

## **Appendix B**

### **Effluent Quality Emergency Responses Plan**

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# **Effluent Quality Emergency Response Plan**

Flin Flon Tailings Impoundment System  
Trout Mine Water Treatment Plant  
Anderson Tailings Impoundment Area  
Chisel Water Treatment Plant  
Birch Lake Tailings Disposal Area

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### Table of Acronyms and Abbreviations

AND	Anderson Lake Discharge
ATIA	Anderson Tailings Impoundment Area
BGC	BGC Engineering Inc.
BLTDF	Birch Lake Tailings Disposal Facility
CDA	Canadian Dam Association
CHTPE	Chisel Treatment Plant Effluent
EAP	Emergency Action Plan
ECCC	Environment and Climate Change Canada
ENV [-]	<b>Environmental Control</b> Department
<b>GE&amp;T</b>	<b>GeoEngineering and Tailings Department</b>
EOR	Engineer of Record
ERP	Emergency Response Plan
FDP	Final Discharge Point
FFTIS	Flin Flon Tailings Impoundment Area
Hudbay	Hudbay Minerals Inc.
MB	Manitoba
MBU	Manitoba Business Unit
MDMER	Mining and Diamond Mining Effluent Regulation
NW	North Weir
OMS	Operation, Maintenance and Surveillance
PR	Provincial Road
RACI	Responsible, Accountable, Consulted, Informed
RP	Responsible Person
TLSS	Trout Lake Surface Sump
WTP	Water Treatment Plant

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## EMERGENCY RESPONSE PLAN

### 1.0 Introduction

This is the Emergency Response Plan (ERP) for effluent quality events at any Hudbay water treatment facility, and covers:

- Quick reference flowcharts, responsibility matrix, and contact list (Section 2.0).
- What could lead to an emergency (Section 3.0).
- What to do during an emergency (Section 4.0).
- How to maintain this Plan (Section 5.0).
- Supporting documents, maps, and event log template (Section 6.0 and appendices).

The purpose of this Emergency Response Plan (ERP) is to reduce the risk of impact to the environment during an unusual event or emergency that may result in an unauthorized deposit under the *Metal and Diamond Mining Effluent Regulations (MDMER)* **or applicable provincial license** at any Hudbay final discharge point (FDP). An unauthorized deposit is defined as any deposit of mining effluent to a fish bearing water body that does not meet the requirements of Schedule 4, the pH is outside of a 6.0 to 9.5 range, or the effluent is acutely lethal **in addition to applicable provincial license requirements**. Hudbay water treatment facilities, general area, and associated [-] FDPs are listed in Table 1-1 below.

It is important to note that this ERP is to be used alongside the Operation, Maintenance, and Surveillance (OMS) Manual for each facility, as available. Any effluent quality emergency may be elevated by dam stability concerns to engage the facility Emergency Action Plan (EAP) as outlined in Table 1-1.

**Table 1-1. Hudbay Water Treatment Facilities, MDMER Final Discharge Points, and Facility EAPs**

Water Treatment Facility	MDMER Final Discharge Point	Facility EAP
<b>FLIN FLON AREA</b>		
Flin Flon Tailings Impoundment System (FFTIS)	North Weir (NW) <b>North Weir Dam (NWD) Seep</b>	ENP-210: FFTIS EAP
Trout Mine Water Treatment Plant (WTP)	Trout Lake Surface Sump (TLSS)	Not required, therefore not available.
<b>SNOW LAKE AREA</b>		
Anderson Tailings Impoundment Area (ATIA)	Anderson Lake Discharge (AND)	ENP-110: ATIA EAP
Chisel Water Treatment Plant (WTP)	Chisel Treatment Plant Effluent (CHTPE)	Not required, therefore not available.
Birch Lake Tailings Disposal Facility (BLTDF)	<ul style="list-style-type: none"> <li>• Birch Lake Outlet Embankment Discharge Point 1 (SWM03)</li> <li>• Birch Lake Outlet Embankment Seep West (SWM02)</li> <li>• Birch Lake Outlet Embankment Seep East (SWM10)</li> <li>• Canada Creek Cutout Embankment Seep (SWM07)</li> </ul>	ENP-007 BLTDF EAP

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## **2.0 At-a-Glance**

**This section is intended as quick reference for users of this plan, summarized on**

Figure 2-1, during effluent quality emergencies at a Highbay water treatment facility.

Notification flowcharts with checklists for key roles in effluent quality emergency scenarios are given in:

- Figure 2- for Level 1 emergencies, characterized by abnormal conditions that do not affect routine operations. The intent of the response is to monitor and understand the conditions.

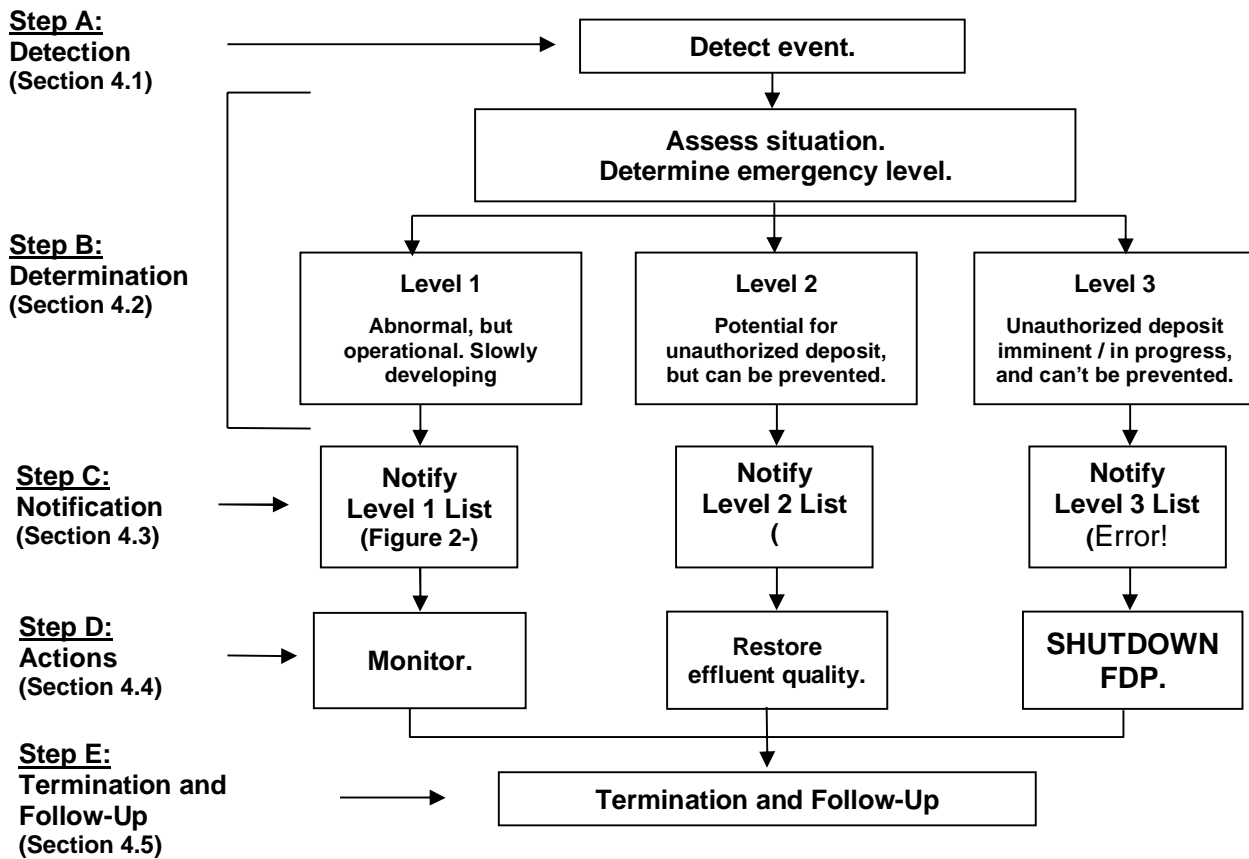
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- Figure 2-3 for Level 2 emergencies, characterized by a potential unauthorized deposit which can still be prevented. The intent of the response is to restore effluent quality.
- **Error! Reference source not found.** for Level 3 emergencies, characterized by imminent or in-progress unauthorized deposit which cannot be prevented. The intent of the response is to stop or control the unauthorized deposit.

Responsibility assignment for key roles is shown in Table 2-1. Current contact details are given in ENO-689 MBU Dams & Tailings Facilities Contact List, which should be used in conjunction with this plan. Available equipment and locations for Flin Flon and Snow Lake areas are provided in Table 2-2.

**Figure 2-1. Emergency Response Plan (ERP) flowchart.**

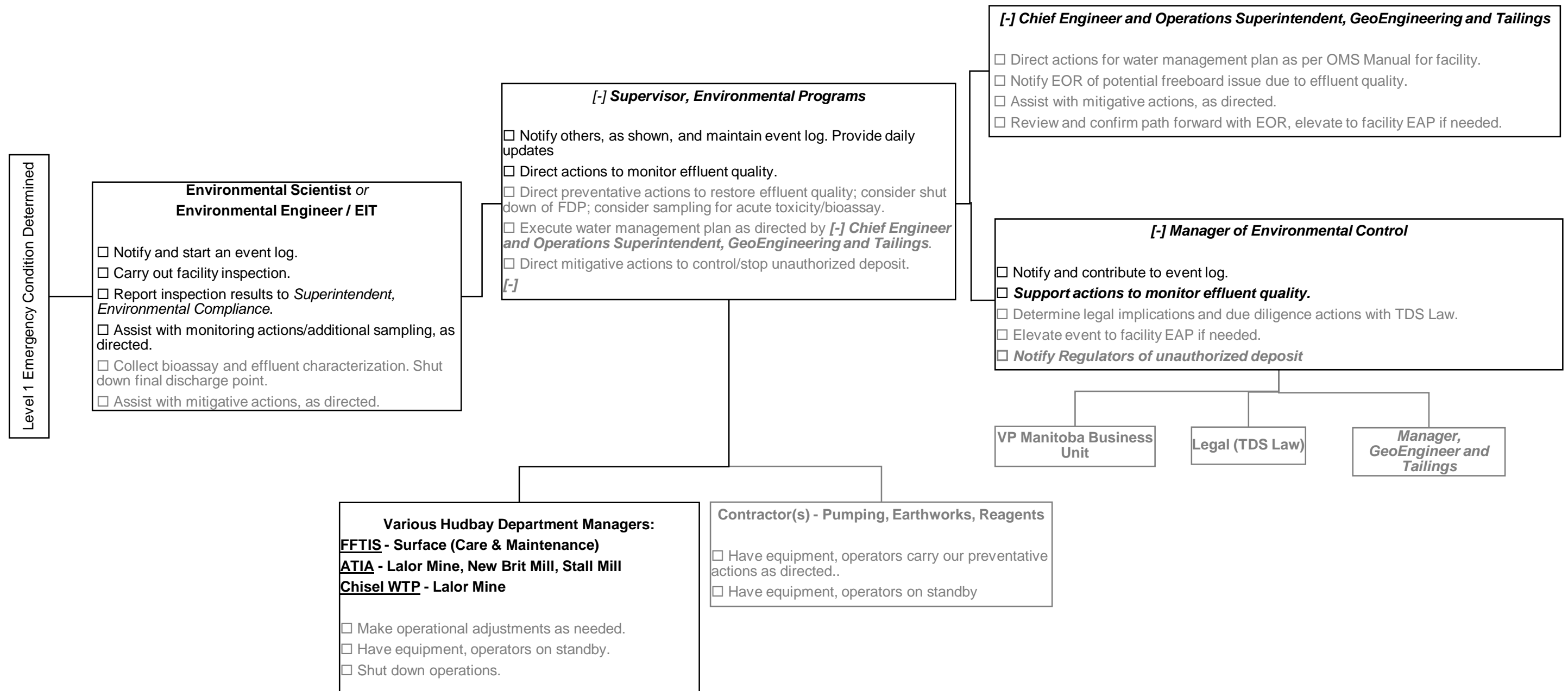


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**Figure 2-2. Emergency notification flowchart and checklists – Level 1.**

Notes:

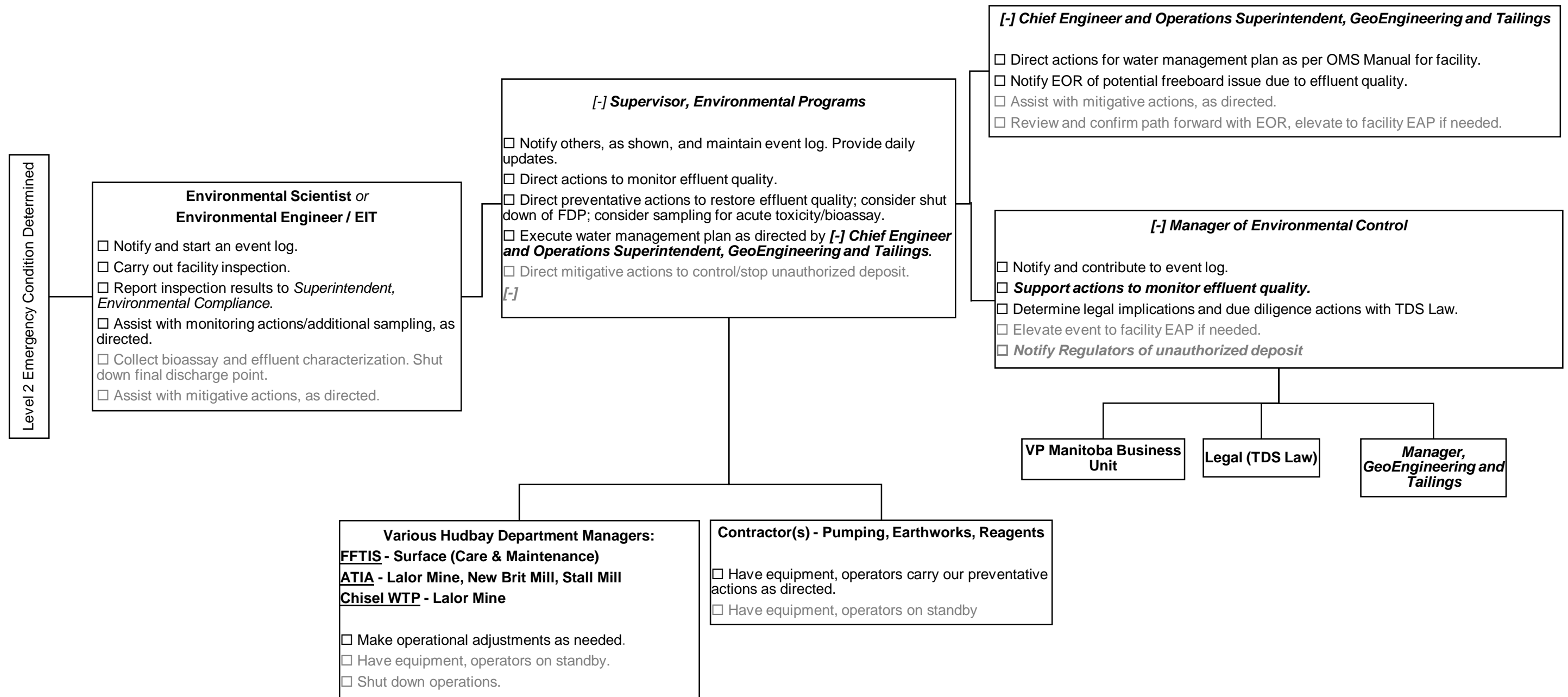
Items not related to Level 1 are shown in grey.  
Black lines denote lines of two-way communication.



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**Figure 2-3. Emergency notification flowchart and checklists – Level 2.**

Notes:  
 Items not related to Level 2 are shown in grey.  
 Black lines denote lines of two-way communication.

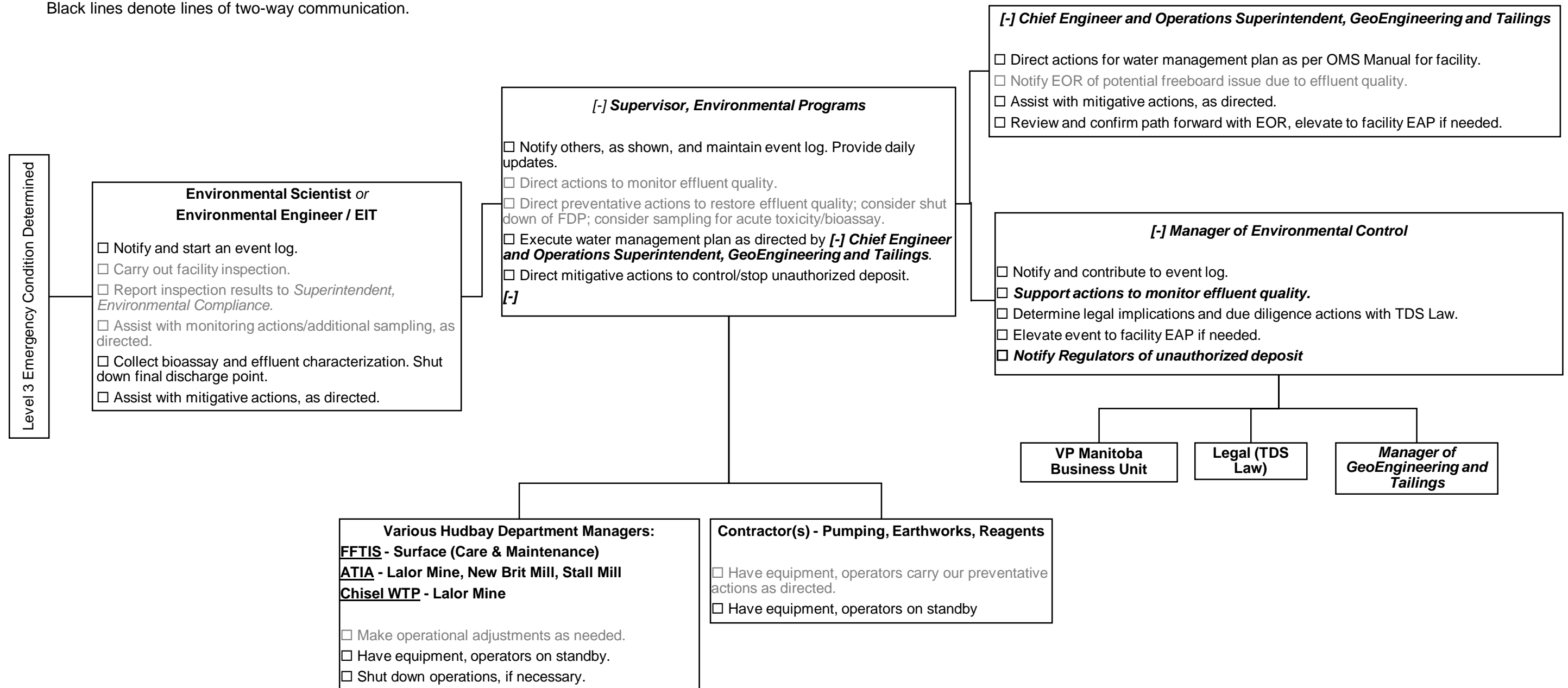


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**Figure 2-4. Emergency notification flowchart and checklists – Level 3.**

Notes:

Items not related to Level 3 are shown in grey.  
Black lines denote lines of two-way communication.



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**Table 2-1. Contact list and responsibility assignment / RACI matrix.**

Role (see ENO-689 for current contact details)	Responsibility Assignment / RACI <sup>(1)</sup> Matrix sorted by Sections of this Plan					
	Section 4.1 Detection	Section 4.2 Determination	Section 4.3 Notification	Section 4.4 Action	Section 4.5 Termination and Follow-Up	Section 5.1 Testing and Training
Internal Parties (Hudbay)						
<b><i>[-] ENV Manager of Environmental Control</i></b>	A	A	A	A / R	A / R	A / R
<b><i>[-] Manager of GeoEngineering and Tailings</i></b>	<b><i>[-] R</i></b>	<b><i>[-] I</i></b>	<b><i>[-] I</i></b>	<b><i>[-] C</i></b>	<b><i>[-] C</i></b>	<b><i>[-] I</i></b>
<b><i>[-] Chief Engineer and Operations Superintendent, GeoEngineering and Tailings</i></b>	R	C	R	R	C	I
ENV Supervisor, Environmental Programs	R	<b><i>[-] R</i></b>	R	R	<b><i>[-] R</i></b>	<b><i>[-] R</i></b>
ENV Environmental Scientist / Technician	R	C	R	R	C	I
Department Managers (Mines, Mills, Care & Maintenance)			I	R	C	I
VP Manitoba Business Unit			R	R	C	I
External Parties (non-Hudbay)						
Engineer of Record for facility			I	C	C	C
Legal: TDS Law			I	C	I	
Earthworks Contractor: <ul style="list-style-type: none"> <li>• Strilkiwski Contracting Ltd.</li> <li>• Bob's Contracting</li> <li>• Sigfusson Northern Ltd. (SNL)</li> <li>• McKeen's Trucking Service Ltd.</li> <li>• RJ's Construction Ltd.</li> </ul>	Contacted on an as-needed basis to provide support, as directed by Hudbay.					
Other Service Providers: <ul style="list-style-type: none"> <li>• Alex's Environmental</li> <li>• Multicrete</li> <li>• M.A. Ironworks</li> <li>• Uni-Jet</li> <li>• United Rentals</li> <li>• VA Plumbing and Heating</li> </ul>						

1. RACI components are summarized as follows:
  - a. R=Responsible; one or more persons.
  - b. A=Accountable; only one person.
  - c. C=Consulted; one or more persons.
  - d. I=Informed; one or more persons.

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**Table 2-2. Equipment List and Locations for Effluent Quality Emergency**

Equipment Provider	Contact	Equipment	Location
<b>Flin Flon Area (FFTIS and Trout WTP)</b>			
Hudbay Flin Flon Care & Maintenance	Chris Faktor 204-271-3651	Loader Excavator Rock Truck	Hudbay FFMC site
McKeen's Trucking Service Ltd.	Rob McKeen 204-271-1718	Loaders Grader Excavators Rock Trucks	McKeen's Yard (near Creighton, SK)
RJ's Construction Ltd	Robert John 204-271-5255	4" pump (x 4) 8" pump	Flin Flon, MB
Alex's Environmental	Ralph Howdle 204-271-1234	Vacuum Truck (x 4)	Bakers Narrows, MB
Uni-Jet	Chris Noonan 204-271-1591	Pressure washing truck Vacuum Truck	Flin Flon, MB Winnipeg, MB
United Rentals	Flin Flon Office 204-687-7830	Telehandler Pumps (various sizes) Light plant	Flin Flon, MB
North Fringe	Mike Dust 306-276-9204	8" Pump (x4) Hose / fittings	Nipawin, SK
<b>Snow Lake Area (BLTDF, ATIA and Chisel WTP)</b>			
Hudbay Lalor Surface Operations	1 <sup>st</sup> : Trevor Salamondra / Dave Andres 204-358-5380 2 <sup>nd</sup> : Tyler Morin / George Warman 204-271-1671 / 204-271-1471	Loaders Excavators	Lalor Mine Surface Yard
Hudbay Stall Mill Operations	Ashton Crone 204-271-4787	Telehandler Loaders	Stall Mill Site
Hudbay New Britannia Mill Operations	Ashton Crone 204-271-4787	Telehandler Loaders	New Britannia Site
Strilkiwski Contracting Ltd	Gerald Strilkiwski 204-638-9304	Loaders Grader Excavators	Strilkiwski Yard (neighbouring Stall Mill, near Snow Lake, MB)
Bob's Contracting	Snow Lake Office 204-358-9955	Pumps (4", 6")	Snow Lake, MB
Chell's Sled Shed	Chris Chell 204-358-0004	Vacuum Truck (x 2)	Snow Lake, MB
Uni-Jet	Chris Noonan 204-271-1591	Pressure washing truck Vacuum Truck	Flin Flon, MB Winnipeg, MB
United Rentals	Flin Flon Office 204-687-7830	Telehandler 8" pump	Flin Flon, MB

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### 3.0 Background

#### 3.1 Purpose, Roles and Responsibilities

The purpose of this Emergency Response Plan (ERP) is to reduce the risk of impact to the environment during an unusual event or emergency that may result in an unauthorized deposit under the *Metal and Diamond Mining Effluent Regulations* (MDMER) at any Hudbay final discharge point (FDP). Hudbay water treatment facilities, general area, and associated MDMER FDPs are listed in Table 3-1.

**Table 3-1: Hudbay Water Treatment Facilities and Associated MDMER Final Discharge Points**

Water Treatment Facility	MDMER Final Discharge Point
<b>FLIN FLON AREA</b>	
Flin Flon Tailings Impoundment System (FFTIS)	North Weir (NW) <b>North Weir Dam (NWD) Seep</b>
Trout Mine Water Treatment Plant (WTP)	Trout Lake Surface Sump (TLSS)
<b>SNOW LAKE AREA</b>	
Anderson Tailings Impoundment Area (ATIA)	Anderson Lake Discharge (AND)
Chisel Water Treatment Plant (WTP)	Chisel Treatment Plant Effluent (CHTPE)
Birch Lake Tailings Disposal Facility (BLTDF)	Birch Lake Outlet Embankment Discharge Point 1 (SWM03) Birch Lake Outlet Embankment Seep West (SWM02) Birch Lake Outlet Embankment Seep East (SWM10) Canada Creek Cutout Embankment Seep (SWM07)

The emergency preparedness procedure and the personnel and department responsibilities presented here apply only to situations surrounding MDMER FDP. The ERP is enacted when an effluent quality incident occurs that is beyond the control of the personnel on the scene. Normal department procedures should be followed during any incident until it is determined that the situation is beyond the control of the personnel on the scene, or the normal departmental procedures have broken down or are unavailable.

It is the responsibility of:

- Vice President, Manitoba Business Unit to ensure the appropriate development and execution of this ERP.
- Senior ***[-] Environmental Control and GeoEngineering and Tailings*** Department personnel to implement training and regular review of the ERP.
- All ***[-] Environmental Control and GeoEngineering and Tailings*** Department personnel to familiarize themselves with the content of the ERP.
- All ***[-] Environmental Control and GeoEngineering and Tailings*** Department personnel to be aware of individual responsibilities in the event an emergency situation arises.

The key roles in effluent emergency response are identified on the notification flowcharts in Section 2.0, along with a responsibility matrix and contact list. A discussion of effluent quality exceedances which could constitute an emergency follows.

### 3.2 Effluent Quality Exceedances and Effects

There are four predominant instances of effluent quality exceedances that may occur at any given FDP according to the MDMER.

- 1) Exceedance of pH Out of Range: Effluent is only authorized to be discharged to the environment provided that it has a pH equal to or greater than 6.0 but not greater than 9.5 as stated in Section 4(1)(b) of the MDMER.
- 2) Grab Sample Concentration Exceedance: Effluent is only authorized to be discharged to the environment provided that it does not exceed concentrations as stated in Section 4(1)(a) of the MDMER. Schedule 4 under the MDMER specifies limits for concentration of a grab sample. Grab sample exceedance generally are caused by quickly developing effluent quality issues and are most likely result from a) weather caused effluent quality upset, and b) equipment failure.
- 3) Monthly Mean Concentration Exceedance: Effluent is only authorized to be discharged to the environment provided that it does not exceed concentrations as stated in Section 4(1)(a) of the MDMER. Schedule 4 under the MDMER specifies limits for the monthly mean concentration of a FDP. Monthly mean exceedances may be caused by a single elevated sample or by a gradual trend outside of the limit. This is usually indicative of a slowly developing effluent quality issue.
- 4) Acute Toxicity Exceedance: Effluent is only authorized to be discharged to the environment provided that it is not acutely lethal as stated in Section 4(1)(c) of the MDMER. This means that effluent must pass all acute toxicity testing for rainbow trout and Daphnia magna as stated in Section 4.1 and Section 14(1) of the MDMER.

Effluent quality exceedances may lead to various adverse environmental effects depending on the complex chemistry and populations of the receiving environments. Adverse environmental effects may include but is not limited to:

- Toxicity: Unauthorized deposits of effluent may cause toxic effects on fish, benthic invertebrates, and aquatic vegetation. Toxic effects may have direct lethal and sub-lethal consequences (i.e. reproduction, size, age) and indirect consequences on long term population size and health, species diversity, and food sources for other populations.
- Water Quality and Human Health: Unauthorized deposits of effluent may cause water quality deterioration of receiving environments. Local communities use receiving environments for drinking water, resources (i.e. fishing), and recreation (i.e. boating, swimming). Deteriorating water quality could have negative impacts on human health (i.e. suitability for drinking water and bioaccumulation of contaminants in fish).
- Quality of Aquatic Habitat: Unauthorized deposits of effluent may have impacts to quality of aquatic habitats. This may include sediment contamination, reduction of quality of food source (vegetation, algae, and plankton), reduction of dissolved oxygen, reduction of protection and increase of predation.

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## 4.0 The Plan

### 4.1 Detection

This step describes the detection of an unusual or emergency event and provides information to assist the [-] **Environmental Control** Department in determining the appropriate emergency level for the event.

Unusual or emergency events may be detected by:

- Field level observations at the water treatment facility including instrument data and trends for facility operation
- Forewarning of conditions that may cause an unusual event or emergency event at the water treatment facility (for example, a severe wind, weather, or extreme precipitation forecast)
- Evaluation of laboratory sample results
- Weekly effluent quality review by [-] **Environmental Control** Personnel

Once an emergency is detected, the next step is to determine the appropriate level.

### 4.2 Determination

[-] The [-] **Supervisor, Environmental Programs** or designated alternate is responsible for determining the emergency level. For effluent quality emergencies, the designated alternate is the [-] **Manager of Environmental Control**.

The [-] **Supervisor, Environmental Programs** may solicit input from the [-] **Chief Engineer and Operations Superintendent, GeoEngineering and Tailings** or other parties to determine the appropriate emergency level, which are defined as follows:

- Level 1: characterized by abnormal conditions that do not affect routine operations. The intent of the response is to monitor and understand the conditions.
- Level 2: characterized by a potential unauthorized deposit which can still be prevented. The intent of the response is to restore effluent quality.
- Level 3: characterized by imminent or in-progress unauthorized deposit which cannot be prevented. The intent of the response is to stop or control the unauthorized deposit.

A direct correlation of indicators to emergency levels has been deliberately omitted as the impact on effluent quality is dependent on many factors including severity or magnitude, location, weather, and even time of year. Instead, once an indicator is detected, the emergency level is determined case-by-case based on the above definitions. Guidance for determining emergency level is outlined in



**Effluent Quality  
Emergency Response Plan**

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Table 4- and

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Table 4-

Once the emergency level has been determined, the next step is to notify key parties.

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**Table 4-1. Guidance for Determining Emergency Level**

Emergency Situation	Means of Identification	Action(s) to be Taken
<b>Level 1</b>		
Schedule 4 Monthly Mean Concentration	> 80% of the monthly mean limit with clear upward trend	Monitoring
Operational issues	Operational targets out of range, may lead to elevated concentrations. Ex. Weather, pH adjustment, reagent supply, surface plant effluent/tailings upset, etc.	
Maintenance	Unplanned, < 1 day fix, may lead to elevated concentrations.	
<b>Level 2</b>		
Schedule 4 Grab Sample Concentration	> 70 % of the grab sample limit with clear upward trend	Preventative
Operational issues	Operational targets out of range with quickly developing trends. Ex. Weather (wind, excess rain), pH adjustment issues, surface plant effluent/tailings upset, etc.	
Emergency Maintenance	Equipment failure that may lead to effluent quality upset.	
Power outage	Unplanned power outage that is projected to last > 1 day.	
<b>Level 3</b>		
Schedule 4 Grab Sample Concentration	> 90 % of the grab sample limit with clear upward trend	Mitigative
Effluent is acutely lethal	Laboratory results show that effluent resulted in >50% mortality of rainbow trout or Daphnia magna.	
Operational issues	Operational issues that lead to unauthorized deposit.	
Emergency Maintenance	Equipment failure that leads to unauthorized deposit.	
Power outage	Unplanned power outage that results in an unauthorized deposit.	

**Table 4-2. MDMER Schedule 4 Parameters and Level 1, 2, and 3 Action Triggers**

Parameter	MDMER Schedule 4 Concentration				
	MDMER Monthly Limit	MDMER Grab Limit	Level 1 (80% of Monthly Limit)	Level 2 (70% of Grab Limit)	Level 3 (90% of Grab Limit)
Arsenic	0.30	0.60	0.24	0.42	0.54
Copper	0.30	0.60	0.24	0.42	0.54
Cyanide	0.50	1.00	0.40	0.70	0.90
Lead	0.10	0.20	0.085	0.14	0.18
Nickel	0.50	1.00	0.40	0.70	0.90
Zinc	0.50	1.00	0.40	0.70	0.90
TSS	15.00	30.00	12.0	21.0	27.0
Ra-226	0.37	1.11	0.30	0.78	1.00
Un-ionized NH <sub>4</sub>	0.50	1.00	0.40	0.70	0.90

Note: Emergency levels are only triggered if concentration is outside of normal operating range. Elevated sample result should be reanalyzed whenever possible.

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### 4.3 Notification

Parties responsible for notifying others are identified on flowcharts and checklists in Section 2.0:

- Figure 2- for Level 1 emergencies.

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- Figure 2-3 for Level 2 emergencies.
- **Error! Reference source not found.** for Level 3 emergencies.

The above listed figures have been developed to align with ENC-528 Internal Notification Protocol for Environmental Operations.

#### 4.4 Action

**[ - ]** The **[ - ] Supervisor, Environmental Programs** or designated alternate is responsible for directing/coordinating actions during effluent quality emergencies. **[ - ]**

As the **designated alternate**, the **[ - ] Manager of Environmental Control**, who is notified for all effluent quality emergency levels, may assist the **[ - ] Supervisor, Environmental Programs** in when these secondary plans are activated or triggered.

A list of actions that may be taken during effluent quality emergencies is given in Table 4-3, sorted by emergency level. In a Level 3 emergency, it is required to shutdown or control discharge at the FDP of the water treatment facility. Shutdown mechanisms for each water treatment facility are given in Table 4-3.

Once all necessary actions have been taken, the emergency may be terminated as described in the next section.

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**Table 4-3. Potential actions during an effluent quality emergency.**

Type of Action (objective)		
Monitoring – Level 1 (understand conditions)	Preventative – Level 2 (Restore effluent quality)	Mitigative – Level 3 (stop or control unauthorized deposit)
Inspect condition of pond and associated equipment.  Evaluate operational trends for the facility and previous sample data for the parameter(s).  Increase sampling frequency and/or field checks.  Elevate emergency level if needed.	Implement monitoring as needed. Implement investigation with surface plants as needed.  Consider taken compliance samples: weekly, acute toxicity test, effluent characterization.  Consider shutdown of FDP.  Use contractors for additional water treatment measures or circulation of water (ex. Lime addition, pump set up and operation).  Follow actions for Water Management Plan as directed by ENV Superintendent, Tailings.	Shutdown FDP as listed in Table 4-4.

**Table 4-4. List of shutdown measures for each MDMER final discharge point.**

Water Treatment Facility	MDMER FDP	Shutdown Mechanism	Applicable Procedures
<b>FLIN FLON AREA</b>			
FFTIS	NW	Stop-logs are lowered into control structure to stop discharge	ENP-003
	<b><i>NWD Seep</i></b>	<b><i>Permanent pumphack system in place to stop discharge</i></b>	<b><i>N/A</i></b>
Trout Mine WTP	TLSS	Effluent pumps to the sump are turned off. TLSS outlet pipe is blocked. Vacuum truck returns excess effluent into Gil Lake to ensure effluent level below TLSS outlet pipe.	ENP-507
<b>SNOW LAKE AREA</b>			
ATIA	AND	Sluice gate is lowered into control structure to stop discharge to environment. Temporary siphons can be turned off with associated valve.	ENP-106, <b><i>ENP-012</i></b>
Chisel WTP	CHTPE	Effluent pump discharge is redirected from the FDP to the Chisel Open Pit through valve change. Alternatively, effluent pumps may be turned off.	LMI-016, LMI-032, LMI-033
BLTDF	SWM03	Discharge pipe is closed with manual valve.	ENI-662
	SWM02	No current mechanism	N/A
	SWM10	No current mechanism (have used a constructed clay berm)	N/A
	SWM07	No current mechanism	N/A

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#### 4.5 Termination and Follow-Up

***[-]*** The ***[-]*** ***Supervisor, Environmental Programs*** or designated alternate is responsible for terminating the ERP. For effluent quality emergencies, the designated alternate is the ***[-]*** ***Manager of Environmental Control***.

Criteria for termination will vary depending on the level and nature of emergency, but should include, at minimum:

1. Assessing the effluent quality in its current state to determine whether emergency conditions are still present. This typically includes an evaluation of data by the ***[-]*** ***Supervisor, Environmental Programs*** and may include consultation with the ***[-]*** ***Chief Engineer and Operations Superintendent, GeoEngineering and Tailings***.
2. Confirming sufficient capacity to respond should another emergency occur after termination. This typically includes taking inventory and estimating time to replenish depleted resources, e.g., materials, equipment, workforce.

Once the ***[-]*** ***Supervisor, Environmental Programs or designated alternate*** deems the criteria for termination have been met, all parties who were notified of the emergency shall be similarly notified of termination by following the same flowcharts. Entries in the event log may be used in the event parties not identified on the notification flowcharts were also engaged during the emergency.

Following termination:

- The ***[-]*** ***Manager of Environmental Control*** or designate must complete a post-event report to document the event including actions taken, root cause, and lessons learned. This may be done using Intelx and include input from other parties, if needed.
- The ***[-]*** ***Manager of Environmental Control*** should develop and implement a plan to prevent future occurrences based on lessons learned.
- The ***[-]*** ***Manager of Environmental Control, ENV [-] Chief Engineer and Operations Superintendent, GeoEngineering and Tailings, and managers of affected Hudbay departments*** may wish to collectively develop a plan for return to normal water treatment facility operation.

## 5.0 Administrative and Maintenance

### 5.1 Testing and Training

The following are carried out annually, as prescribed in PWP-006 Emergency Preparedness:

- Tabletop exercise / audit lead by the ***[-]*** ***Manager of Environmental Control*** and documented in PWO-017 Emergency Procedure Test Report.
- Live drill lead by the ***[-]*** ***Manager of Environmental Control***, also documented in PWO-017.

Upon Plan revision, tabletop training lead by the ***[-]*** ***Manager of Environmental Control*** may be required to familiarise affected parties with the changes. Proof of any such training sessions is documented using PWO-019 MBU Training Record.

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## 5.2 Documentation and Reporting

Should the ERP be activated, there are only two reporting requirements:

- A post-event report by the ***[-] Manager of Environmental Control*** or designate; see previous section.
- An event log maintained by the ***[-] Supervisor, Environmental Programs***; attached in Appendix .

The notification flowcharts provided in Section 2.0 are meant to serve as guides, and are not required to be used or filled out for compliance with this Plan.

As the ***[-] Accountable Person***, the ***[-] Manager of Environmental Control*** is responsible for keeping this Plan up to date. This may be achieved through:

- Annual review of this Plan, as prescribed in PWP-006 Emergency Preparedness.
- Change-driven revision of this Plan, such as change of personnel, changes to regulations or updated maps.

Upon revision, the ***Manager of Environmental Control*** is also responsible for distributing to all responsible/affected parties which have been identified as part of the contact list provided in Section 2.0.

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## 6.0 References

**Table 6-1. Hudbay documents.**

No.	Title
Plant-Wide, i.e., MBU-Wide	
PWP-006	Emergency Preparedness
PWO-017	Emergency Procedure Test Report
PWO-019	MBU Training Record
Environment Control	
ENP-110	Anderson TIA OMS Manual: Module 10 Emergency Action Plan
ENP-210	FFTIS OMS Manual: Module 10 Emergency Action Plan
ENP-007	Birch Lake Tailings Disposal Facility Emergency Action Plan
ENC-528	Internal Notification Protocol for Environmental Operations
ENO-689	MBU Dams & Tailings Facilities Contact List
ENP-003	North Weir Manual
ENP-507	Trout Lake Treatment Plant Operation
ENP-106	Anderson TIA OMS Manual: Module 06 Water Management Plan
<b>ENP-012</b>	<b>ATIA Discharge Management Plan</b>
ENI-662	New Britannia Birch Lake TDF Discharge Procedure
Other(s)	
LMI-016	Water Treatment Plant Shut Down
LMI-032	Water Treatment Plant Troubleshooting
LMI-033	Operate Waste Water Treatment Plant

1. All Hudbay controlled documents are filed on the M-Drive.

**Table 6-2. Non-Hudbay documents.**

Document Title	Author	Issue Date(s)
Metal and Diamond Mining Effluent Regulation SOR/2002-222	ECCC	2002

1. All non-Hudbay documents are publicly available online.

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## **Appendix A Water Treatment Facility Plans**

- A-1 Flin Flon Tailings Impoundment System
- A-2 Trout Mine Water Treatment Plant
- A-3 Anderson Tailings Impoundment Area
- A-4 Chisel Water Treatment Plant
- A-5 Birch Lake Tailings Disposal Area

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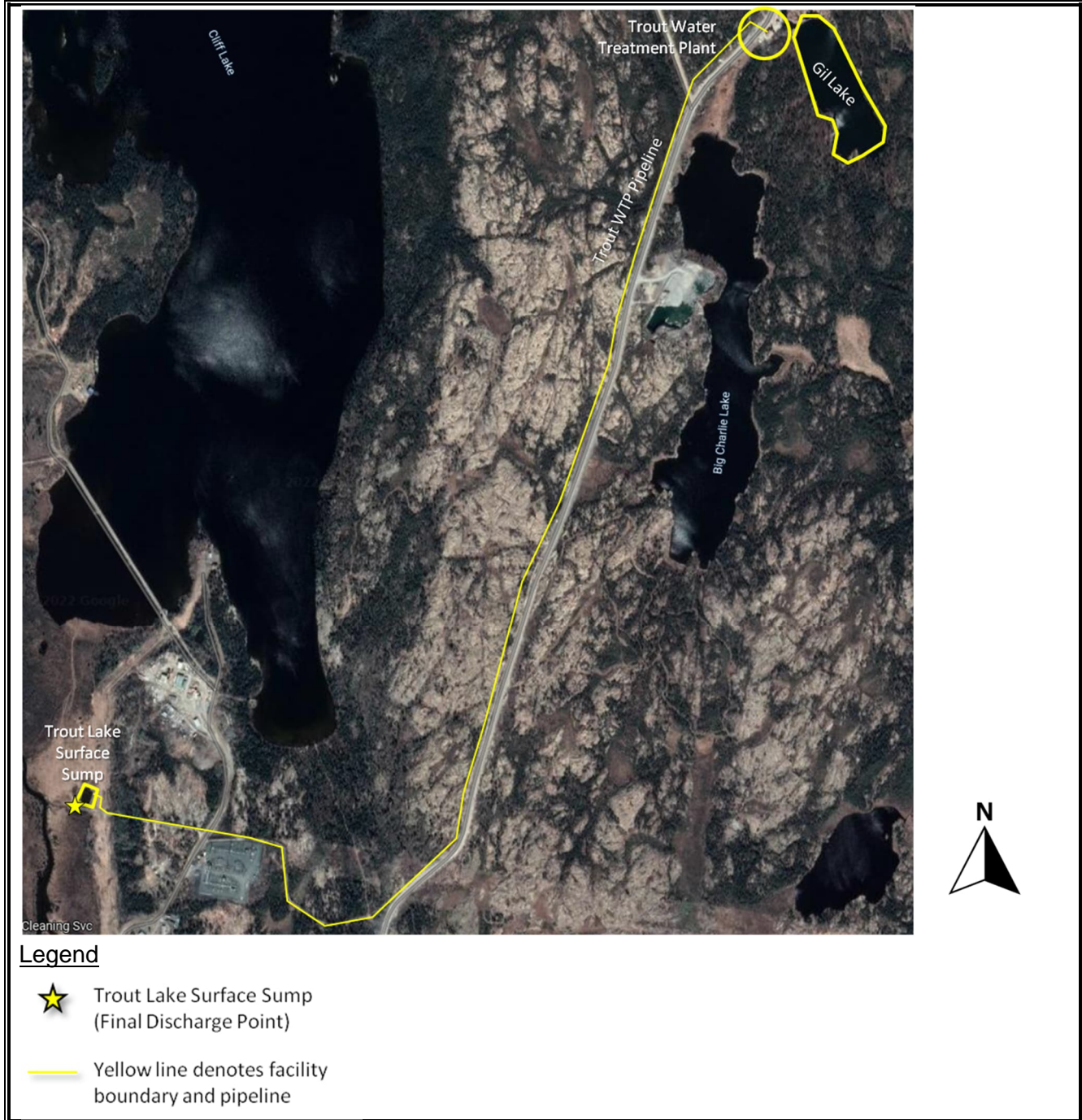
### A-1 Flin Flon Tailings Impoundment System



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### A-2 Trout Mine Water Treatment Plant



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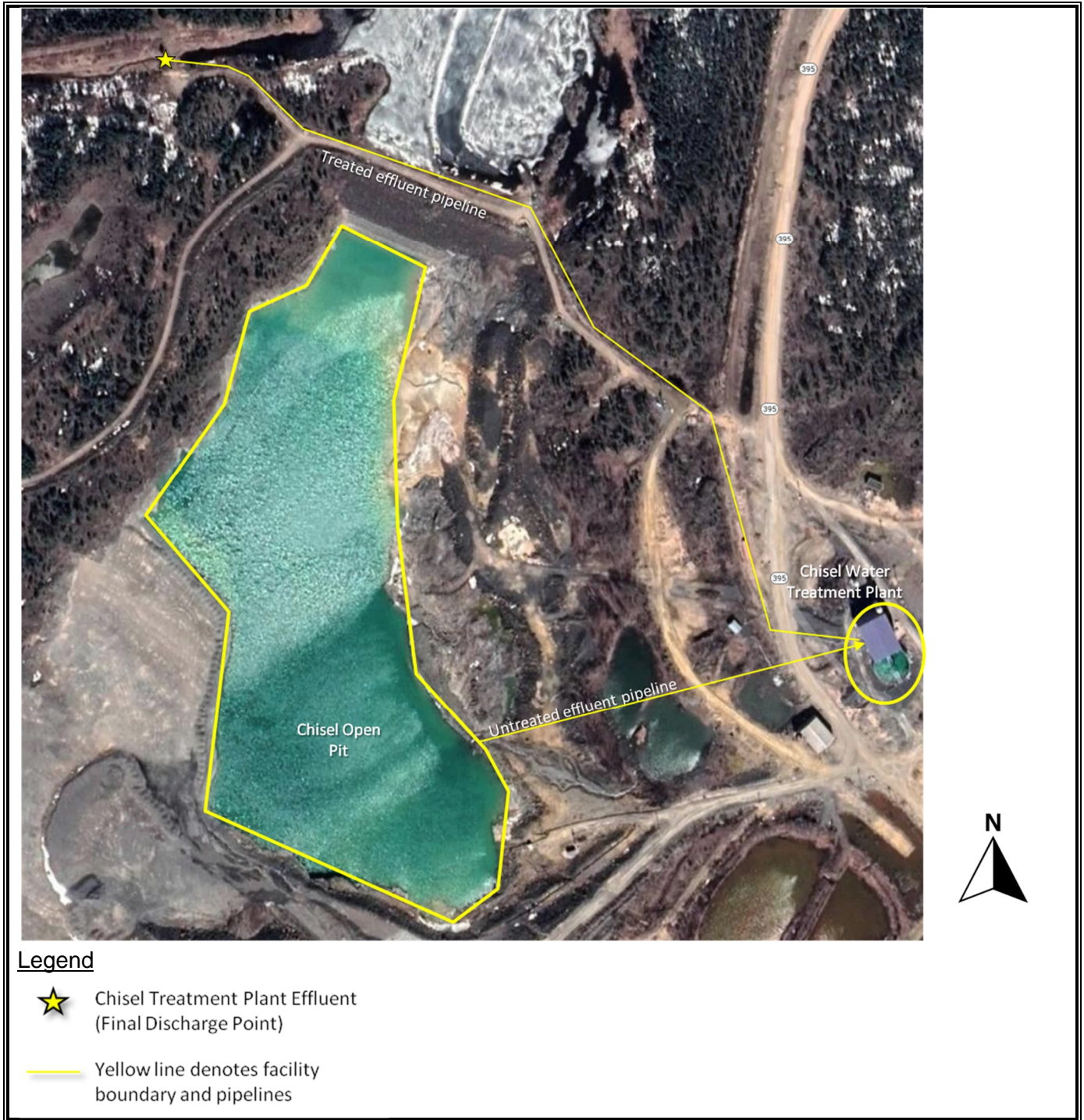
### A-3 Anderson Tailings Impoundment Area



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### A-4 Chisel Water Treatment Plant



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### A-5 Birch Lake Tailings Disposal Facility



#### Legend

- ★ Final Discharge Point
- Yellow line denotes facility boundary and pipeline



**Effluent Quality  
Emergency Response Plan**

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**Appendix B Event Log**

