emergency Evacuation:

68°28'33.0"N latitude and 135°33'25.0"W longitude in degrees, minutes, and seconds (DMS)

4.3 WSP Crisis Management Team

A crisis, triggering the activation of the WSP Crisis Management Team (CMT), is any event or circumstance which requires an immediate response and damages or threatens in a material way:

- the health and safety of our employees or other people including sub consultants and contractors;
- the properties/assets of our company; and
- the reputation of our company.

4.4 Activation of WSP Crisis Management Team

If a crisis occurs, the incident scene must not be disturbed except so far as is necessary to attend to injured persons (IPs), prevent further injuries or death, and protect the environment that is endangered because of the emergency. Follow the documented emergency procedures as outlined within this Plan and report the crisis to the WSP PM. The WSP PM is responsible for activating the WSP CMT. If the WSP PM cannot be reached, the Site Supervisor will place the call to the Project Director who will activate the WSP CMT. The Crisis Management Silver Plan for WSP is included in Appendix B.

- Once activated, the WSP CMT will:
  - **Report:** advise the CMT as appropriate.
  - **Assess:** evaluate the impact and severity of the situation and determine the crisis level per the Crisis and Incident Communications Policy.
  - **Convene:** assemble the most suitable response team for the situation.
  - **Execute:** contain and manage the situation using all available resources.
    - Facts: what do we know?
    - Assumptions: what do we believe?
    - Scenarios: what are best-case, worst-case & likely scenarios?
    - Target objectives: what is our current objective (e.g., more info, restore power)?
    - Response options: what is the best response from the options available?
    - Implementation: what needs to be done now, by who (e.g., action plan)?
    - Stakeholders: prioritize key stakeholders according to interest and influence.
    - Key messages: prepare and deliver key messages for priority stakeholders.
  - **Recover:** post-event, conduct a formal review to drive continual improvement.

5.0 EMERGENCY RESPONSE REQUIREMENTS

A First Aid Risk Assessment was completed for this Project as required by the NWT Occupational Health and Safety Regulations to determine the first aid attendants, supplies and equipment, facilities and transportation required to render prompt and appropriate first aid to worker and to render prompt and appropriate transportation for injured workers to the nearest appropriate medical facility or hospital. As per the regulations, the Site is categorized as high-risk in respect to the type of injuries that could occur at the work site.

As per Part 5 of the NWT Occupational Health and Safety Regulations, the Project must meet minimum requirements pertaining to First Aid for the Site (Table 3). It is anticipated that the Project will have at least two Type 3 First Aid Kit and two Advanced First Aid Attendants.

Table 3: Minimum First Aid Requirements for the Site

Applicable Schedule	Number of Workers at the Site	Minimum First Aid Kit and First Aid Attendant Level
Schedule D: Minimum First Aid Kit Requirements: High Risk Work Sites	■ 2 to 25 Workers at Site	■ 1 small Type 3 First Aid Kit
Schedule H: Minimum First Aid Attendant Requirements	■ 2 to 10 Workers at Site ■ 11 to 20 Workers at Site ■ 20 to 30 Workers at Site	■ 1 Advanced First Aid Attendant ■ 2 Advanced First Aid Attendant or 1 paramedic level attendant ■ 3 Advanced First Aid Attendant or 1 paramedic level attendant

5.1 Training Requirements

All personnel shall receive an orientation on this Plan by the Site Supervisor on their first visit to Site and prior to starting work. All first aid trained personnel will possess a valid First Aid training certificate. All Site personnel will be trained in the use of fire extinguishers and spill response equipment.

5.2 First Aid Stations

A first aid room will be identified and established in the barge camp. The Site Medic is responsible for operating and maintaining the first aid room and equipment. Additional Type 2 first aid kits will be made available in select on-site vehicles. Vehicles with first aid kits will be marked with signage and will be communicated to all personnel during the site orientation. The first aid kits will contain the minimum first aid requirements including: a manual, a first aid register and emergency contact numbers, and contain supplies and equipment set out in Schedule H of the Occupational Health and Safety (OHS) Regulations. First aid kits will be inspected weekly, and equipment (such as the automated external defibrillator [AED]) tested monthly.

In addition to the minimum requirements of Schedule H, each first aid kit location will also have an eye wash station. One AED will be available for the duration of the Project. The primary location of the AED will be in the first aid room.

6.0 GENERAL SITE EVACUATION

In the event of a site-wide emergency, the First Responder will communicate the nature of the emergency via radio. The process is described in Figure 3.

Upon the order to muster:

- All personnel will stop working, shut down and secure equipment.
- All personnel will muster at the Muster Point.
- The Site Supervisor will confirm all personnel are present.
- The Site Supervisor will determine if evacuation from Site or shelter in place is required.
- The Site Supervisor has the authority to order a site-wide evacuation in the event of a catastrophic or potentially catastrophic emergency to protect the health and safety of personnel. All personnel will be evacuated to Inuvik by truck (if deemed necessary).

To initiate a site-wide evacuation, the Site Supervisor will call “evacuate, evacuate, evacuate” over the Site radio.

Upon the order to evacuate:

- Each crew will confirm the order with the Site Supervisor via in person or radio communication.
- All personnel will stop working, shut off (if safe to do so) and leave equipment in place.
- Move to the Project Muster Point.
- Confirm with the Site Supervisor when all crew members are accounted for; and follow instructions from the Site Supervisor for safe evacuation from the Site.
- Visitors will be ushered by designated Site personnel to the Muster Point.

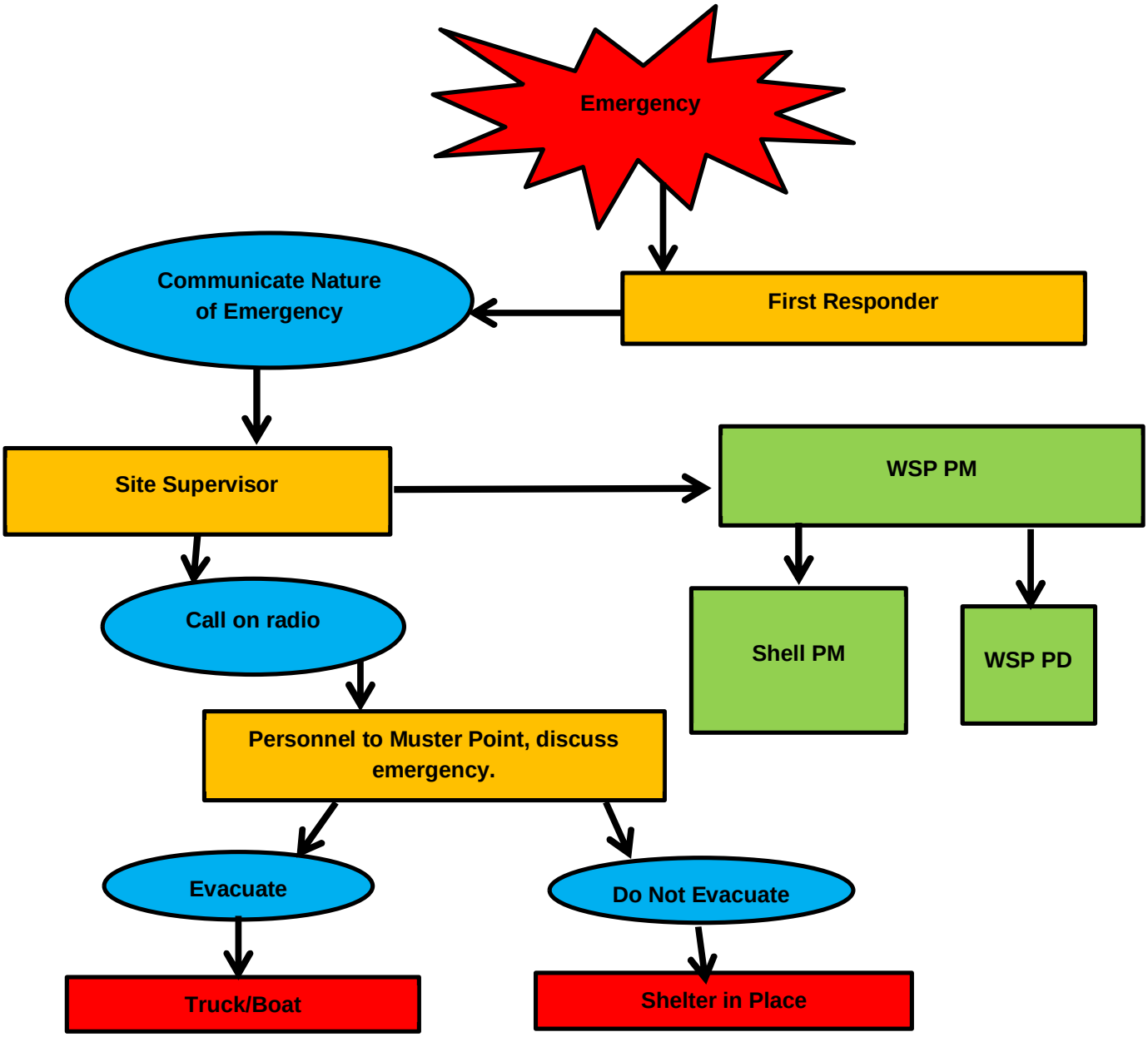


Figure 3: General Site Evacuation Flowchart

7.0 SITE SPECIFIC EMERGENCY RESPONSE PROCEDURES

The emergency situations with the greatest likelihood of occurring at or near the Project site have been identified and are listed in this section. In addition to the potential emergencies identified, it is recognized that emergencies are often unexpected and can arise at any time. It is the responsibility of the WSP Site Supervisor, in consultation with the Site Medic, First Aid Attendants and Subcontractor Site Supervisor to assess conditions on a regular basis and adjust the Plans as new situations are identified. Any changes and/or additions made this Plan must be communicated to the Project Manager.

7.1 Fire or Explosion

In the event of fire, the first responder will attempt to put out a fire using a fire extinguisher if safe to do so; if not, radio for help.

To report a fire in progress:

- Remain calm.
- Sound the alarm/Call “FIRE, FIRE, FIRE” on a radio.
- Evacuate endangered personnel to Muster Point.

Using a fire extinguisher:

- Before deciding to use a fire extinguisher to fight a fire:
  - be sure that the fire is small and not spreading;
  - you have the correct type of fire extinguisher for what is burning; and
  - stand several feet from the fire.
- Pull the pin (if necessary, turn the pin to break the zip tie).
- Aim the nozzle at the base of the fire.
- Squeeze the handle slowly.
- Sweep from side to side.
- Drop the fire extinguisher and evacuate if the fire is spreading.

In case of a large fire, a water truck with a minimum capacity of 5,000 L will be readily available on the Site to extinguish fires. The water truck will be refilled whenever used for project purposes so that it is full and ready to respond in the event of a fire that is not extinguishable by a fire extinguisher alone. In addition to the water truck, a portable water pump will be available on the Site for assisting in fire response. The pump will have a hose with a fish screen and be staged in a manner that will allow the hose to be unrolled into the river to quickly provide water to a fire. The Aklavik Fire Department and 1-877-NWT-FIRE will be notified for fire response coordination for any fires that cannot be managed with the resources available on the Site.

The fire response equipment that will be available on site are listed below:

- 1 – Water Truck with hoses equipped with fire nozzles;
- 2 – Water pumps, suction hose (2-3”) with fish screen, fire hoses and fire nozzles;

- Multiple – 20 – 30 lb Fire Extinguishers Type ABC stored on all vehicles/equipment and barge camp;
- 2 – Type K Fire Extinguishers for barge camp kitchen; and
- 4 – Shovels and assortment of appropriate hand tools.

In addition, heavy equipment assigned to the Project will be redeployed to assist fire management as much as practical.

7.2 First Aid and Medical Assistance

All minor injuries or illnesses (small cuts, lacerations, sprains, strains etc.) shall be reported immediately to the Site Supervisor and documented following the injury loss reporting process. The IP's condition will be assessed, and appropriate first aid treatment will be applied if/as required. Care management begins the moment a person is injured and concludes when a worker returns to normal condition and duties. The Site Supervisor will lead care management and work with the injured worker to ensure appropriate mitigations are put in place that allow an injured worker to recover. The injured worker's conditions will be monitored daily following the report of an injury. The process is also described in Figure 4.

In the event of a serious or potentially life-threatening injury/illness:

- Call goes out on the radio in a calm clear voice "MEDICAL, MEDICAL, MEDICAL".
- All work on site stops immediately. All crews stand down and maintain radio silence.
- Site Supervisor or alternate takes immediate and sole control of the emergency via radio.
- Site Medic responds immediately, mobilizes first aid equipment, and responds to the IP.
- On-site workers will assist with IP(s) carry/move/transport in case it is required.
- Site Medic and Site Supervisor will determine the best option for transporting the IP to the hospital/health centre.
- Site Supervisor to call health centre and determine the appropriate transportation method based on the condition of the IP(s) when assistance beyond on-site capabilities is required.
- Site Supervisor or designated WSP employee shall accompany an IP to the hospital/health centre.

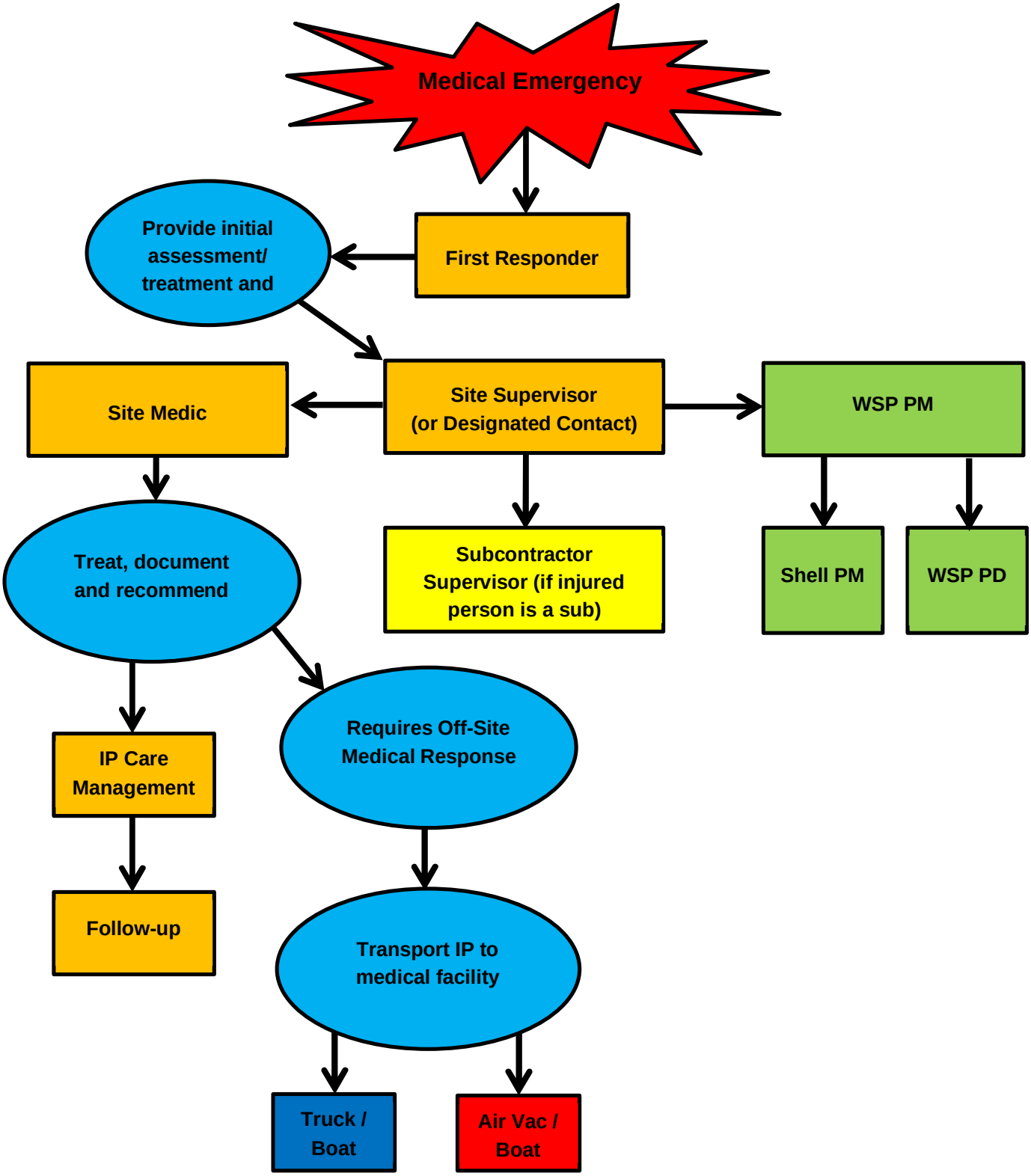


Figure 4: Medical Emergency Flowchart

7.3 Missing Crew Member

All personnel will be accounted for at the start and end of the workday. If a worker goes missing, a thorough search of the Site and barge camp will be conducted immediately. If the person cannot be safely located, the Site Supervisor will make an emergency call to the RCMP and report a missing person.

7.4 Ice Breakthrough

The time of greatest risk to personnel breaking through ice is during the Ice Road Construction phases. Ice road construction is carried out by work crews and not persons working as individuals; therefore, reporting and rescue efforts can be carried out in a timely manner. Pre-construction crew will carry emergency tents with heating capabilities. Depending on location, heated, mobile shelter areas such as vehicles may be available along the route. Standard road construction methods include adequate separation of vehicles to avoid multiple personnel and equipment breaking through the same area.

If an ice breakthrough occurs, persons witnessing a breakthrough will immediately contact the WSP Site Supervisor, if unavailable, contact the RCMP using the Emergency Contact List provided in Table 2. Witnesses will provide as much information as possible based on the circumstances at the time of the event.

7.5 Environmental Spill Response Procedures

If there is an environmental release, take the following steps (also described in the Spill Contingency Plan and in Figure 5):

- Stop work.
- Ensure safety of all personnel in the work area.
- Identify the material released.
- Contain the spill (using spill kits), stop the flow and control hazards by eliminating all ignition sources, define safety parameters by setting up cones and barricades if needed.
- Report spill to Site Supervisor. The Site Supervisor will report the spill, status, and any injuries to the WSP PM.
- Monitor the air at the perimeter of the flagged off area, as necessary.
- Clean up the released material to the extent possible. Waste and cleanup materials will be removed from the Site at the earliest opportunity and disposed of appropriately (in accordance with the Waste Management Plan).
- Assess and remediate any suspected residual impacts.
- Create a GPS waypoint of spill location.
- The Site Supervisor documents the spill. Gathers photos/drawings and evidence for investigation of the incident. Record time and date that it occurred, record type of chemical released, record environment that the spill occurred (water, land air), record size (amount released, area effected) and equipment involved.
- The WSP PM will report to the Shell PM and, if reporting thresholds are exceeded, to the NWT 24-Hour Spill Report Line.

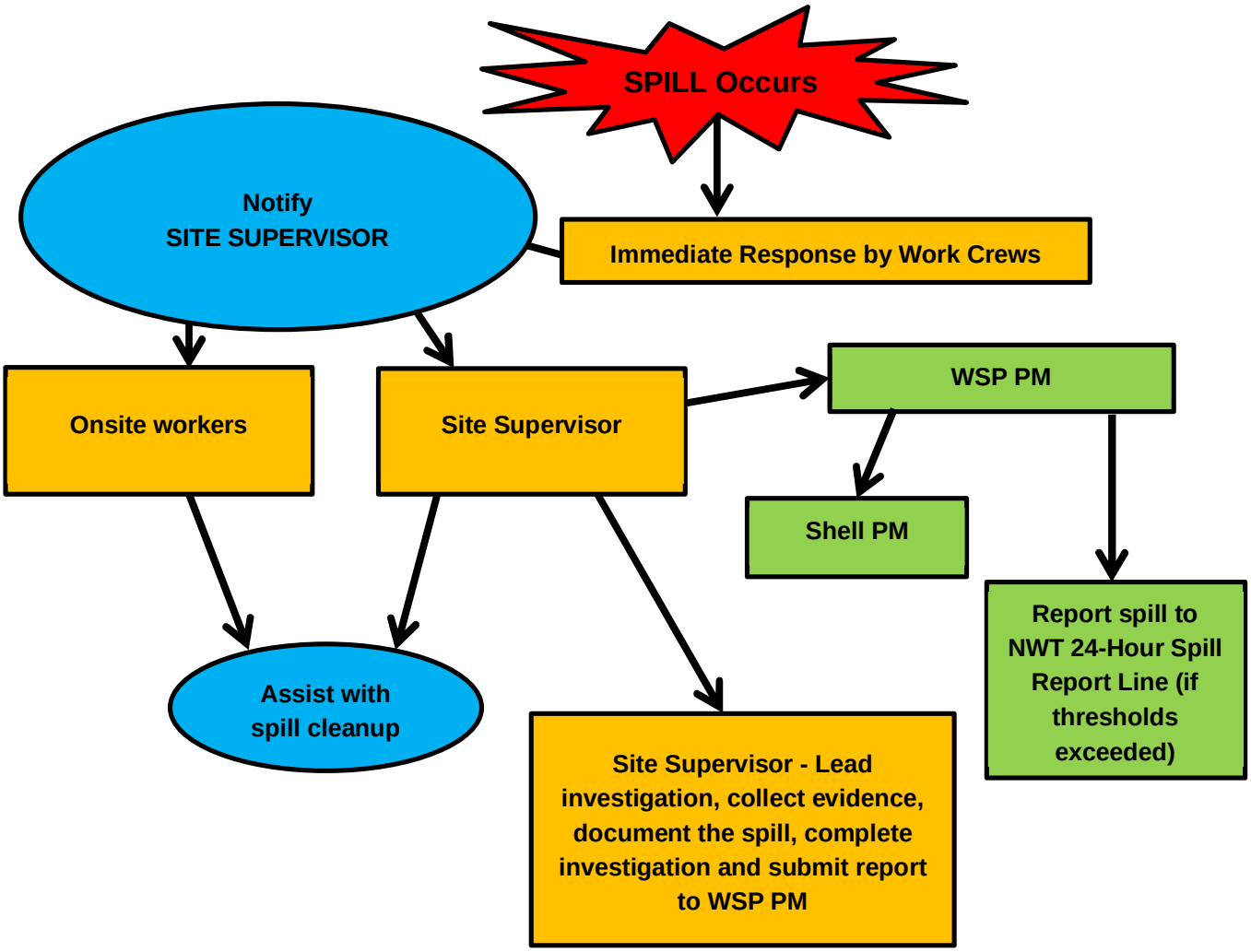


Figure 5: Spill Response Flowchart

7.6 Communication System Interruptions

The main method of communication on site will be by using two-way handheld radios operating on the same channel for all crews. Interference is not expected to affect two-way radio usage at the Site. Radios are to be charged each day and communication checks to be tested each morning. Defective or broken radios are to be taken out of service, tagged, and replaced. Satellite phones, inReach and Starlink devices necessary for external communication will be tested before work starts on site and service verified each day. Should all communication systems fail, this would result in the immediate stoppage of work until communication services are restored.

7.7 Severe Weather

Weather in the region can change very drastically in a short amount of time. When working during periods where rapid weather changes or inclement weather may be expected, make sure that workers are appropriately equipped with winter or rain gear, warm clothing and a change of clothing as appropriate. All travel-related decisions will be made by the Site Supervisor.

- The Site Supervisor or designate alternate will obtain frequent weather updates throughout the workday and communicate changes so that crews may be prepared to modify or suspend work when bad weather doesn't allow it to be completed safely.
- High winds are common for the region, conditions will be assessed by the Site Supervisor.
- If forecasted bad weather requires the evacuation of workers from the work area, the Site Supervisor will coordinate the safe mobilization of the field crew back to safety.
- If weather in the area may prevent emergency evacuation of an IP, the Site Supervisor, with the consultation of the subcontractor and the project management team may decide to suspend high risk work activities until the weather passes.

The Site Supervisor will communicate weather and potential evacuation status with the crew and, considering the weather forecast, time of day and activities taking place (in terms of risk), one of the following decisions will be made:

- Continue work as normal.
- Suspend high hazard activities and wait for weather to improve.
- Suspend all activities and evacuate the work site.

7.8 Wildlife Encounter

If wildlife is observed, report sighting immediately to the Wildlife Monitor so they can determine threat level and response. The Wildlife Management and Monitoring Plan describes all responses to wildlife and will be implemented throughout the entire Project.

All bear conflicts are to be reported to the local Environment and Climate Change office. Report a wildlife-conflict: Phone: (867) 678-0289.

Refer to the Wildlife Management and Monitoring Plan for further reporting requirements once the Wildlife Monitor confirms the encounter has been appropriately managed.

7.9 Workplace Harassment and Violence

Strategies for recognizing and dealing with incidents of harassment and violence in the workplace are outlined within WSP's Harassment and Violence in the Workplace Policy. Acts of harassment and violence are defined within this policy. If personnel encounter aggressive behaviour by another individual, they are to:

- Remain calm.
- Monitor their own non-verbal cues.
- Maintain a safe distance from the aggressor and identify your escape route to safe area.
- Do not make threats or promises.
- Remove themselves from the situation immediately.
- If the situation escalates, call for help using radio or verbally.
- Contact the Site Supervisor when safe to do so and file an incident report.

The Site Supervisor will report the incident to the WSP PM and involve the WSP HSSE Advisor and human resources representative. The incident may be reported to the local authorities depending on the nature of the aggressive act, and arrangements will be made to have the person(s) responsible for the aggressive act to be immediately escorted and permanently removed from the Site.

8.0 HOSPITAL ADDRESSES

The closest full-service hospital is the Inuvik Regional Hospital (Table 4). Transportation from Site to the hospital will be completed via emergency ice road (winter) and river (summer) unless Air Ambulance is required.

Table 4: Hospital Information.

Hospital Name	Address	Phone	Level of Care Available
Inuvik Regional Hospital	285-289 MacKenzie Rd, Inuvik, NT	867-777-8000	ER 24/7 / Full Care
Aklavik Susie Husky Health and Social Services Centre	2 Airport Road, P.O. Box 114, Aklavik, NT	867-978-2516	Partial Care

9.0 STATEMENT OF LIMITATIONS

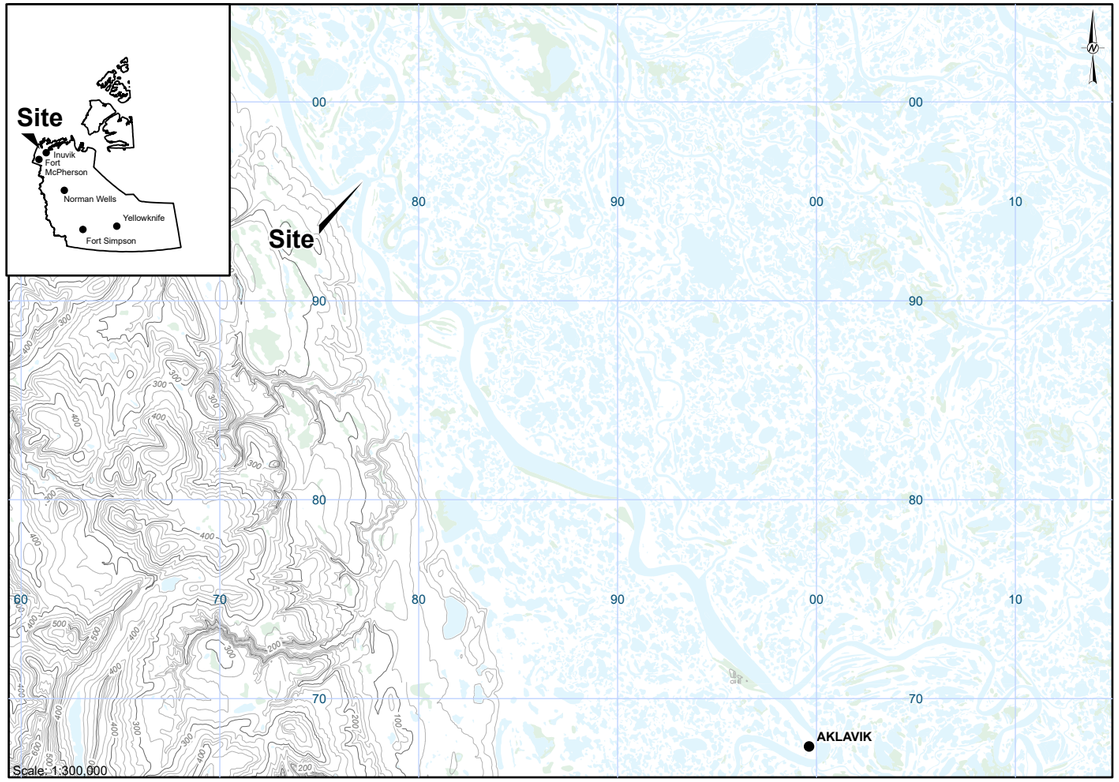
WSP Canada Inc. (WSP) has prepared this document in a manner consistent with that level of care and skill ordinarily exercised by members of the engineering and science professions currently practising under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this document. No warranty, express or implied, is made.

This document, including all text, data, tables, plans, figures, drawings and other documents contained herein, has been prepared by WSP for the sole benefit of Shell Canada Limited (Shell). It represents WSP's professional judgement based on the knowledge and information available at the time of completion. WSP is not responsible for any unauthorized use or modification of this document. All third parties relying on this document do so at their own risk.

The factual data, interpretations, suggestions, recommendations, and opinions expressed in this document pertain to the specific project, site conditions, and are not applicable to any other project or site location. In order to properly understand the factual data, interpretations, suggestions, recommendations and opinions expressed in this document, reference must be made to the entire document.

APPENDIX A

Figures



LEGEND

- CONTOUR (50 M INTERVAL)
- CONTOUR (10 M INTERVAL)
- WATERCOURSE
- WATERBODY
- SWAMP

REFERENCE(S)

1. BASE MAP: MAXAR
2. KEY TOPOGRAPHICAL MAP CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - CANADA.
3. MACKENZIE DELTA BOUNDARY: TESSLER (2015)
4. INSET MAP: MADE WITH NATURAL EARTH.
5. PROJECTION: NAD 1983 CSRS UTM ZONE 8N, TRANSVERSE MERCATOR

0 500 1,000

1:15,000 METRES

CLIENT
SHELL CANADA LIMITED

CONSULTANT
wsp

YYYY-MM-DD	2025-02-17
DESIGNED	S.VILLENEUVE
PREPARED	J.HECK
REVIEWED	J.KRIZAN
APPROVED	J.HYRICH

PROJECT
FORMER STAGING AREA
WEST CHANNEL
INUVIALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES

TITLE
SITE LOCATION

PROJECT NO.	PHASE-TASK	REV.	FIGURE
CA0009291.9178	1800-2453	0	A1

LEGEND

- HISTORICAL INFRASTRUCTURE
- FORMER LEASE BOUNDARY

0 37.5 75 150

1:3,000 METRES

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - CANADA
2. BASE MAP: SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
3. COORDINATE SYSTEM: NAD 1983 CSRS UTM ZONE 8N

CLIENT
SHELL CANADA LIMITED

PROJECT
FORMER STAGING SITE
WEST CHANNEL
INUVIALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES

TITLE
SITE PLAN WITH HISTORICAL INFRASTRUCTURE

CONSULTANT

YYYY-MM-DD	2025-03-14
DESIGNED	S.VILLENEUVE
PREPARED	J.HECK
REVIEWED	J.KRIZAN
APPROVED	J.HYRICH

PROJECT NO.	CONTROL	REV.	FIGURE
CA0009291.9178	1800-2453	0	A2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

25mm

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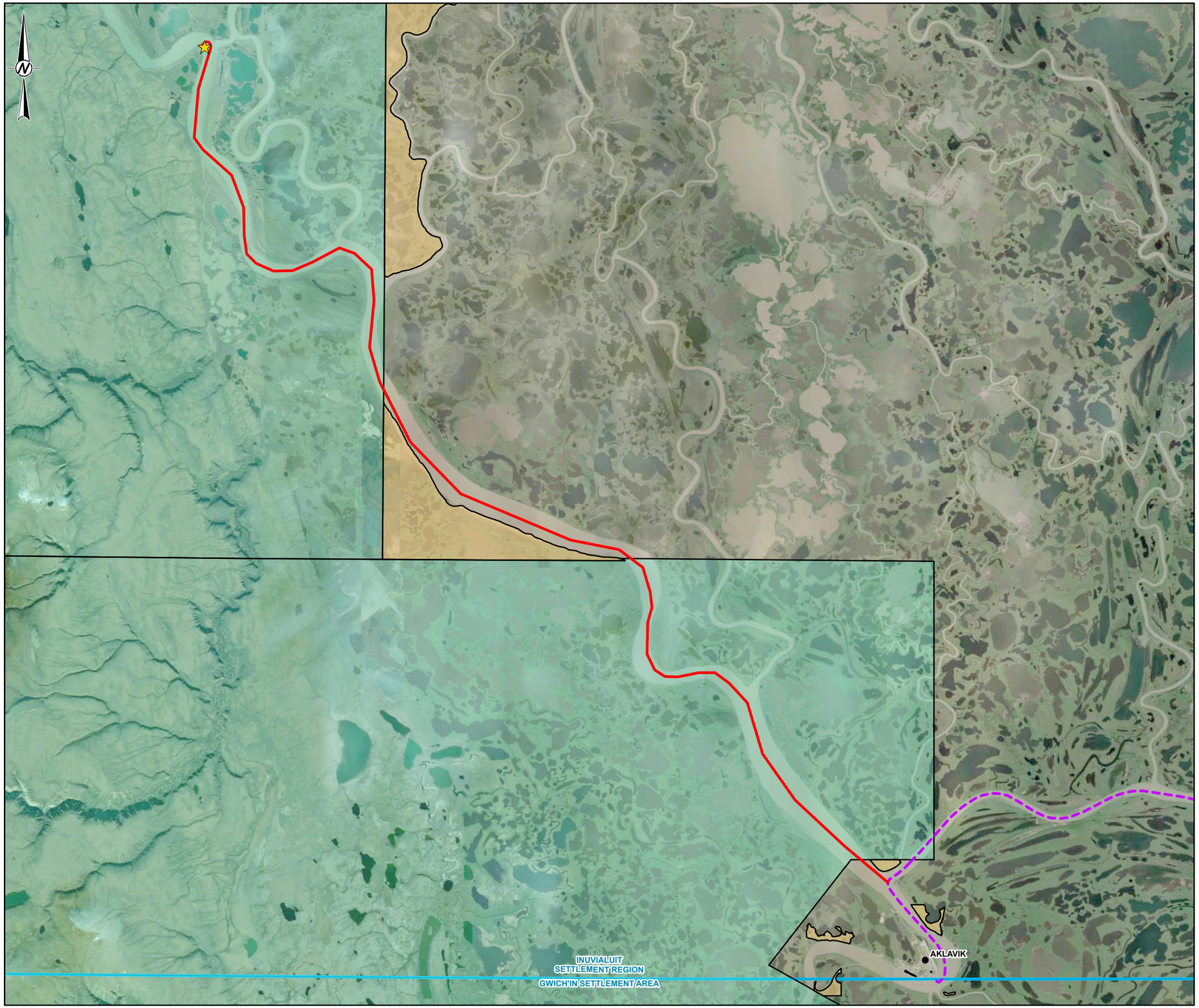

LEGEND

- SITELOCATION
- PROPOSED ICE ROAD
- PUBLIC SEASONAL ICE ROAD FROM AKLAVIK TO INUVIK
- SETTLEMENT REGION BOUNDARY

INUVIALUIT PRIVATE LANDS

- 7(1)(A) LANDS - SURFACE AND SUBSURFACE TITLE
- 7(1)(B) LANDS - SURFACE TITLE

0 1.5 3 6

1:120,000 KILOMETRES

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - CANADA
2. BASE MAP: EARTHSTAR GEOGRAPHICS
3. COORDINATE SYSTEM: NAD 1983 CSRS UTM ZONE 8N

CLIENT
SHELL CANADA LIMITED

PROJECT
FORMER STAGING SITE
WEST CHANNEL
INUVIALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES

TITLE
SITE LOCATION WITH ICE ROAD

CONSULTANT

wsp

YYYY-MM-DD	2025-03-14
DESIGNED	S.VILLENEUVE
PREPARED	J.HECK
REVIEWED	J.KRIZAN
APPROVED	J.HYRICH

PROJECT NO.	CONTROL	REV.	FIGURE
CA0009291.9178	1800-2453	0	A3

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

25mm

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LEGEND

- EXCAVATION LIMITS AS OF DECEMBER 15 TO 17, 2024 AND JANUARY 31, 2025 SURVEYING
- ABOVEGROUND WATER DISCHARGE LINE
- CUT LINE
- HIGH WATER LINE
- 30 m BUFFER FROM HIGH WATER LINE
- ROAD CENTERLINE
- SOIL PILE TOE LINE
- TRAIL EDGE LINE
- TREE/BUSH LINE
- UNDERGROUND PIPELINE
- SURVEILLANCE NETWORK MONITORING PROGRAM SAMPLING STATION
- AMBIENT AIR MONITORING LOCATION
- THERMISTOR LOCATION
- TOPOGRAPHIC LOW
- DISCHARGE POINT

NOTES

1. THE AS-BUILT DRAWING REFLECTS THE SITE CONDITIONS AT THE TIME THE SURVEY WAS COMPLETED AND IS NOT NECESSARILY REFLECTIVE OF THE CONDITIONS AT THE TIME OF DRAWING REVIEW.
2. EXCAVATION BOUNDARIES SHOWN ON DRAWING ARE THE DISTURBED PERIMETER SURVEYED FOLLOWING REMOVAL OF SOIL FOR TREATMENT AND BACK-SLOPING THE SIDE WALLS AT AN APPROXIMATE 1 (HORIZONTAL) TO 1 (VERTICAL) SLOPE.

REFERENCE

ORIGINAL DRAWING OBTAINED FROM GEOVERRA LIMITED PARTNERSHIP; FILE No.: 24-01717-001-SK-01-R0-AS-BUILT; SCALE: 1:400; DATE: JULY 17, JULY 23 AND JULY 24, 2024.

0 25 50
1:1,500 METRES

CLIENT
SHELL CANADA LIMITED

PROJECT
FORMER WEST CHANNEL STAGING SITE
INUVIALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES

TITLE
WEST CHANNEL SITE LAYOUT

CONSULTANT

YYYY-MM-DD	2025-05-28
DESIGNED	SVilleneuve
PREPARED	LMoraes
REVIEWED	JKrizan
APPROVED	JHyrich

PROJECT NO.	PHASE-TASK	REV.	FIGURE
CA0009291.9178	1800-2453	0	A4

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

0 25 mm

APPENDIX B

Crisis Management – Silver Plan

Crisis Management – Silver Plan for WSP Canada

Introduction – WSP makes every effort to ensure that our people, clients, and assets are protected against threats and risks, including unplanned and undesired events such as natural or manmade disasters, accidents, crime, civil unrest that has the potential to cause harm to an employee or groups of employees. This document arises from the requirements of the WSP Global Standard 105 for Crisis Management.

Impacts of unplanned and unexpected events may compromise the company's ability to continue operations in a safe and secure manner. Implementation of this Silver Plan is required where there is a need to protect our people, clients, brand, reputation, assets, and the general interests of our stakeholders and the wider community.

The objectives of this plan are to 1.) Identify potential/foreseeable threats and treat them before they are realized, 2.) Contain and manage the immediate of impact unplanned and unexpected events should they eventuate and 3.) Recover to a safe state key business operations and deliverables.

The **Silver** Team operates at a Regional Level and is responsible through business processes for identifying threats to overseas travellers or projects (horizon scanning), providing **strategic** direction in terms of effective crisis management.

During a crisis event the Silver team supports the Gold/Bronze team's response by driving and setting the strategic agenda (this includes the provision of functional support e.g. human resources, IT**,** H, S&S legal**,** and communications support when requested by the Gold/Bronze Teams). Decision support will be provided based on the scenario being managed.

Gold Team	→	Establishes Policy / Process / Links regions to Board (Crisis Management Standard / Policy)	
↕			
Silver Team Management Protocol	→	Regional Teams, including physical Crisis Management Process / Formats / Plan	Plans to follow 8 steps crisis
↕			
Bronze Team / Significant Organizational Change	→	Discipline / Country / Project Teams, including physical crisis management process / formats / plan	Review every 12 months

Implementation of this **Silver Plan** is required where there is a need to protect our people, clients, brand, reputation, assets, and the general interests of our stakeholders and the wider community.

The objectives of this plan are to:

1. Identify potential/foreseeable threats and treat them before they are realized,
2. Contain and manage the immediate impact of crisis, and
3. Return to normal operations.

Silver Team

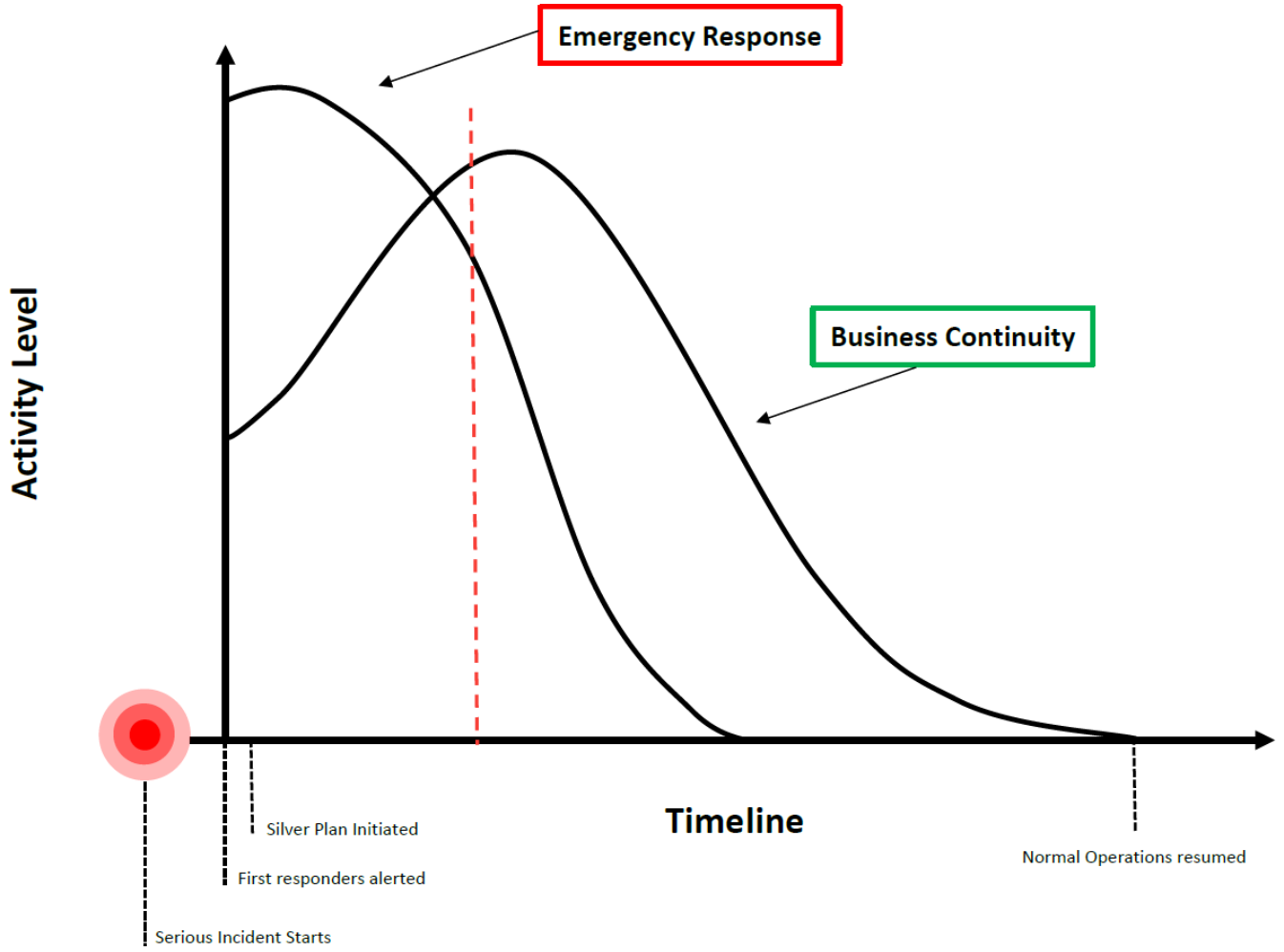
The Silver Team operates at a Canada Region Level and is responsible for identifying threats to its operations and providing strategic direction during a crisis.

The Silver Team will appoint an *emergency response leader* and a *business continuity leader* who will establish their respective teams based on the identified crisis at hand. They will also keep in contact with the Gold team as needed.

When responding to any crisis the Silver Team will follow the **RACER** approach:

- **Report**: Advise the Bronze/Gold Team/SHEQ Team ASAP
- **Assess**: Evaluate the impact and severity of the situation
- **Convene**: Assemble the most suitable response team for the situation
- **Execute**: Contain & manage situation using all available resources
- **Recover**: Post-event, conduct a formal review to drive continual improvement.

Crisis Actions Timeline



Roles and Responsibilities of Silver Team:

Title: Silver Team Membership

Scope	All operations	**Author**	Shawn Scott	**Last review**	2023-01-27
Country	Canada	**ISOS rating**		**Last test date**	

Key contacts	Role	Email	Mobile
International SOS	International support	Membership: 02AABC000037	+61 2 9372 2468
Michael Marley	Global Safety & Security	michael.marley@wsp.com	+44 781 606 3428
Anne- Sophie Tétreault	HSE	Anne-Sophie.Tetreault@wsp.com	+1 514 561-3003
Janet Oh	Legal & Regulatory	janet.oh@wsp.com	+1 514 340-0046
Gary Black	Security	gary.black@wsp.com	+ 1 647-539-8992
Maryse Tremblay	Ethics & Integrity	maryse.tremblay@wsp.com	+1 438-843-8076
John Lopes	Corporate Real Estate & Facilities Management	john.lopes@wsp.com	+1 289 218-9024
Renée Sauriol	Communications	renee.sauriol@wsp.com	+1 514 830-2892
Zoe Nutten	HR	zoe.nutten@wsp.com	+1 416 578-1292
Marc Albert	IT & IT Security	marc.albert@wsp.com	+1 514 349-5309
Peter Hatcher	Regional Leader Ontario, Atlantic, and West Canada	peter.hatcher@wsp.com	+1 403 589 0408
Sébastien Fecteau	Regional Leader Québec	sebastien.fecteau@wsp.com	+1 418 564-6363
Cari Anderson	Corporate Travel Booker/Admin	Cari.anderson@wsp.com	+1 647 643-1664
Charles-Olivier Bernard	Commercial & Risk Management	charles-olivier.bernard@wsp.com	+1 438 337-2875
Nadine Lalonde	Silver Team Call Lead – NON HSE Related	nadine.lalonde@wsp.com	+1 438 462-3379
Myriam Beauchemin	Silver Team Call Lead – HSE Related	myriam.beauchemin@wsp.com	+1 819 570-6032

Crisis Management – Silver Plan for WSP Canada

Nature of Threat: The following groupings list the potential threats that may occur within WSP Canada Operations. The identified threat and impact that should be considered by Silver/Bronze Teams when establishing local plans. These threats are categorized into HSE Led or Non-HSE led as identified in the chart above and this will help identify who is the emergency response coordinator responsible to initiate. Each call will identify the nature of the threat and the identified Emergency Response Leader and Business Continuity Leaders for each type, as identified below, will act as the Silver Team Call Co-Chairs and decision makers.

Category	Threat	Impact to Critical Business Activities	Emergency Response Leader	Business Continuity Leader	External Stakeholders
Workplace emergency	**Emergency impacting one or more workplaces - Natural disaster or utilities outage (non IT)**	Blocked worker access to/from workplace and/or safety risk travelling to/from project sites or home	Anne-Sophie Tétreault (HSE led)	Office Leaders Note: Office Leader to *interface with John Lopes (Facilities/Real Estate) as needed*	Local utilities companies Local news media Emergency Services Landlord Public Safety Canada
HSE	**Health or Safety Critical (Severe Injury or Fatality) Significant Environmental Incident**	Stop to project, WSP or client operations	Anne-Sophie Tétreault (HSE led)	Sector Leader *Note: if across Sectors Regional Leader to be added*	Provincial Ministry of Labour or equivalent Provincial Ministry of Environment
Security	**Terrorism/Active Shooter /Crime/Physical Security threat/Social Unrest**	Blocked worker access to/from workplace and/or immediate safety risk travelling to/from project sites or home	Anne-Sophie Tétreault (HSE led)	Regional Leader	Emergency Services Public Safety Canada Municipal and Provincial police
Travels	**International travels emergency**	Blocked worker access to workplace and/or immediate safety risk	Anne-Sophie Tétreault (HSE Led)	Sector Leader	Foreign Affairs and International Trade Canada (DFAIT) International SOS (iSOS)
Epidemic Pandemic	**Epidemic or Pandemic**	Blocked worker access to/from workplace and/or safety risk travelling to/from project sites or home, quarantines established by authorities, unplanned absences from work.	Anne-Sophie Tétreault (HSE led)	Regional Leader	Public Safety Canada Public Health Agency of Canada Provincial Ministries (Ministry of Labour, Ministry of Health, etc)
IT	**Phone/IT Security/IT network outage/Core System eg. ERP**	Inability to communicate or access critical information and continue operations	Marc Albert (Non-HSE led)	Regional Leader	Server provider ATOS Clients
Legal and Regulatory (includes EI)	**Authorities, Regulations, Liabilities, Insurance**	Major dispute, litigation	Janet Oh (Non-HSE led)	Regional Leader	
Financial	**Capital, Financial, Guarantees**	Pull on guaranties, major project claim, damages	George Niktaris	Regional Leader	
Reputation	**Reputational**	Adverse media attention, including due to involvement and/or failure in high profile project	Renee Sauriol (Non-HSE led)	Regional Leader	National news media Social media contacts – LinkedIn, Facebook, Twitter Clients

Crisis Management – Silver Plan for WSP Canada

Silver Crisis Team: In the event that a threat should develop, the first point of reference for an employee is to raise the issue to their Office Leader or Site Supervisor using the RACER methodology. The first point of contact for the Silver Team is the identified Emergency Response Leader and/or the identified Business Continuity leader associated with the nature of the threat in the chart above. The Emergency Response Leader will then inform the appropriate Silver Team Call Lead to initiate a call with the required team members as identified in the chart below.

Key Contacts										
Key contacts	**Role**	**Email**	**Mobile**	**IT**	**Workplace Emergency**	**Security**	**Reputational**	**Travels**	**HSE**	**Epidemic Pandemic**
Call Leader Type				**Non HSE Led**	**HSE Led**	**HSE Led**	**Non-HSE Led**	**HSE-Led**	**HSE Led**	**HSE Led**
Michael Marley	H&S (EMEIA)	michael.marley@wsp.com	+44 781 606 3428							
Anne-Sophie Tétreault	HSE	Anne-Sophie.Tetreault@wsp.com	+1 514 561-3003		X	X		X	X	X
Janet Oh	Legal & Regulation	janet.oh@wsp.com	+1 514 340-0046			X	X	X	X	X
Gary Black	Security Services	gary.black@wsp.com	+1 647-539-8992		X	X				X
Maryse Tremblay	Ethics & Integrity	maryse.tremblay@wsp.com	+1 438-843-8076				X			
John Lopes	Facilities/Supply Chain	john.lopes@wsp.com	+1 289 218-9024	X	X	X				X
Renée Sauriol	Communications	renee.sauriol@wsp.com	+1 514 830-2892		X	X	X	X	X	X
Zoe Nutten	HR	zoe.nutten@wsp.com	+1 416 578-1292			X	X	X		X
Marc Albert	IT & IT Security	marc.albert@wsp.com	+1 514 349-5309	X						X
Peter Hatcher	Regional Leader Ontario, Atlantic & West	peter.hatcher@wsp.com	+1 403 589 0408	X	X	X	X	X	X	X
Sébastien Fecteau	Regional Leader Québec	sebastien.fecteau@wsp.com	+1 418 564-6363	X	X	X	X	X	X	X
Cari Anderson	Corporate Travel Booker/Admin	Cari.anderson@wsp.com	+1 647 643-1664			X		X		X
Charles-Olivier Bernard	Commercial & Risk Management	charles-olivier.bernard@wsp.com	+1 438 337-2875	X		X	X	X	X	X
Nadine Lalonde	Silver Team Call Lead – NON HSE Related	nadine.lalonde@wsp.com	+1 438 462-3379	X			X			
Myriam Beauchemin	Silver Team Call Lead – HSE Related	myriam.beauchemin@wsp.com	+1 819 570-6032		X	X		X	X	X
Satvinder Flore	ERI Sector Leader	Satvinder.flore@wsp.com	+1 403 612-1981					X	X	
François Lemay	Building Sector Leader	Francois.lemay@wsp.com	+1 613 292-2000					X	X	
Greg Herasymuik	E&E Sector Leader	Greg.herasymuik@wsp.com	+1 403 852-2239					X	X	
Joe Sframeli	T&I Sector Leader	Joe.sframeli@wsp.com	+1 647 222-7626					X	X	

Detailed Roles and Responsibilities: For each potential threat identified, different SME and business leaders will be called upon to participate on a crisis call as identified in the chart above.

Specific roles and responsibilities of each of these roles are identified below:

Role	High Level Role Responsibilities	Accountabilities
HSE	Subject matter expert (SME) for all areas under HSE. They must retain an overview of the HSE impacts and activities to return to normal operations. They direct other team members within HSE to gather and analyse information, or complete specific tasks, and then make decisions based on the information available. They will coordinate with other SME groups as required	▸ Liaise with Global Health, Safety & Wellbeing Team and any external Security support required ▸ Ensure all HSE statutory commitments are identified, acted on and fully understood by the Team; ▸ Manage Health & Safety, Environment (HSE) responses consistent with the WSP Safety Management System; ▸ Maintain a strategic security overview of the incident, ensuring strategic security issues are appropriately managed; and, ▸ Assist the Team in addressing health, safety and environmental related issues.
Security Services	Subject matter expert (SME) for all areas under Security. They must maintain an overview of Security related impacts and activities during an incident leading to recovery operations. Members of Security Services will work with HSE, Facilities, Civil Police and other First Responders during the response and recovery phases of all incidents.	▸ Liaise with First Responders, Police/fire/Ambulance during a response to an incident; ▸ Ensure communications are maintained with CMT during an incident; ▸ Maintain a strategic security overview of the incident, ensuring strategic security issues are appropriately managed; ▸ Assist HSE, Facilities to maintain health and safety of all employees during an active incident.
Corporate Travel	Subject matter expert (SME) for all areas under Corporate Travel and the tracking of WSP employees travel movements. They gather and analyse information, or complete specific tasks, and then make decisions based on the information available. They will coordinate with other SME groups as required	▸ Work with Travel Management Company, ISOS, and Global Mobilty to identify and create a list of the employees that are either travelling to or have already arrived in the specified regions ▸ Advise Silver team of the list of employees and work with other SME groups, as required, on the development of a safe return strategy ▸ Work with HR and people managers to ensure the employee has been contacted and has confirmed that they are safe ▸ Implement the safe return strategy with employee, people manager, and HR ▸ Update Permissible Travel Matrix as required ▸ Work with Travel Management Company to ensure no further employees travel to the specified regions until issue resolved

IT & IT Security	Subject matter expert (SME) for all areas under IT and IT Security. They must retain an overview of the IT and IT Security impacts and activities to return to normal operations. They direct other team members within IT and IT Security to gather and analyse information, or complete specific tasks, and then make decisions based on the information available. They will coordinate with other SME groups as required	▸ Ensure that the Teams are provided with all IT capability and solutions to operate effectively in the event of a crisis; ▸ Maintenance of Crisis management related IT capability and solutions in readiness for a Crisis event; ▸ Provide support to the Team in terms of continuity of IT systems during the Crisis, and the provisional of additional capability, as required; ▸ Develop, own and maintain required Disaster Recovery Plans in readiness to meet defined success criteria; ▸ Implement and manage Disaster Recovery Plans to conclusion; and, ▸ Provide general IT systems advice and support to the Team on financial planning impacts and aspects
Corporate Real Estate & Facilities Management	Subject matter expert (SME) for all areas under Corporate Real Estate & Facilities Management, Work with internal and external parteners to restore critical business operations as quickly and safely as possible. Manage the Lease review, Landlord engagement and 3rd party	▸ Assess vulnerabilities: Fire, flood, power outages, inclement weather, terrorism, and natural disasters are examples of effects that can prevent the continued operation to the physical property. ▸ 3rd Party Management: Work with vendors/suppliers to bring the property and space back to business operational status. ▸ Communicate Updates: Advise the business of updates towards timeline to return to physical business as usual.
Legal & Regulation	Subject matter expert (SME) for all areas under Legal. They must retain an overview of the Legal impacts and activities to return to normal operations. They direct other team members within Legal to gather and analyze information, or complete specific tasks, and then make decisions based on the information available. They will coordinate with other SME groups as required.	▸ Assist in the development of a positive legal direction; advise on legal landscape and implications; ensuring the Team(s) recognize actions which could have adverse legal effects for WSP. ▸ Manage legal risk and insurance issues; and ▸ Ensure suitable investigative processes are undertaken. ▸ Ensure all legislative and ethical commitments required to be taken by WSP Canada and fully understood by the Team ▸ Review draft communications, and assess disclosure obligations
Ethics & Integrity	Subject matter expert (SME) for all areas under Ethics & Integrity. They must retain an overview of the ethical impacts of an event and activities that could put WSP's business integrity practices in question.	▸ Provide ethics and compliance related advice ▸ Provide guidance in relation to reputational impact tied to a business integrity risk ▸ Advise on how to manage files related to business integrity involving public bodies or public authorities

HR	Subject matter expert (SME) for all areas under People and Culture. They must retain an overview of the People and Culture impacts and activities to return to normal operations. They direct other team members within People and Culture to gather and analyse information, or complete specific tasks, and then make decisions based on the information available. They will coordinate with other SME groups as required	▸ Ensure all social, legislative and ethical commitments in regard to the treatment of staff and their families are acted on and fully understood by the Team; ▸ Ensure country-specific HR issues are adequately considered and dealt with; ▸ Ensure communication messages are appropriate to the current circumstances; ▸ Liaise with HR members from activated Teams; and ▸ Ensure accurate, consistent HR approach between response teams during the Crisis
Communications	Subject matter expert (SME) for all areas under Marketing and Communications. They must retain an overview of the Marketing and Communication impacts and activities to return to normal operations. They direct other team members within Marketing and Communications to gather and analyse information, or complete specific tasks, and then make decisions based on the information available. They will coordinate with other SME groups as required Communications during the first 48 hours of any Crisis are crucial.	▸ Identify and evaluate implications of the incident on WSP / Partners' reputation and future operability; ▸ Advise Team on development of internal and external communications strategy; ▸ Turns all information to the media spokesperson(s); ▸ Manages any Communications Support personnel deployed at the Team location; ▸ Manages any Pre-recorded message updates, if applicable
Regional Leaders	Regional Leaders act as the Business Continuity Leader for their appointed region on behalf of all the Sectors in their identified region. They must retain an overview of the business impacts and activities to return to normal operations. They direct other team members to gather and analyse information, or complete specific tasks, and then make decisions based on the information available.	▸ Providing guidance and support to operations (sectors) ▸ The decision maker with respect to operations (sectors), ▸ Ensure an integrated team response is coordinated, reporting and communicating is maintained; ▸ Lead the Team in managing the return to normal Operations
Sector Leaders	Sector Leaders act as the Business Continuity Leader for their appointed sector They must retain an overview of the business impacts and activities to return to normal operations. They direct other team members to gather and analyse information, or complete specific tasks, and then make decisions based on the information available.	▸ Providing guidance and support to operations (sectors) ▸ The decision maker with respect to operations (sectors), ▸ Ensure an integrated team response is coordinated, reporting and communicating is maintained; ▸ Lead the Team in managing the return to normal Operations

Commercial & Risk Management	Subject matter expert (SME) for all areas under Commerical and Risk Management They must retain an overview of the Commerical and Risk Management impacts and activities to return to normal operations. They direct other team members within Commerical and Risk Management to gather and analyse information, or complete specific tasks, and then make decisions based on the information available. They will coordinate with other SME groups as required	▸ Identify risks and related mitigations. ▸ Evaluate commercial positions and impacts. ▸ Assist in the development of a balanced commercial and risk direction on behalf of WSP's commercial commitments; ensuring the Team(s) recognise actions which could have adverse commercial impact for WSP. ▸ Manage risk and commercial impacts and/or issues; ▸ In collaboration with Finance, ensure all applicable financial notifications and tracking is carried out; ▸ Ensure adequate funds are available for incident response and recovery efforts; and ▸ Provide advice and support to the Team on financial planning impacts and aspects
Silver Team Call Lead HSE	*The call coordinator for HSE threats acts as both the Emergency Team Call Coordinator and Information Manager for the identified threat* **Emergency Team Coordinator:** The Emergency Team Coordinator is the person who gets things done, and takes full responsibility for the execution of the Leaders instructions. The Coordinator reports only to the Emergency Response Leader for the duration of the Crisis. **Information Manager:** The Information Manager controls and monitors the flow of information to/from all stakeholders during the call and post call follow	Emergency Call Lead Coordinator: ▸ Coordinate personnel and provide guidance to Silver members on their roles and tasks; ▸ Support the two-way flow of information, assist with support to other teams; and ▸ Maintain a strategic overview of the incident Information Manager: ▸ Coordinating the recurring meetings ▸ Receive, sort and make sense of incoming intelligence and information ▸ Maintain a chronological record of events and current status of response and recovery actions; ▸ Ensure relevant incoming information is noted and brought to the Team's attention; and, ▸ Maintain regular communication with the other Teams.

Silver Team Call Lead NON HSE	**The call coordinator for non-HSE threats acts as both the Emergency Team Call Coordinator and Information Manager for the identified threat** **Emergency Team Coordinator**: The Emergency Team Coordinator is the person who gets things done, and takes full responsibility for the execution of the Leaders instructions. The Coordinator reports only to the Emergency Response Leader for the duration of the Crisis. **Information Manager:** The Information Manager controls and monitors the flow of information to/from all stakeholders during the call and post call follow	Emergency Call Lead Coordinator: ▸ Coordinate personnel and provide guidance to Silver members on their roles and tasks; ▸ Support the two-way flow of information, assist with support to other teams; and ▸ Maintain a strategic overview of the incident Information Manager: ▸ Coordinating the recurring meetings ▸ Receive, sort and make sense of incoming intelligence and information ▸ Maintain a chronological record of events and current status of response and recovery actions; ▸ Ensure relevant incoming information is noted and brought to the Team's attention; and, ▸ Maintains regular communication with other other teams identified in the particular threat

Process:

Crisis management planning:

Canada will prepare a Crisis Management Plan ("**CMP**"/Silver/Bronze) Plan for each scoped area or situation (e.g. Region/Country/Major Project) that identifies the following based on the nature of operations/situation:

- Location details including key contacts to assist in a crisis
- Related response plans (e.g. playbooks)
- Critical activities
- Foreseeable threats including death, medical emergency, security threat, natural disaster, or civil disturbance
- Response time objectives for each threat event
- Threat mitigation planning.
- For work in high or critical risk countries (based on ISOS or on WSP's High-Risk Country list and policy) a thorough Health, Environment & Safety Plan must be completed and reviewed with the HSE team (and validated by Global HSE team) that includes details of robust security, medical and travel risk controls and a workable country evacuation plan.

Communicate, Train & Test:

- Communicate the CMP to affected people
- Provide crisis response training and refresher sessions for likely respondents
- At a minimum, each CMP must be scenario tested annually

Crisis response:

- **Report**: Advise the Gold/Silver/Bronze Team as appropriate.
- **Assess**: Evaluate the impact and severity of the situation and determine the crisis level per the Crisis and Incident Communications Policy.
- **Convene**: Assemble the most suitable response team for the situation.
- **Execute**: Contain & manage situation using all available resources.
  - Facts: what do we know?
  - Assumptions: what do we believe?
  - Scenarios: what are best-case, worst-case & likely scenarios?
  - Target objectives: what is our current objective? (e.g. more info, restore power)
  - Response options: what is the best response from the options available?
  - Implementation: what needs to be done now, by who? (e.g. action plan)
  - Stakeholders: prioritize key stakeholders according to interest & influence
  - Key messages: prepare & deliver key messages for priority stakeholders
- **Recover:** Post-event, conduct a formal review to drive continual improvement

Review effectiveness of arrangements

- Each Crisis Management Plan/Playbook shall be reviewed and updated periodically, at least annually or following major organizational change of acquisition activity.
- Opportunities to continually improve our approach to Crisis Management should be actively pursued

wsp.com

DATE 3 July 2025 **Project No.** CA0009291.9178

TO Inuvialuit Water Board
P.O. Box 2531, Inuvik, NT X0E 0T0

RE: ADDENDUM 2 TO THE REMEDIAL ACTION PLAN FOR THE FORMER WEST CHANNEL STAGING SITE SOIL REMEDIATION ACTIVITIES, INUVIALUIT WATER BOARD WATER LICENCE N5L8-1846 - SHELL CANADA LIMITED

On behalf of Shell Canada Limited (Shell), WSP Canada Inc. (WSP) submitted modification requests to the Inuvialuit Water Board (IWB) on 29 May 2025 regarding the use of an alternate contact water treatment system and additional enhanced thermal conduction (ETC) soil treatment cycles in support of Soil Remediation at the Former West Channel Staging Site (the Project) under IWB Water Licence N5L8-1846. The IWB accepted the proposed modifications to the Remedial Action Plan (RAP) on 6 June 2025.

The following amended text is provided to document the resulting changes to Sections 7 and 9 of the RAP, including the previously issued and approved Addendum 1. In addition, the Project schedule in Table N (Section 11) was updated and Figure 1 (Attachment 1) was revised to present the modified site layout. This Addendum 2 is intended to supplement, and should be read in conjunction with, the information currently included in the RAP and Addendum 1.

REMEDIAL ACTION PLAN ADDEDNDUM 2

1.0 INTRODUCTION

No amended text required.

2.0 BACKGROUND

No amended text required.

3.0 PHYSICAL SITE CHARACTERISTICS

No amended text required.

4.0 REMEDIATION CRITERIA

No amended text required.

5.0 CONTAMINANTS OF CONCERN

No amended text required.

6.0 REMEDIATION LOGISTICS AND MITIGATION MEASURES

No amended text required.

WSP Canada Inc.
16820 - 107 Avenue, Edmonton, Alberta T5P 4C3, Canada
T: +1 780 483 3499 F: +1 780 483 1574

7.0 SOIL MANAGEMENT

7.1 Excavation and Treatment of Contaminated Soil

No amended text required.

7.2 Confirmatory Sampling Plan

7.2.1 Confirmatory Sampling – Excavation Extents

No amended text required.

7.2.2 Confirmatory Sampling – Effectiveness of Treatment

No amended text required.

7.2.3 Contingency Plan

If initial ETC soil treatment is ineffective, the soil will be treated again for an extended period and/or at an adjusted temperature. If, after a secondary ETC treatment cycle the petroleum hydrocarbon (PHC) concentrations remain above the soil quality objectives (SQOs), the soil may undergo additional ETC treatment cycles.

If soil containing PHCs at concentrations above the SQOs cannot be treated following multiple ETC treatment cycles, the soil will be stockpiled on site pending off-site transportation to a licensed disposal facility.

8.0 WASTE MANAGEMENT

No amended text required.

9.0 WATER MANAGEMENT

9.1 Water Supply

No amended text required.

9.2 Surface Water Discharge

9.2.1 Ponded Areas

As noted in the RAP Addendum 1, Site contact water suspected to have elevated contaminants of concern (CoC) concentrations (i.e., visible sheen) will be stored in temporary storage tanks (e.g., drums) prior to off-site disposal at a licensed facility. Deviating from the RAP Addendum 1, instead of using an on-site activated carbon treatment system for any instances where the quantity of surface water suspected to have elevated CoC concentrations exceeds that which can be drummed (e.g., during heavy rainfall events in the summer), this water will be evaporated using quench towers connected to the existing thermal oxidizers used in the ETC soil treatment process.

The quench towers consist of an open tower structure with three water injection ports arranged in a vertical sequence within the tower itself. Site contact water will be pumped from temporary holding ponds, through the quench tower feed, and into the injection ports. This water stream is then injected directly into the heated process exhaust, destroying potential residual PHCs in the water by combustion, with carbon dioxide (CO_2) and water vapour byproducts. Injecting the water into the quench tower in this manner allows the water to be evaporated during heat exchange inside of the quench tower, where any suspended solids drop out and remain on site for treatment in the ETC system. The water is ultimately recycled back into the regional water cycle as water vapour through this process. Estimated evaporative capacity of a quench tower system is expected to range between 10 to 20 cubic metres (m^3) of water per day for each tower. It is estimated that by

employing two quench towers at the Site, up to 40 m^3 of water may be evaporated per day. Figure 1 (Attachment 1) presents the site layout with the location of the two quench towers (Quench Tower 1 and Quench Tower 2). A flow diagram illustrating the process is presented in Figure A and an example quench tower in operation is presented in Photo A, below. Additional information from Iron Creek Group detailing the proposed system are provided in Attachment 2.

Contact water will be pumped to the settling ponds located in the bermed and lined water treatment area. Water with visible particulate matter will be filtered through a 200 micrometre (µm) and 100 µm filter bag housing unit. Following this initial sediment removal, water will be pumped to a holding pond located in the bermed and lined fuel storage area. A hydrocarbon sorbent boom will be placed on the water surface in the pond to adsorb any hydrocarbons present on the water surface. As needed, water will be pumped to either Quench Tower 1 or Quench Tower 2. During this process, a second 200 µm filter bag housing exists to capture any larger particles prior to evaporation. Quench Tower 1 and 2 are heated using waste heat from the ETC 1 and ETC 2 soil treatment heaters exhaust that is approximately 1000 to 1250 degrees Fahrenheit (540 to 680 degrees Celsius). The water is instantly vaporized and any volatile organic compounds (VOCs) that are present are converted into the byproducts of combustion (e.g., water vapour and CO_2). Contact water can be input to the quench system either in an “intermittent/on-demand” or “continuous flow” process, depending on the Site and water volume requirements. The quench feed and recirculation pumps will be shut down when there is no contact water to be handled at the Site.

The potential effects on aquatic resources arising from this treatment process may include:

- Accidental contact water releases that may reach nearby water bodies (prior to evaporation in the quench towers).
- Malfunctioning of the quench tower could potentially result in incomplete destruction of VOCs.

To address these potential effects, the following mitigation measures will be implemented:

- Regular maintenance and checks of the settling and holding ponds, and associated piping connections to the quench towers, will be undertaken to avoid preventable leaks.
- Settling and holding ponds and quench towers will be in bermed areas (Figure 1).
- Twice a day perimeter monitoring at site boundaries to detect VOC release to the atmosphere, in which case the system would be stopped and repaired. This monitoring will be completed using hand-held photoionization detectors during operational time at set points at the site boundary, in the predominant downwind direction from the thermal oxidizer exhaust.
- Continuous temperature monitoring of the thermal oxidizer to assure complete destruction of VOCs.

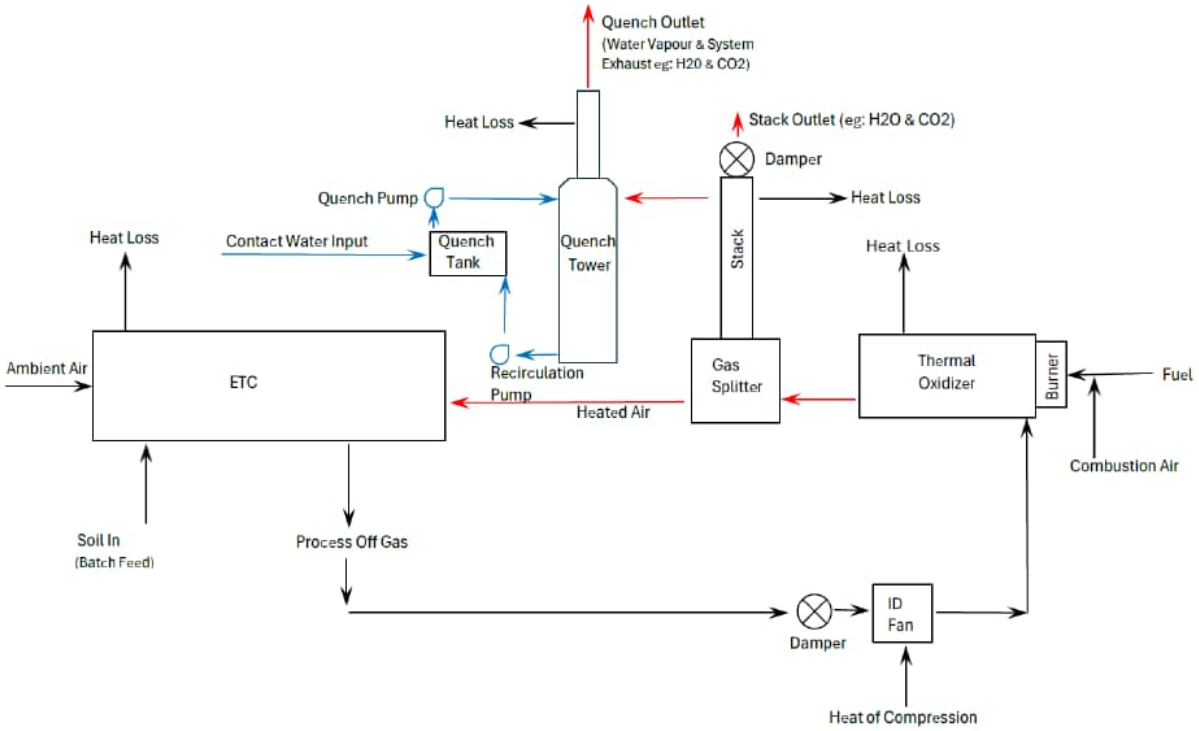


Figure A: ETC system with quench tower, contact water evaporation process flow diagram.

Photo A: Example quench tower in operation at an unrelated site.

9.3 GROUNDWATER

No amended text required.

10.0 BORROW SOURCES

No amended text required.

11.0 SCHEDULE

The proposed Project schedule is presented in Table N.

Table N: Updated Project Schedule

Project Activity	Estimated Time Frame
Engagement and consultation	Ongoing
Regulatory permitting	August 2023 to May 2024
Field program – Soil Remediation (summer/fall)	July to October 2024
Field program – Ice Road Construction	December 2024
Field program – Soil Remediation (winter)	December 2024 to April 2025
Field program – Soil Remediation (summer/fall)	June to September 2025
Demobilization	October 2025

12.0 REFERENCES

No amended text required.

CLOSURE

We trust the information provided herein meets your requirements. If you have any questions, please contact the undersigned or and Kyle Thompson (Senior Program Manager), 403-691-3174, kyle.thompson@shell.com at your convenience.

Yours truly,

WSP Canada Inc.

REGISTERED PROFESSIONAL ENGINEER
A.D. HACHKOWSKI
LICENSEE
07 July 2025
NT/NU

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Project Director
WSP Canada Inc.
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Attachments: Attachment 1: Figure
Attachment 2: Quench Tower Water Evaporation Process Summary

PERMIT TO PRACTICE
WSP Canada Inc.
Signature M. Jillian Mitro
Date 2025-07-07
PERMIT NUMBER: P407
NT/NU Association of Professional Engineers and Geoscientists

ATTACHMENT 1

Figures

LEGEND

- EXCAVATION LIMITS AS OF DECEMBER 15 TO 17, 2024 AND JANUARY 31, 2025 SURVEYING
- ABOVEGROUND WATER DISCHARGE LINE
- CUT LINE
- HIGH WATER LINE
- 30 m BUFFER FROM HIGH WATER LINE
- ROAD CENTERLINE
- SOIL PILE TOE LINE
- TRAIL EDGE LINE
- TREE/BUSH LINE
- UNDERGROUND PIPELINE
- SURVEILLANCE NETWORK MONITORING PROGRAM SAMPLING STATION
- AMBIENT AIR MONITORING LOCATION
- THERMISTOR LOCATION
- TOPOGRAPHIC LOW
- DISCHARGE POINT

NOTES

1. THE AS-BUILT DRAWING REFLECTS THE SITE CONDITIONS AT THE TIME THE SURVEY WAS COMPLETED AND IS NOT NECESSARILY REFLECTIVE OF THE CONDITIONS AT THE TIME OF DRAWING REVIEW.
2. EXCAVATION BOUNDARIES SHOWN ON DRAWING ARE THE DISTURBED PERIMETER SURVEYED FOLLOWING REMOVAL OF SOIL FOR TREATMENT AND BACK-SLOPING THE SIDE WALLS AT AN APPROXIMATE 1 (HORIZONTAL) TO 1 (VERTICAL) SLOPE.

REFERENCE

ORIGINAL DRAWING OBTAINED FROM GEOVERRA LIMITED PARTNERSHIP; FILE No.: 24-01717-001-SK-01-R0-AS-BUILT; SCALE: 1:400; DATE: JULY 17, JULY 23 AND JULY 24, 2024.

0 25 50
1:1,500 METRES

CLIENT
SHELL CANADA LIMITED

PROJECT
FORMER WEST CHANNEL STAGING SITE
INUVIALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES

TITLE
WEST CHANNEL 2025 SITE LAYOUT

CONSULTANT

YYYY-MM-DD	2025-05-28
DESIGNED	SVilleneuve
PREPARED	LMoraes
REVIEWED	JKrizan
APPROVED	JHyrich

PROJECT NO.	PHASE-TASK	REV.	FIGURE
CA0009291.9178	1800-2453	0	1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

0 25 mm

ATTACHMENT 2

Quench Tower Water Evaporation Process Summary

QUENCH TOWER WATER EVAPORATION PROCESS SUMMARY MAY 2025

SOIL REMEDIATION PROJECT WEST CHANNEL, NWT

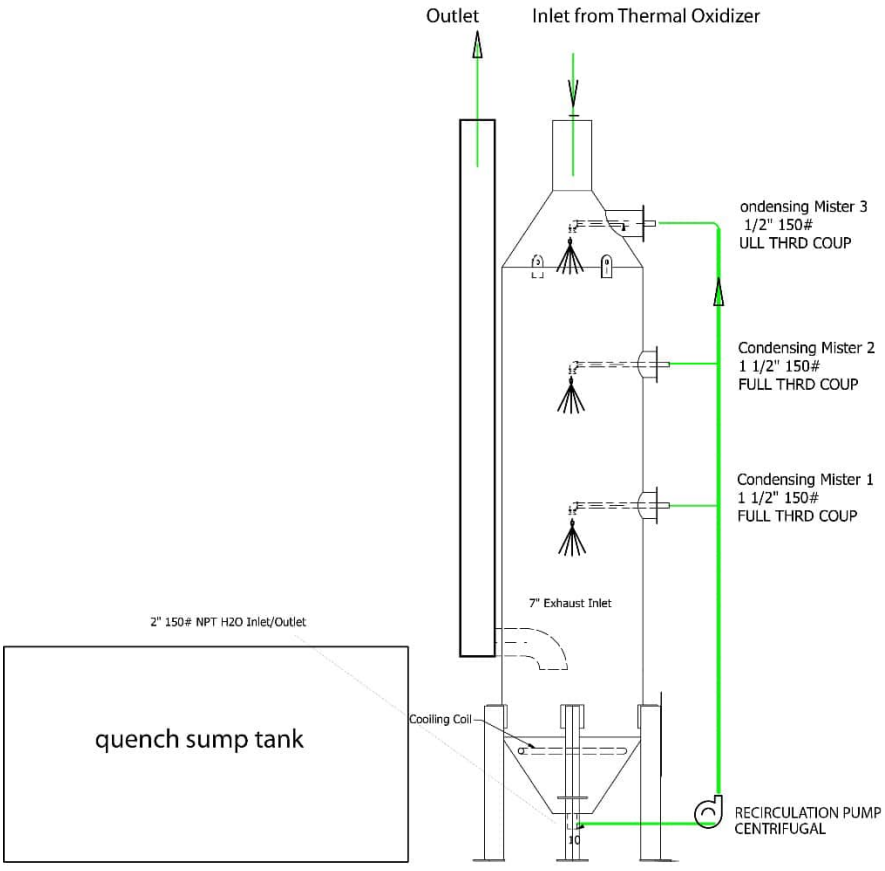
Prepared For:

Quench Tower Operational Overview

Iron Creek's quench towers provide an evaporative solution for site contact water collected during remedial operations. The quench towers consist of an open tower structure with three water injection ports arranged in a vertical sequence within the tower itself.

Water collected at the site can be pumped from the existing water collection and storage equipment through the quench tower feed and into the injection ports. This water stream is then injected directly into the heated process exhaust. Injecting the water into the quench tower in this fashion allows the water to be evaporated during heat exchange inside of the quench tower. The water is ultimately recycled back into the regional water cycle as water vapour through this process.

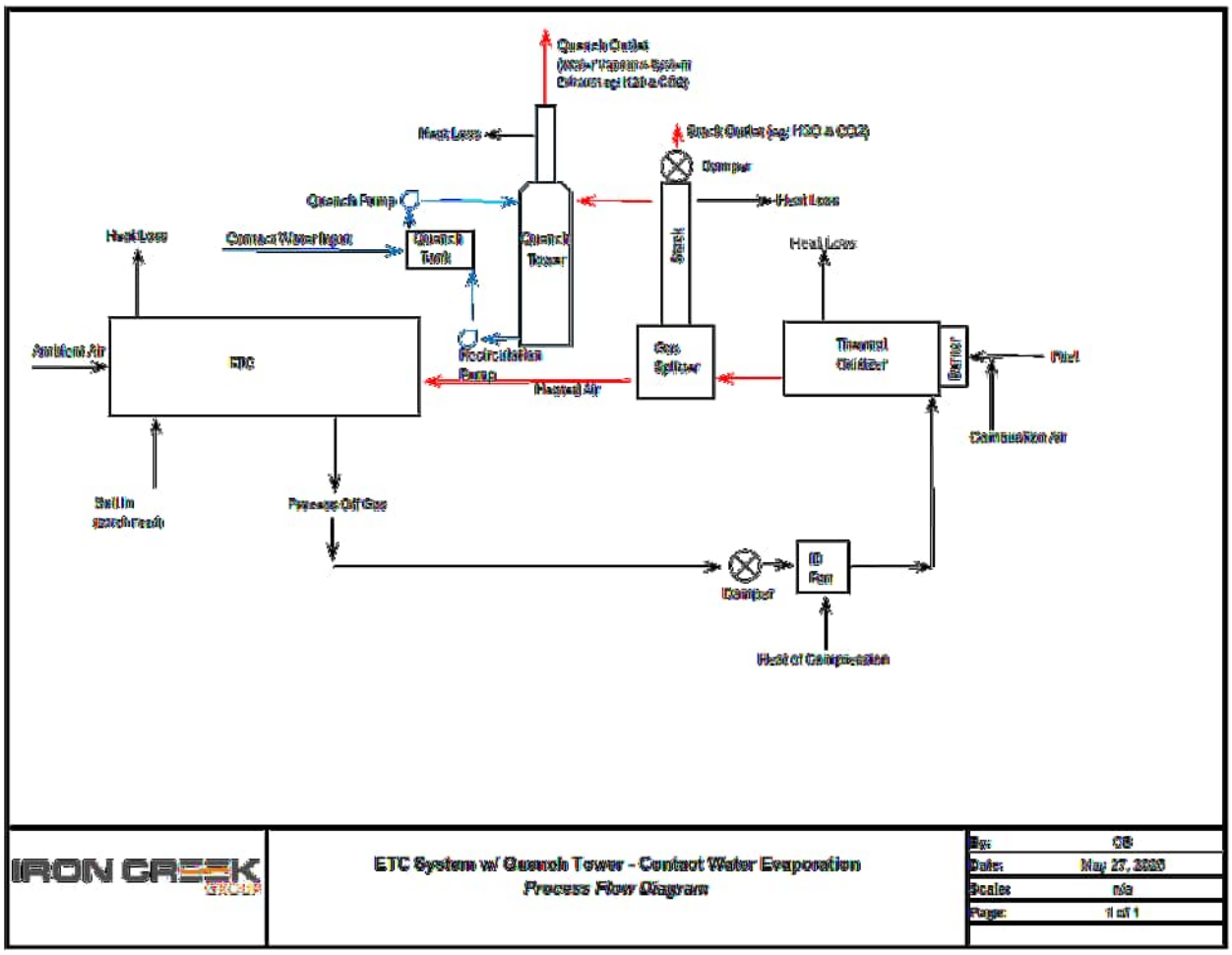
OVERVIEW OF QUENCH SYSTEM



The quench towers connect to the existing ETC thermal oxidizer equipment at the site and are able to evaporate water 24 hours per day during soil treatment operations. Estimated evaporative capacity of a quench tower system is expected to range between 10-20 m^3 H_2O/day for each tower.

Quench Tower Operational Procedures

- Install quench assembly into the ETC off gas exhaust stream, behind the thermal oxidizer in the process cycle;
- Move site contact water sequentially, through the various existing, onsite water management infrastructure to allow solids to settle prior to pumping into the quench units;
- Utilize quench pump and recirculation pump to circulate site contact water into the quench for evaporation via waste heat in the ETC process exhaust (1,000-1,250 ^{o}F) while the treatment systems are in operation;
- Contact water can be input to the quench system either in an “intermittent/on-demand” or “continuous flow” process, depending on the site and water volume requirements;
- The water is sprayed into the thermal oxidizer’s air stream where the water is instantly vaporized and VOC ’s are converted into water vapour and CO_2 (byproducts of combustion).
- Shut down quench feed and recirculation pumps when there is no contact water to be handled at site.



The photos included below provide a visual reference of how Iron Creek's quench towers look while operating:

Photo 1: A quench tower set up during Northern Canada Winter Operations

Photo 2: An operating ETC system with a quench tower connected to the process exhaust.

Photo 3: A quench tower in operation.