



**REPORT**

# Waste Management Plan

*Self-Contained Camp Storage and Operations, and Herbicide Application, at  
Camp Farewell, Inuvialuit Settlement Region, Northwest Territories*

Submitted to:

**Shell Canada Limited**

Suite 4000, 500 Centre Street SE  
Calgary, Alberta T2G 1A6

Submitted by:

**WSP Canada Inc.**

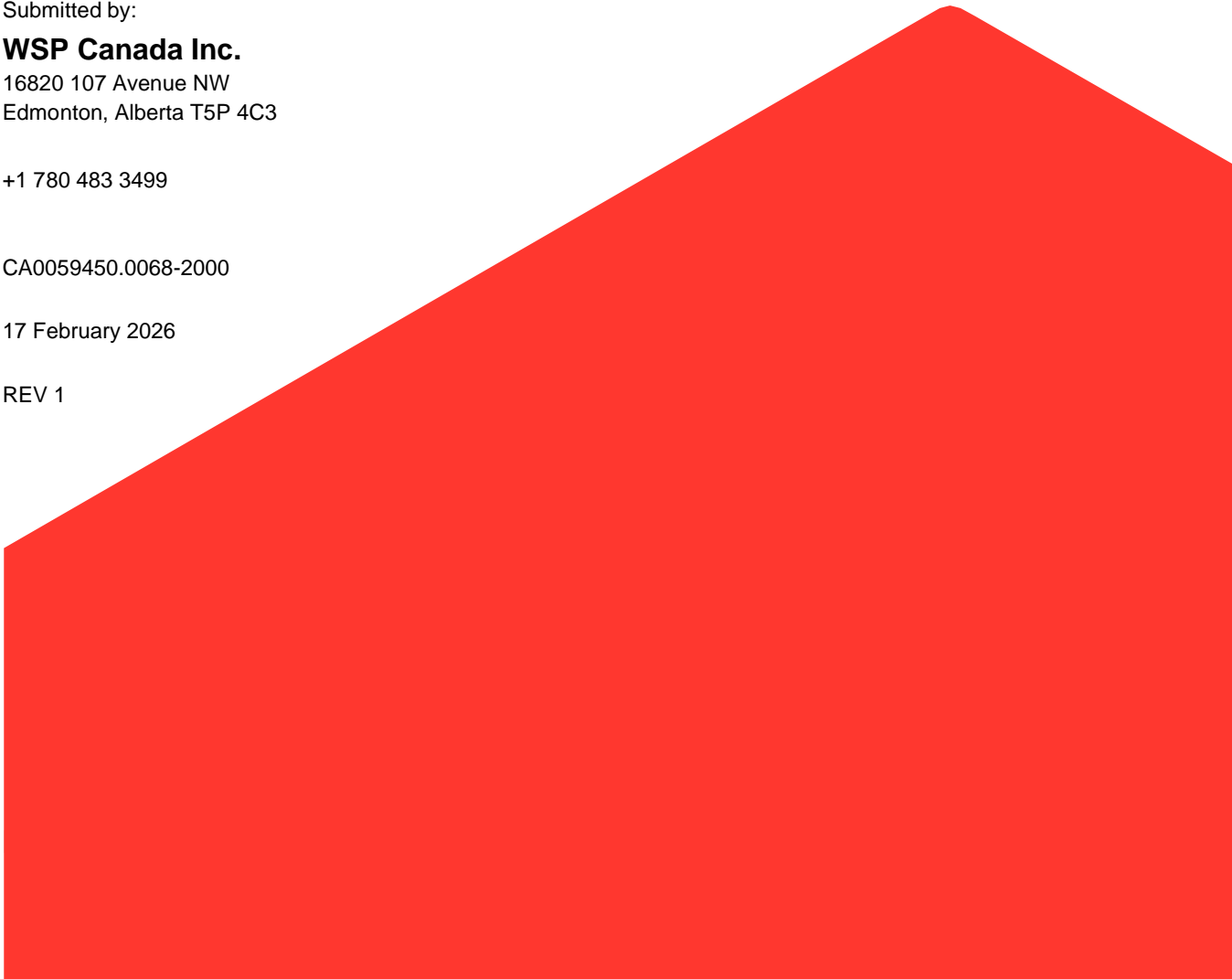
16820 107 Avenue NW  
Edmonton, Alberta T5P 4C3

+1 780 483 3499

CA0059450.0068-2000

17 February 2026

REV 1



## Distribution List

- 1 Electronic Copy - Shell Canada Limited
- 1 Electronic Copy - WSP Canada Inc.
- 1 Electronic Copy - Environmental Impact Screening Committee
- 2 Electronic and 2 Paper Copies - Inuvialuit Water Board



# Table of Contents

**1.0 INTRODUCTION ..... 1**

    1.1 Background ..... 1

    1.2 Location and Description..... 1

    1.3 Project Summary ..... 1

    1.4 Project Contacts ..... 3

    1.5 Roles and Responsibilities ..... 4

    1.6 Guidelines ..... 4

    1.7 Actions to Reduce Wastes ..... 4

**2.0 IDENTIFICATION OF WASTE TYPES ..... 4**

**3.0 WASTE MANAGEMENT ..... 5**

    3.1 Non-Hazardous Waste ..... 5

    3.2 Hazardous Waste and Sewage..... 5

**4.0 TRAINING AND REPORTING ..... 6**

**5.0 REFERENCES ..... 6**

**6.0 STATEMENT OF LIMITATIONS ..... 7**

**TABLES [IN TEXT]**

Table A: Anticipated Waste Streams During the Camp Operations..... 5

**APPENDIX**

**APPENDIX A**

Figure

## 1.0 INTRODUCTION

### 1.1 Background

WSP Canada Inc. (WSP) has prepared this Waste Management Plan (the Plan) on behalf of Shell Canada Limited (Shell) for the former Camp Farewell staging site (the Site) in the Mackenzie Delta of the Inuvialuit Settlement Region (ISR), Northwest Territories (NWT). The purpose of this Plan is to describe the proper treatment and disposal of several types of waste generated during the temporary storage and operation of a self-contained camp, and herbicide application for scentless chamomile (*Tripleurospermum inodorum*), at the Site (the Project). For completeness, the Plan includes the aviation fuel cache (Jet-A1) and environmental sampling activities as approved under Environmental Impact Screening Committee (EISC) File [04/25-06] and permitted by the Canadian Wildlife Service (MM-NR-2026-NT-001).

The Plan will be effective upon its approval and will be implemented during the Project. Paper copies of this Plan will be available on the Site (through the Site Superintendent) and will be posted at several accessible locations. All personnel will have access to paper and digital copies of the Plan.

### 1.2 Location and Description

The Site is at 69°12'32.6"N latitude and 135°06'04.57"W longitude on the northeastern bank of the Middle Channel of the Mackenzie Delta, NWT. The Site is approximately 125 kilometres (km) northwest of Inuvik and encompasses a land area of approximately 14 hectares (ha) (35 acres [ac]) within the Kendall Island Bird Sanctuary (KIBS). The location of the Site is presented in Figure 1 (Appendix A).

The Site was constructed in 1970 to 1971 and was operated as a staging and storage location to support Shell's Mackenzie Delta drilling program. The Site consisted of camp buildings for worker habitation, fuel storage (above ground storage tanks), burn pits, a sewage lagoon and storage areas for various materials and equipment. Decommissioning of the Site, environmental site assessments and staged soil remediation was completed between 2008 and 2019.

### 1.3 Project Summary

The purpose of the Project is to provide temporary storage and operation of a self-contained camp, and herbicide application for scentless chamomile, at the Site. The storage and operation of the self-contained camp is in support of assessment work at the former Shell wellsites in the Inuvialuit Settlement Region ([ISR] (Environmental Impact Screening Committee [EISC] Files [05/24-01], [09/24-01] and [10/24-04]).

The proposed 2025 to 2028 activities may include the following:

- The existing gravel pad at the Site may be used for temporary summer storage of the self-contained camp (with capacity for up to approximately 55 people) and associated equipment (e.g., grader, dozer etc.). The camp may be moved to the Site and transported on the existing gravel access for secure storage on the existing gravel pad. The mobilization of the camp to the Site for storage may occur prior to spring break up, and may be demobilized following fall freeze up, using ice roads constructed for assessment work at the former Shell wellsites in the ISR. Alternatively, mobilization to the Site may occur by barge after spring break-up and prior to fall freeze up. All tanks will be emptied prior to temporary on-site storage and the tank contents will be transported off site and disposed of appropriately. Camp trailers to be temporarily stored at the Site include sleepers, kitchens, bathroom facilities, recreational rooms, generator buildings, emptied freshwater tanks and an emptied combined sewage and grey water tank. After summer storage, the self-contained camp

may be transported from the temporary storage location at the Site to a river ice location to support further assessment work at the former Shell wellsites in the ISR. Temporary storage of the self-contained camp may continue annually during the summers of 2026 to 2028.

- The self-contained camp may be operated from the existing gravel pad at the Site to support seasonal investigation and remediation programs. Camp trailers to be operated at the Site include sleepers, kitchens, bathroom facilities, recreational rooms, and generator buildings. The camp will be powered and heated using diesel generators, which will have an associated fuel tank (approximately 10,000 litres [L], with secondary containment and/or drip tray). Fuel will be supplied to the generator fuel tanks via a fuel truck that will mobilize to and from Inuvik to re-fuel as needed and stored in camp diesel and gasoline storage and refuelling area (Figure 1). Water will be supplied as required via water truck from Inuvik to either a heated water tank adjacent to the camp or stored in the water truck or obtained from the Mackenzie River. An approximately 40,000 L heated combined sewage and grey water tank, also adjacent to the camp, will be emptied as required using a vacuum sewage truck. The sewage and grey water will be disposed of at an approved facility (e.g., the Inuvik sewage lagoon). Operation of the self-contained camp may continue annually during the winters of 2025/2026 to 2027/2028 and summers of 2026 to 2028 to support seasonal investigation and remediation programs.
- If operated during the summer, to provide accommodation for up to approximately 25 people completing summer field work, a small portion of the self-contained camp may be established in June and closed for the season in September. The self-contained camp will be closed during the spring break up and fall freeze up, with all tanks emptied and contents transported off site and disposed of appropriately. Transportation between Camp Farewell and the former wellsites during the summer will be via boat and the existing access from the river to the Site and/or helicopter.
- If operated during the winter, to provide accommodation for up to approximately 55 people working at the former Shell wellsites in the ISR, the self-contained camp may be established in December or January (pending the construction of ice roads and load limits) and closed for the season in late April. The self-contained camp will be closed during the spring break up and fall freeze up, with all tanks emptied and contents transported off site and disposed of appropriately. Transportation between Camp Farewell and the former Shell wellsites during the winter will be via ice roads constructed on the river ice (approved under EISC Files [05/24-01], [09/24-01] and [10/24-04]) and the existing access from the river to the Site. No new overland access would be required.
- In June 2025, wide-spread presence of scentless chamomile (*Tripleurospermum inodorum*) was observed at the Site. Since 2005, the Government of the Northwest Territories has identified this species as Alien (i.e., a species that has been introduced as a result of human activities outside their native range). To reduce the risk of spreading this alien species through continued work at the Site, targeted treatment measures will be implemented. In addition to manual removal and appropriate disposal of the uprooted scentless chamomile plants, disinfection of helicopter skids, tools, work boots and other clothing, the area on the gravel pad (where most of the plants were observed) will be subject to targeted Milestone™ Herbicide applications and potential mechanical mowing in the spring of 2026. Trained and qualified personnel will complete the targeted manual herbicide application and/or site wide mowing prior to the scentless chamomile flowering window and as access to the Site allows. These mitigation measures may be repeated in the spring of 2027 and 2028, as needed.

Activities approved under EISC File [04/25-06] include the following:

- Aviation fuel cache (Jet-A1) located at the Site for the summers of 2025 and 2028, using a double walled 35,000 litre (L) fuel tank that includes pump housing in an enclosed cabinet with secondary containment. The fuel cache is established on the existing gravel pad, a minimum of 100 metres (m) from the high-water mark of the nearest waterbody on flat, stable terrain, away from slopes leading to waterbodies (Figure 1, Appendix A).
- Environmental soil sampling during the summer of 2025 was completed by advancing approximately 80 shallow boreholes to an approximate depth of 0.5 metres below ground surface (mbgs) using hand tools (i.e, hand auger and shovel), on the existing gravel pad and some areas directly adjacent to it. Potential follow up environmental sampling programs using hand tools may occur in the summers of 2026, 2027 and 2028. Soil samples will be collected from the boreholes and select soil samples submitted for laboratory analysis of petroleum hydrocarbons (PHC). Completed hand auger boreholes will be refilled with either the original material or with bentonite and/or sand.

## 1.4 Project Contacts

### **Kyle Thompson**

Senior Program Manager  
Legacy Soil & Groundwater Projects  
Shell Canada Limited  
Office – 1 (403) 691-3174  
E-mail – kyle.thompson@shell.com  
Suite 4000, 500 Centre Street SE  
Calgary, Alberta, T2G 1A6, Canada

### **Patrick Kalita**

Project Director  
WSP Canada Inc.  
Cell – 1 (780) 239-1420  
E-mail – patrick.kalita@wsp.com  
16820 – 107 Avenue NW  
Edmonton, Alberta, T5P 4C3, Canada

### **Virginia Anderson**

Senior Project Manager  
WSP Canada Inc.  
Cell – 1 (250) 469-4795  
E-mail – virginia.anderson@wsp.com  
840 Howe Street  
Vancouver, British Columbia, V6Z 2M1, Canada

### **Tammara Grendus**

Senior Project Manager  
WSP Canada Inc.  
Cell – 1 (587) 892-9976  
E-mail – tammara.grendus@wsp.com  
237 4 Avenue SW, Suite 3300  
Calgary, Alberta, T2P 4K3, Canada

## 1.5 Roles and Responsibilities

Shell is responsible for the overall content and assignment of responsibilities 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.

## 1.6 Guidelines

This document was prepared using the following guidelines.

- Guideline for Hazardous Waste Management (GNWT ENR 2017);
- Guideline For Industrial Waste Discharges in the NWT (GNWT ENR 2004); and
- Guidance for the Preparation of Waste Management Plans (IWB] 2014).

## 1.7 Actions to Reduce Wastes

This Plan incorporates the basic principles of waste management, which include source reduction, reuse, recycling/recovery and disposal. Management of waste is an important consideration of Shell's operations. Where possible, every effort is made to minimize waste production by incorporating the principles of waste: Reduce, Reuse, Recycle and Recover.

- Source reduction includes the elimination or reduction of the volume or toxicity of waste by adopting practical methods such as using alternative materials or processes. This principle can be achieved by material elimination, inventory control and management, material substitution, process modification and improved housekeeping, maintenance and training.
- Reuse is achieved by using a product more than once for the same application or different purposes. Reusing materials such as fuel drums and pallets can reduce the amount of waste generated.
- Recycling/recovery of products that have one use reduces the volume of waste. Sorting products so they can be managed in bulk reduces the need for additional handling.
- Disposal of waste is considered the final option for waste management. When disposing of waste, the type of waste, volume, location and final containment must be considered. The waste disposal options available to this Project include approved off-site solid waste sites, municipal sewage lagoons and licensed hazardous waste disposal facilities.

## 2.0 IDENTIFICATION OF WASTE TYPES

All wastes will be identified, characterized and classified as hazardous or non-hazardous to develop safe and efficient handling strategies that assure regulatory compliance. This Plan will be distributed to all personnel and regular tailgate meetings will stress the importance of Shell's waste management principles and the duties associated with waste segregation. A summary of the anticipated waste streams during the camp operations is provided in Table A.

**Table A: Anticipated Waste Streams During the Camp Operations**

Category	Waste Stream	Description	Anticipated Volume
Non-hazardous waste	Non-recyclable domestic wastes (organic and non-organic)	Organic and non-organic waste including garbage, office garbage, camp waste and food scraps	Minimal amounts (e.g., less than 1 cubic metre [m <sup>3</sup> ] per week)
	Recyclable domestic wastes	All material appropriate for recycling (i.e., beverage containers, tin cans, plastic and glass)	Less than 1 m <sup>3</sup> per week
Hazardous waste and sewage	Contaminated soils and/or snow	Soil and/or snow contaminated with either diesel or other accidental spill materials resulting from the Project	All efforts will be made to avoid spills
	Used hydrocarbon (and other chemicals) containers and absorbents	Containers used to store hydrocarbons (and other chemicals) and absorbent materials used for spill cleanup	All efforts will be made to avoid spills
	Camp sewage (and greywater)	Camp flushing toilets, showers and kitchen facilities	Maximum of 2 m <sup>3</sup> per day (depending on camp occupancy)

During camp storage, minimal waste will be produced at the Site as the camp will not be used. Generated waste will be managed as described in Section 3.0.

During the removal of scentless chamomile from the gravel pad at the Site, the removed plants will be tightly packed in garbage bags, stored in 1 m<sup>3</sup> mega sacks, and removed for off-site disposed at an approved landfill. Any waste generated during the herbicide application (e.g., empty jug, gloves) will be managed as described in Section 3.0.

## 3.0 WASTE MANAGEMENT

### 3.1 Non-Hazardous Waste

Non-hazardous waste will be stored temporarily in wildlife-proof containers or lockable bins/metal containers at the self-contained camp and will be transported from the Site regularly during camp operations, and as needed during camp storage, and disposed of at an approved landfill facility (e.g., Inuvik). Approval from the waste receiving facility will be obtained prior to Project start.

All personnel will be made aware of the recycling program and notes will be posted in the camp. Recyclable beverage containers will be collected in clearly labelled containers. Recyclables will be collected and transported to the bottle depot in the Town of Inuvik.

### 3.2 Hazardous Waste and Sewage

Contaminated soil, snow and hydrocarbon absorbents from accidental Project spills will be handled according to the provided Spill Contingency Plan.

All hazardous waste, including empty herbicide containers and un-used mixed herbicide, will be properly packed in approved transport containers and shipped for final disposal to an appropriately licensed out of territory disposal facility. The NWT guidelines for the management of hazardous waste, which outline the registration and tracking requirements for generators, carriers and receivers of hazardous waste in the NWT, will be followed.

Camp generated sewage and grey water will be temporarily stored in a 40,000 L heated combined sewage and grey water tank, emptied as required using a vacuum sewage truck, and disposed at an approved facility (e.g., the Inuvik sewage lagoon). Approval from the facility will be obtained prior to Project start.

## 4.0 TRAINING AND REPORTING

On-site personnel will receive basic waste management awareness training as part of their orientation. Personnel managing waste will be certified in Workplace Hazardous Material Information System and Transportation of Dangerous Goods.

Shell and its contractors are responsible for providing training to all employees and contractors. Waste management training will be provided to project staff prior to starting work, and will include the review of this Plan and information on:

- individuals' roles and responsibilities;
- identification of the various types of waste; and
- instructions on how waste streams are separated and managed.

A report detailing the types, volumes and final disposal locations of the Project-generated waste will be prepared and submitted to the applicable regulatory agencies.

## 5.0 REFERENCES

GNWT ENR (Government of Northwest Territories Department of Environment and Natural Resources). 2004. Guideline for Industrial Waste Discharge in the NWT. Yellowknife, NWT.  
[http://www.enr.gov.nt.ca/sites/enr/files/guidelines/industrial\\_waste\\_guidelines.pdf](http://www.enr.gov.nt.ca/sites/enr/files/guidelines/industrial_waste_guidelines.pdf)

GNWT ENR. 2017. Guideline for Hazardous Waste Management. Yellowknife, NWT.  
[http://www.enr.gov.nt.ca/sites/enr/files/resources/128-hazardous\\_waste-interactive\\_web.pdf](http://www.enr.gov.nt.ca/sites/enr/files/resources/128-hazardous_waste-interactive_web.pdf)

IWB (Inuvialuit Water Board). 2014. Guidance for the Preparation of Waste Management Plans.  
[https://www.inuvwb.ca/sites/default/files/141023\\_iwb\\_guide\\_for\\_waste\\_mgmt\\_plan\\_development\\_2\\_.pdf](https://www.inuvwb.ca/sites/default/files/141023_iwb_guide_for_waste_mgmt_plan_development_2_.pdf)

## 6.0 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**

**Figure**

-15240000

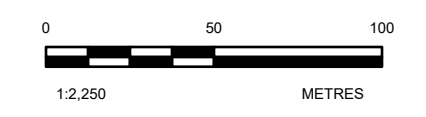
-15240000



**LEGEND**

- BOAT AND BARGE LANDING AREA
- ✕ THERMISTOR
- SITE BOUNDARY
- KENDALL ISLAND BIRD SANCTUARY
- APPROXIMATE GENERATOR BUILDING STORAGE LOCATION
- APPROXIMATE SELF CONTAINED CAMP STORAGE LOCATION
- APPROXIMATE SEWAGE TANK STORAGE LOCATION (EMPTY)
- AVIATION (JET A1) FUEL CACHE
- HELICOPTER LANDING AND REFUELING AREA

Feature	Easting	Northing	UTM Zone
Aviation (Jet A1) Fuel Cache	495995.22	7677815.60	8
Helicopter Landing and Refueling Area	495990.48	7677779.82	8
Approximate Self Contained Camp Location	496058.46	7677743.91	8
Approximate Sewage Tank Location (Empty)	496086.92	7677707.89	8
Approximate Generator Building Location	496076.68	7677690.49	8
Boat and Barge Landing Area	496029.11	7677505.44	8



**REFERENCE(S)**  
 1. PROJECT AREA IMAGERY: AERIAL IMAGERY SUPPLIED BY LIDAR SERVICES INTERNATIONAL AND COLLECTED ON JUN 19, 2023.  
 2. PROJECTION: NAD 1983 CSRS UTM ZONE 8N, TRANSVERSE MERCATOR

CLIENT  
**SHELL CANADA LIMITED**

PROJECT  
**CAMP FAREWELL  
 INUVIALUIT SETTLEMENT REGION  
 NORTHWEST TERRITORIES**

TITLE  
**SITE LOCATION PLAN**

CONSULTANT	YYYY-MM-DD	2026-01-26
	DESIGNED	S.VILLENEUVE
	PREPARED	C.MEDINA
	REVIEWED	J.KRIZAN
	APPROVED	T.GRENDUS

PROJECT NO. CA0059450.0068    PHASE - TASK 2000-2607    REV. 0    FIGURE 1

PATH: S:\Client\Shell\Camp\_Farewell\B99\_PROD\CA0059450\_0068\40\_PROD\2020\2607\CA0059450\_0068\2000\_2607\HS-XXX.apr. PRINTED ON: AT: 12:44:43 PM

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

**wsp**

**wsp.com**