

Pine Point Mine Tailings Impoundment Contingency Manual

Effective Date: June 21, 2019

Revised Date: September 13, 2021

The Teck logo is located in the bottom right corner of the page. It consists of the word "Teck" in a bold, dark blue, sans-serif font. The background of the page features a large, dark blue geometric shape on the left side, which is a right-angled triangle with its hypotenuse on the right, pointing towards the bottom right corner.

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Revision No.	Date Created / Revised (yyyy-mmm-dd)	Revision(s) Made	Revised By
1	2018-May-28	Section 4.3 – Corrected Appendix references; Section 4.5 – added Wendy Bidwell contact information	Michelle Unger
2	2019-June-21	Overall reorganization, editing and updated to 2019 Teck document control template Section 3.1 – updated fuel storage, fueling practice and spill containment Section 4.0 – Included Schedule B from the Spill Contingency Planning and Reporting Regulations R-068-93 Section 4.5.2 – updated contact information Section 5.4 – Updated Inspector contact information	Barr & Michelle Unger
3	2020-May-5	Section 5.3.3 Flocculant section added Section 5.3.4 Previously labelled 5.3.3 renamed	D. Haggard N. MacDonald

Revision No.	Date Created / Revised (yyyy-mm-dd)	Revision(s) Made	Revised By
4	2021-June-21	<p>Section 1.0 – updated introduction to include the surface lease obtained in 2020, introduction of the mechanical evaporator system, and updated figures</p> <p>Section 2.1 – updated hydrocarbon information to account for storage of fuel in larger volumes than previously identified</p> <p>Section 2.3 – added section for coagulants and flocculants</p> <p>Section 3.1 – updated section of hydrocarbon storage and spill prevention</p> <p>Section 3.2 – updated section with removal of the maximum and alert water levels which have been replaced with water level quantitative perm</p> <p>Section 3.3 - added section for coagulants and flocculants</p> <p>Section 5.3.1 – updated to include a larger spill kit stationed at the fuel tank</p> <p>Section 5.3.3 – updated section for coagulants and flocculants to include a wider variety of products.</p>	Michelle Unger
5	2021-Sep-13	<p>Section 2.2 – updated to include comments 1 and 2 from the MVLWB on the Land Use permit amendment. This section was updated to describe how untreated water could be released if mechanical evaporator operational criteria are not maintained.</p> <p>Section 3.0 – updated to include comments 3 and 4 from the MVLWB on the land use permit amendment. This section was updated to describe operating conditions that would prevent overspray from the mechanical evaporator system.</p> <p>Section 5.3 – updated to include a situation specific response for a release scenario due to mechanical evaporators.</p>	Michelle Unger

AUTHORIZATION

Authorized By	Authorized Signature	Authorized Date
Michelle Unger, Manager, Environmental Performance		2021-Sep-17

1.0 Introduction and Site Description

The Teck Metals Ltd. (Teck) Pine Point Tailings Impoundment Area (TIA) is located approximately 50 km southwest of Fort Resolution, NT and approximately 75 km east of Hay River, NT (Figure 1.1). The TIA is associated with the former Pine Point lead-zinc mine that operated from 1964 to 1988. In 1996, the majority of the lands leased to Teck's predecessor, Cominco, were released back to the Government of Northwest Territories (GNWT). The remaining lease (#85B/16-9-9) at closure includes the north portion of the TIA and some surrounding area. In 2020, an additional surface lease was acquired (L-2000009) that incorporates the southern portion of the TIA for purposes of dyke inspection and maintenance and reclamation research and implementation (Figure 1.2).

The TIA is the area of approximately 640 ha that is bordered by the perimeter dikes and is located to the north of the former Pine Point mill site on terrain that slopes gently downward towards the northwest (Figure 1.2). The earthfill perimeter dyke system retains tailings and ponded water. The dyke system extends fully along the north and west sides of the TIA but is required along only a portion of the south and east sides. The TIA is covered with 10 to 20 cm of coarse sandy gravel overlaying the tailings. Typical native soil for the area is gravelly clay. No historic waste management locations are known.

Current activities at the facility are those associated with the "Active Closure Phase" of the TIA. The Active Closure Phase includes the active treatment of water that collects in the TIA according to Water Licence MV2017L2-0007 and Land Use Permit MV2019X0006. Surface water runoff from the tailings area is collected and treated onsite with lime to precipitate zinc before discharge to the environment. As a condition of the water licence renewal in 2018, research is currently underway at the facility to develop a final closure plan to transition the site to a Passive Closure Phase. In 2021, a Mechanical Evaporation system was proposed to be installed to supplement water treatment with lime in reducing water levels. The installation may occur in 2022 and has been included within this Manual. Current activities at the site are active water treatment from June to October (approximately) and intermittent research activities.

1.1 Environmental Policy

As part of Teck's Code of Sustainable Conduct, Teck implements "practices to ensure the safe operation and closure of tailings storage facilities" and promotes "the efficient and responsible use of energy, water and other resources throughout our business." This contingency manual was completed according to Teck's Code of Sustainable Conduct in that it outlines the practice for responding to spills and releases during the current phase of the facility.

1.2 Objectives

This contingency manual describes how Teck will prevent and respond to spills and releases during the current phase of the facility. The document was prepared in accordance with the GNWT Spill Contingency Planning and Reporting Regulations according to the *Environmental Protection Act* and according to the Guidelines for Spill Contingency Planning (INAC 2007). The objectives of this contingency manual are as follows:

- Identify the responsibilities of on-site and corporate personnel in the event of an emergency or spill;

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- Identify reporting requirements;
- Identify spill prevention practices;
- Facilitate the prompt, efficient and safe clean-up of spills; and
- Provide information on available resources, facilities and trained personnel in the event that a spill or an emergency occurs.

1.3 Company Name and Contact

Teck Metals Ltd. Bag 2000

Kimberley, BC

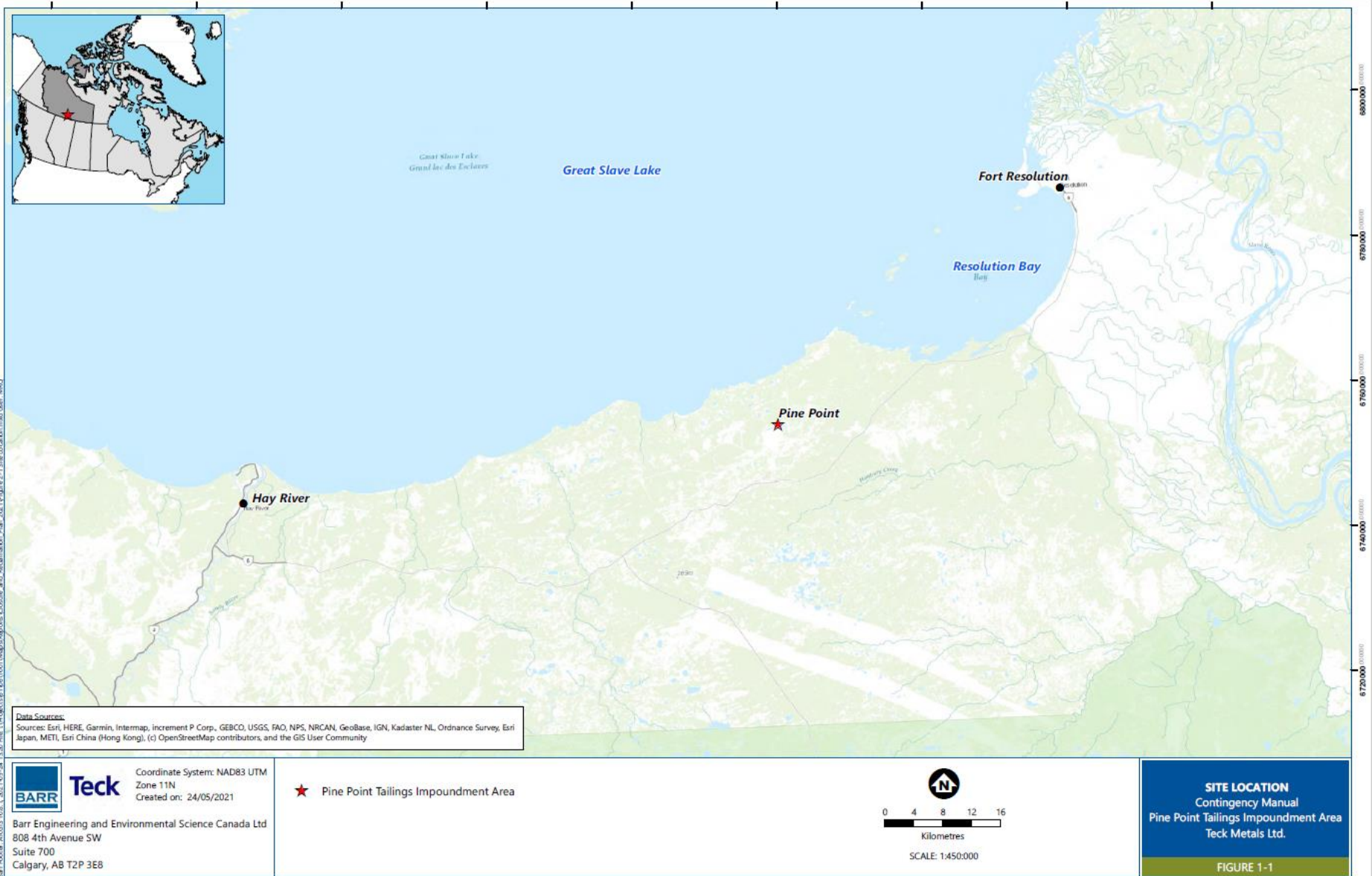
V1A 3E1

Contact: Michelle Unger, Manager Environmental Performance, Pine Point Site Manager

Pine Point Coordinates (associated with decant area at TIA):

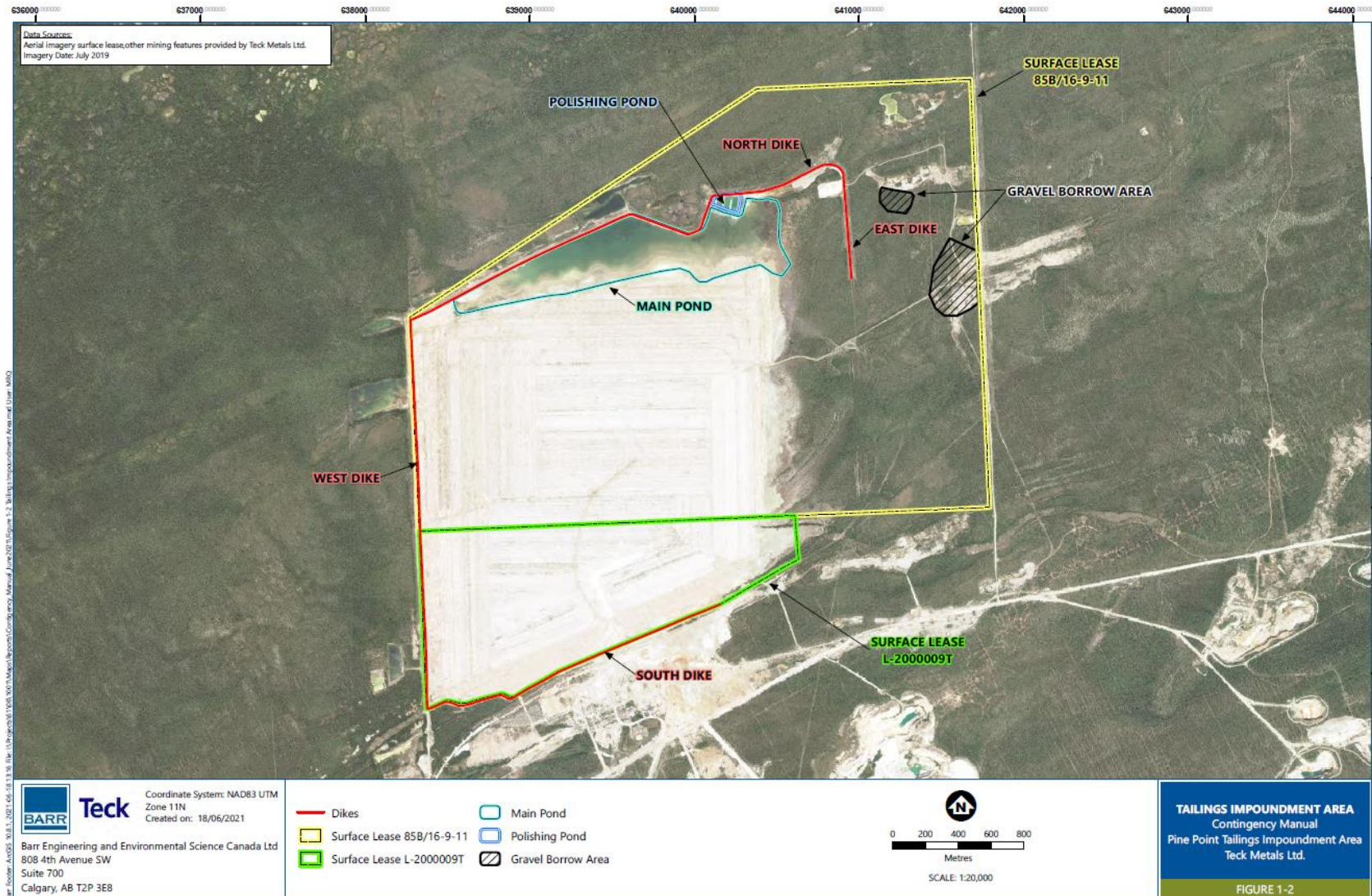
60°53'41.3"N 114°25'30.7"W

Figure 1.1 – General Location



Barr Footer: AEGIS 508.1, 2021-05-24, 15:30: Bldg: V:\Projects\1615\1001_Maps\Reports\Outline_and_Summary\Map_20210524\Fig_2-1_Site_Location.mxd User: MBG

Figure 1.2 – Tailings Impoundment Area



2.0 Potential Release Scenarios

Potential release scenarios include hydrocarbons used during water treatment and ancillary work activities, and the impounded (untreated) water and stored tailings

2.1 Hydrocarbons

The TIA is currently in Active Closure Phase. As such, the water treatment equipment and staff are present at the TIA for only the limited period when water treatment is occurring. Water treatment currently occurs for 5 to 16 weeks during June to October each year. Each year, prior to water treatment commencing, equipment and supplies used in water treatment such as pumps, generators, lime, and trailers are brought to site. Gasoline and diesel are used to power various on-site equipment. Gasoline is stored in a 450 L Tidy Tank, which is truck-mounted. Diesel and gasoline, in 20 L jerry cans, are stored within a secondary container that holds the full volume (up to 80 L) of the jerry cans.

The Mechanical Evaporator system is operated using a 680-kW generator set that is diesel powered. Diesel is stored in a 7600 L (2000 gallon) aboveground storage tank. Installation and operation of the aboveground storage tank will adhere to the Environmental Code of Practice of Aboveground and Underground storage Tank Systems Containing Petroleum and Allied Petroleum Products (PN1326) (CCME 2003) including but not limited to the following:

- Leak detection devices
- Overfill protection devices
- Secondary containment for 110% of the contents (double-walled tank)
- Secondary containment at fuel line connections between fuel tank and generator set
- Visual inspections

The fuel tank and generator set will be located greater than 100m from the “Ordinary High-Water Mark of any Watercourse” according to conditions of the Land Use Permit. In addition, the fuel tank and generator set will be secured to prevent possible tampering, safety risks, or fuel theft, which could also result in fuel releases.

In addition to water treatment, research activities are conducted on site by a limited number of people. Typically, the research team is composed of two to four people for two to three week periods, approximately three to four periods per year. Research activities may require one or two gasoline and diesel storage tanks that are truck mounted or in jerry cans for fueling equipment.

A limited number of vehicles are present at the TIA at any given period. During the water treatment period, one light truck is on-site. During research activities two light trucks may be present. Occasionally, heavier equipment may be needed, such as excavators, rock trucks and drill rigs for short durations to support ad hoc site activities.

Hydrocarbons may be released to the environment during refueling, drips and leaks from equipment, and catastrophic failure of tidy tanks or jerry cans. Release response is included in Section 5.0.

2.2 Untreated Water and Tailings

The main pond at the TIA impounds water that runs off the TIA and water directed to the main pond from drainage ditches on the east side of the TIA. A dyke partially surrounds the TIA to contain tailings and water, and prevents the uncontrolled release to the surrounding environment. The surrounding environment includes wetland (resulting from beaver activity) and former borrow pits that contain water.

Untreated water from the main pond may be released to the adjacent environment if water levels are excessively high and adequate freeboard to maintain dyke stability cannot be maintained. Such a scenario may occur in the spring during high snow melt conditions and/or heavier than normal, recurring precipitation events.

Water and tailings may also be released if a catastrophic dyke breach were to occur as a result of significant erosion or a seismic event. Erosion could occur due to wave action on the face of the dykes or from heavy precipitation. If erosion were to become extreme, the potential to weaken the dyke to the point of failure is possible. Seismic events, such as an earthquake are rare in the NWT. However, seismic events could cause structural damage to the dam.

Untreated water may be released if mechanical evaporators over-spray during a high wind event when winds are from the south. Typical windspeeds for the Pine Point TIA are less than 6 metres per second (m/s) (about 22 km/h). With a tail wind speed of 6 m/s, the evaporator spray will travel a maximum distance of 300 m based on manufacturer specifications. The evaporators will be positioned so that spray is maintained within 300 m and therefore, would not spray beyond the dyke.

2.3 Coagulants and Flocculants

Coagulants and/or flocculants may be used to improve water treatment effectiveness. Currently, this is limited to use of flocculant blocks and has shown some effectiveness in reducing suspended solid concentrations. Additional products are currently being trialed for potential use. Selected product(s) will be diluted to specified concentrations and deployed at the inlet culvert. The most likely cause of an accidental spill will be from human error during product loading, which may cause a spill in the immediate vicinity of the treatment area. However, the intended substances will generally be used in small volumes and there are no natural waterbodies present in the area of intended use. In the event of a spill to the treatment pond, the outlet siphons could be quickly closed well ahead of the presence of excess substance at the point of discharge due to the multi-day retention time of the pond. Product will be stored according to manufacturer recommendations.

3.0 Release Prevention

Prevention is the best mitigation for spill events. Teck employs several best practices to prevent the release of contamination to the surrounding environment.

3.1 Hydrocarbon Storage and Fueling

Hydrocarbon spills are prevented by using proper storage and fueling procedures. All fuel storage tanks include secondary containment. All fuel powered generators and hydrocarbon waste containers are equipped with secondary or emergency spill containment (e.g., collapsible containment berm, double-walled tank). Fuel storage and hydrocarbon waste bins are inspected regularly to identify damage to bins (e.g., holes) and to look for possible leaks.

Fuelling only occurs if spill containment is in place. Spill containment may include use of a drip pan or similar device to catch potential spills while fueling. Potential leaks at the fuel line connection for the 680-kW generator will be collected in an impermeable drip pan or similar device. In addition, the main gasoline tank used to fuel on-site equipment and generators, and the diesel tank used for the 680-kW generator each have an electric pump that is equipped with an automatic shut off.

3.2 Untreated Water and Tailings

The main pond level is monitored in the spring, summer and fall to confirm that the level is at or below the normal operational water level. If the water level is at or above the normal operational water level, the Site Manager is informed and the water is treated and released as early as practical. Note that interim water level quantitative performance objectives (QPOs) were developed for freshet in 2021. Additional analyses are planned to confirm and expand the QPOs for water management for 2022 and beyond, with update of the OMS manual by end of 2021. Water treatment stops when the water level approaches 200.0 m. The Pine Point Tailings Impoundment Area Operation, Maintenance, and Surveillance (OMS) Manual (Teck, 2020) recommends that the water level in the pond be maintained at or below the normal operational water level to prevent waves during high wind events from overtopping and eroding the dyke crests.

The mechanical evaporator system includes an on-board meteorological station that measures wind direction, wind speed, temperature and relative humidity and has an angle (trajectory) adjustment feature. The evaporator system will be programmed such that with the current wind direction and speed, the spray will not travel more than 300 m. If the measured wind speed is greater than 6 m/s from the south (behind the evaporator), then the system will be shut down until acceptable wind conditions return. The system will also shut down when temperatures are below freezing and when relative humidity is greater than 80% so that evaporators will not run when conditions are not favourable for optimal evaporation. If the system shuts down because one or more of the above conditions occur, the system will return to operation only when all of the above conditions are present for 30 minutes. If the meteorological station is not functioning, then the evaporators will also not operate.

The tailing dykes that partially surround the TIA are inspected three times a year (spring, summer and fall) in compliance with the water licence. A qualified geotechnical engineer conducts at least one of the three inspections annually. During the inspections, all signs of erosion are noted and evaluated for significance. If significant erosion is noted when a geotechnical engineer is not present, the observation is reported to the Site Manager who in turn will contact the geotechnical consultant to conduct a formal inspection. Significant erosion observations and full or partial dyke failures are reported to the Site Manager immediately for prompt repair.

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The Site Manager is notified by the federal government if there is an earthquake within 100 kilometres that is characterized as a magnitude 5.0 or greater on the Richter scale. The Site Manager will immediately contact a geotechnical engineer to undertake a dyke inspection. If a geotechnical engineer is not readily available, then a person with geotechnical experience will conduct a preliminary inspection of the dyke. Recommendations from the geotechnical engineer would be acted upon in a timely manner.

Refer to the Pine Point Tailings Impoundment Area OMS Manual (Teck, 2020) for additional information regarding the safe operation, routine and event driven maintenance, and monitoring programs for the facility.

3.3 Coagulants and Flocculants

Coagulants and/or flocculants will be stored according to manufacturer recommendations, including double-walled containers (or secondary containment) composed of compatible materials. The products will be stored at least 150 m from any downstream environment. Product will be handled according to manufacturer direction. Off-loading of material will occur only as needed with appropriate precautions by trained individuals.

4.0 Reportable Spills

A reportable spill is defined in Schedule B of the NWT Spill Contingency Planning and Reporting Regulations (NWT Reg. 068-93), pursuant to the *Environment Protection Act*. Schedule B has been reproduced in Table 1 below. Release limits for all substances are provided below even though the majority of these substances are not anticipated on site.

Table 4.1: Reportable Quantities of Released Materials (Schedule B from the Spill Contingency Planning and Reporting Regulations)

Transportation of Dangerous Goods Act – Class Designation	Description of Contaminant	Reportable Release Limit
1	Explosives	Any amount
2.1	Compressed gas (flammable)	Any amount of gas from containers with a capacity greater than 100 L
2.2	Compressed gas (non-Corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 L
2.3	Compressed gas (toxic)	Any amount
2.4	Compressed gas (corrosive)	Any amount
3.1, 3.2, 3.3	Flammable liquid	100 L
4.1	Flammable solid	25 kg
4.2	Spontaneously combustible solid	25 kg
4.3	Water reactant solids	25 kg
5.1	Oxidizing substances	50 L or 50 kg
5.2	Organic peroxides	1 L or 1 kg
6.1	Poisonous substances	5 L or 5 kg
6.2	Infectious substances	Any amount
7	Radioactive	Any amount
8	Corrosive substances	5 L or 5 kg
9.1 (in part)	Miscellaneous products or substances excluding PCB mixtures	50 L or 50 kg

Transportation of Dangerous Goods Act – Class Designation	Description of Contaminant	Reportable Release Limit
9.2	Environmentally hazardous	1 L or 1 kg
9.3	Dangerous wastes	5 L or 5 kg
9.1 (in part)	PCB mixtures of 5 or more parts per million	0.5 L or 0.5 kg
None	Other contaminants	100 L or 100 kg

5.0 Release Response Action Plan

The Pine Point TIA has a site-specific Emergency Response Plan (PP-ERP-002) which includes emergency response procedures and action plans for known and potential hazards specific to work at the site including spills. Training is carried out annually, or more frequently if required by the nature of the threat or local regulations, for everyone with a named responsibility, including those nominated as alternates.

5.1 Role Definition

First Responder: The first responder is the person who has witnessed a spill occur or who has observed evidence of a spill (e.g., a stain observed on soil). The Pine Point TIA has water treatment staff present for a limited period each year. Depending on the amount of precipitation and therefore the amount of water that collects in the main pond, water treatment may occur for a duration of 5 to 16 weeks. The water treatment period occurs any time between June and October. At other times, environmental consultants or engineers may be on site conducting inspections, maintenance or other activities to support the operation of the TIA or to collect data for the reclamation closure plan. Therefore, the first responder could be anyone who first witnesses a release.

Site Manager: The Site Manager is located at Teck's office in Kimberley, B.C. The Site Manager is responsible for the initial regulatory report, regulatory liaison, remediation procedures and regulatory reporting (i.e., completion of follow-up reports as required). If considered necessary, the Site Manager will also coordinate an investigation.

Teck Legacy Seepage Collection Monitors (24-hour monitor): The Seepage Collection Monitors are based at Teck's office in Kimberley, B.C. The Seepage Collection Monitors provide 24-hour on-call service and are able to assist with contacting an alternate person in the case the Site Manager is unavailable.

5.2 Identification of a Release

The first responder may observe the occurrence of a release or may observe evidence of a release after the occurrence (e.g., soil stain). If the situation is unsafe, the first responder must evacuate the area and block access to the site by all non-emergency personnel. Emergency response personnel must be contacted and then notify the Site Manager. The satellite phone is located at the water treatment plant when water treatment operations are underway. If water treatment is not occurring, then contractors are must have a means of contacting emergency personnel (e.g., satellite phone or messaging system).

If safe to do so, the first responder should stop the source and contain the spill using absorbent pads and berm the area, if possible, to prevent migration of the product and prevent a released product from entering waterways. The First Responder must begin to complete the Teck Event Reporting Report Form (TLP-SP-043) and in doing so, identify the product that was released, estimated volume, expected or known cause for the spill, assess the level of containment, and potential for harm to the environment and human health. Contact the Site Manager to report the release. The Site Manager will review the spill release information and the reportable spill volumes (Table 1) to determine whether the spill is reportable to the NWT 24-Hour Spill Report Line. If deemed reportable, the Site Manager will phone 1-867-920-8130.

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Releases of a substance into the environment that may cause, is causing or has caused an adverse effect to the environment, human health or safety, or property must be reported immediately regardless of the volume. If a release of any substance (liquid, solid or gas) does not trigger external spill or non-compliance reporting, then an internal spill reporting form must be filled out for all spills regardless of volume.

The Site Manager will complete and submit the NWT Spill Report Form (see Appendix A for the complete form):

- Date and time of spill
- Location of spill
- Contractor involved.
- Type of contaminant spilled and quantity spilled.
- Cause of spill.
- Whether spill is continuing or has stopped.
- Description of existing containment.
- Action taken to contain, recover, clean up and dispose of spilled contaminant.
- Name, address and phone number of person reporting spill.

The Site Manager and First Responder must collaborate to determine the best approach for spill clean-up and documentation for the event.

5.3 Situation-Specific Response

5.3.1 Hydrocarbon Release

For a hydrocarbon spill involving gasoline (a flammable liquid), all ignition sources must be turned off immediately. Once safe to do so, all hydrocarbon releases must be contained. A spill kit containing a 45-gallon kit with absorbent booms and sheets is available at the water treatment plant site during seasonal operations. All personnel responsible for refueling equipment will have smaller spill kit in the vehicle. Small spill kits contain absorbent pads, granular absorbent material, a trowel, heavy plastic bags or a pail for containment of contaminated materials (e.g., absorbent materials and soil), gloves and safety goggles.

A larger spill kit will be stationed near the aboveground storage tank that supports the mechanical evaporator system. The spill kit will include absorbent pads, pillows and socks to contain and recover spilled fuel promptly, a shovel to collect contaminated material and a leak proof container appropriate for hydrocarbon contaminated materials.

For hydrocarbon spills to soil, all free product and contaminated soil must be dug up and disposed of in properly labeled containers available on-site and dedicated for hydrocarbon wastes. If the spill is small, the First Responder is expected to do this immediately with the tools available on site. For a large spill, the hydrocarbon spill must be contained to the extent possible using absorbent materials and building a berm around the area. Contractors from Fort Resolution or Hay River must be contacted promptly for completion of the spill remediation (Table 2).

Table 5.1: Service Providers for Spill Response Services

Contractor	Phone Number	Services Provided
Carter Industries	(867) 874-6574	Specialized in earthworks Located in Hay River
Rowe's Construction	(867) 874-3243	Specialized in equipment rentals Located in Hay River
Hay River Disposals	(867) 874-2720	Specialized in vacuum trucks Located in Hay River

If a hydrocarbon spill to the main pond or the polishing pond occurs, the syphons would be immediately shut off to prevent discharge to the downstream drainage to allow for clean-up. Any spill into open water would be surrounded with a containment boom and collected using a vacuum truck.

All contaminated material will be disposed of at a licensed facility and according to procedures identified in the Waste Management Plan (PP-EP-003).

5.3.2 Untreated Water and Tailings

In the event of a dyke breach, barriers will be placed (e.g., rock or earthen berm) or constructed to prevent further migration of tailings and dyke material as soon as it is safe to do so using available equipment on site and those procured from Fort Resolution or Hay River (Table 2). Tailings and dyke material will be collected and returned to the TIA.

If over-spray from the evaporators is observed (i.e., automated shut-down controls malfunction), the first responder should contact the site manager immediately at the emergency contact number posted at the facility. The site manager will coordinate a response to the tailings impoundment area to shut down the evaporators. The responder will confirm malfunctioning of the system and shut down mechanical evaporator system. A detailed investigation will be completed to determine why the automated shut-down controls malfunctioned before the system is restarted.

5.3.3 Coagulants and Flocculants

Coagulant and flocculant products may be used at Pine Point and may be in solid or liquid form. It is important that any stored or unused products be properly contained, unexposed to precipitation and not in any location that may come in contact with water. Products are toxic to aquatic life and therefore pose a risk if overused or handled in an uncontrolled manner. Coagulant or flocculant products that are spilled and subsequently deemed unusable are to be placed into secondary containment along with any associated contaminated soil, removed from site and disposed of as hazardous waste. Temporary, portable secondary containments are readily available on site and can be quickly mobilized for this need.

5.3.4 Other Substances

If additional hazardous substances are brought to the Pine Point TIA, the personnel bringing the substance to the site is required to notify the Site Manager and confirm that the appropriate response

equipment is available by confirming with the Site Manager or must bring the appropriate spill response equipment.

All spills will be cleaned up and contaminated materials will be disposed of at a licensed facility.

5.4 Release Response Personnel Contact Information

Contact information for GNWT and Teck personnel responsible for release reporting are presented in Table 3.

Table 5.2: Contact Details for Site Manager and Alternate

Contact	Phone	Cell Phone
NWT 24-Hour Spill Report Line	(867) 920-8130	NA
Teck Site Manager and Alternate		
Michelle Unger	(250) 427-8422	(250) 432-5264
Kathleen Willman	(250) 427-8401	(250) 432-9563
Teck Legacy Seepage Collection Monitor (24-hour monitor)	(250) 427-9700	NA
Additional GNWT Contacts		
Manager, Resource Management Officer	(867) 872-2558	NA
Water Resources Officer	(867) 872-6421	NA
Environment and Climate Change Canada		
ECCC Environmental Enforcement	(867) 669-4730	NA

As stated previously, all reportable spills must be reported to the NWT 24-hour Spill Report Line by the Teck Site Manager. Instructions for follow-up reporting will be provided by the Spill Report Line receiver when the spill is initially reported. Follow-up may include involvement from other GNWT agencies as listed in Table 3 or others. The Teck Site Manager may also contact the Manager, Resource Management Officer or Water Resources Officer as applicable.

The ECCC Environmental Enforcement office can provide information relating to environmental enforcement and reporting requirements under the *Canadian Environmental Protection Act* and the *Fisheries Act* if required. However, in most cases ECCC would be contacted by the lead agency as required. A lead agency is the government authority that regulates or has authority over the activity from which the emergency originated.

5.4.1 External Technical Advice

The Canadian Transport Emergency Center (CANUTEC), a branch of Transport Canada, can also be contacted for 24-hour technical advice on Dangerous Goods, as needed. The Dangerous Goods Initial Emergency Response Guide (CANUTEC 2016) can also be referenced for response information. The CANUTEC help line for dangerous goods is 1-888-226-8832 or 613-996-6666.

5.5 Spill Incident Investigation

Upon resolution and completion of cleanup of a spill, an incident investigation must be conducted. The objective of the Investigation is to prevent a reoccurrence of an incident. The investigation will be coordinated by the Site Manager and may involve additional personnel depending on the nature of the incident and the investigator's technical or operational experience. Teck applies the Incident Cause Analysis Method (ICAM) investigation process. ICAM identifies systemic health, safety, or environmental deficiencies by providing a set of tools to examine the contributing factors that lead to incidents.

6.0 Training

All Teck employees and Contractors working at the Pine Point TIA should be familiar with this document. New employees and contractors will be introduced to the plan as part of their orientation. The orientation will include an overview of the potentially hazardous situations that spills can create to the health and safety of workers and the environment, and worker responsibilities to prevent, identify, report, and respond to a spill, including training on the use of spill kits. This document will be available for all workers. The company will advise workers of revisions or changes to the plan.

All Teck employees and Contractors must provide Safety Data Sheets (SDS) for all products that are used on-site or must be aware of where SDS are stored. For products used during water treatment operations, the SDS are included within the Water Treatment Manual (PP-EP-001). All personnel must be aware of the contents of the SDS prior to working with products. Teck employees and contractors are trained in Workplace Hazardous Materials Information System (WHMIS) and Transportation of Dangerous Goods (TDG) prior to doing work on site.

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- Teck Metals Ltd. (Teck). 2021. Waste Management Plan PP-EP-003.
- Teck Metals Ltd. (Teck). 2021. Pine Point Emergency Response Plan PP-ERP-002.

APPENDIX A

NWT Spill Report Form

NWT Spill Report available at: https://www.enr.gov.nt.ca/sites/enr/files/128-spill_report_form_e_fillable_1.pdf

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS



NT-NU 24-HOUR SPILL REPORT LINE

Tel: (867) 920-8130 • Fax: (867) 873-6924 • Email: spills@gov.nt.ca

REPORT LINE USE ONLY

A	Report Date: MM DD YY	Report Time:	<input type="checkbox"/> Original Spill Report		Report Number:
	Occurrence Date: MM DD YY	Occurrence Time:	OR <input type="checkbox"/> Update # _____ to the Original Spill Report		
C	Land Use Permit Number (if applicable):		Water Licence Number (if applicable):		
D	Geographic Place Name or Distance and Direction from the Named Location:			Region: <input type="checkbox"/> NT <input type="checkbox"/> Nunavut <input type="checkbox"/> Adjacent Jurisdiction or Ocean	
E	Latitude: _____ Degrees _____ Minutes _____ Seconds		Longitude: _____ Degrees _____ Minutes _____ Seconds		
F	Responsible Party or Vessel Name:		Responsible Party Address or Office Location:		
G	Any Contractor Involved:		Contractor Address or Office Location:		
H	Product Spilled: <input type="checkbox"/> Potential Spill	Quantity in Litres, Kilograms or Cubic Metres:	U.N. Number:		
I	Spill Source:	Spill Cause:	Area of Contamination in Square Metres:		
J	Factors Affecting Spill or Recovery:	Describe Any Assistance Required:	Hazards to Persons, Property or Environment:		
K	Additional Information, Comments, Actions Proposed or Taken to Contain, Recover or Dispose of Spilled Product and Contaminated Materials:				
L	Reported to Spill Line by:	Position:	Employer:	Location Calling From:	Telephone:
M	Any Alternate Contact:	Position:	Employer:	Alternate Contact Location:	Alternate Telephone:

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: <input type="checkbox"/> EC <input type="checkbox"/> CCG/TCMSS <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA		Significance: <input type="checkbox"/> Minor <input type="checkbox"/> Major <input type="checkbox"/> Unknown		File Status: <input type="checkbox"/> Open <input type="checkbox"/> Closed	
<input type="checkbox"/> AANDC <input type="checkbox"/> NEB <input type="checkbox"/> Other: _____					
Agency:	Contact Name:	Contact Time:	Remarks:		
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					