

Shell Canada Limited

Suite 4000, 500 Centre Street SE Calgary, Alberta T2G 1A6 Internet www.shell.ca

September 4, 2025

## Bijaya Adhikari, PhD

Science and Regulatory Coordinator Inuvialuit Water Board P.O. Box 2531, Inuvik, NT X0E 0T0

Tel: (867) 678–8610 Fax: (867) 678–2943

Email: adhikarib@inuvwb.ca

RE: INFORMATION REQUEST RESPONSES FOR WATER LICENCE APPLICATION N5L8-1848, SOIL REMEDIATION AT THE FORMER UNIPKAT I-22 WELLSITE, INUVIALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES – SHELL CANADA LIMITED

Please find attached responses, and applicable Water Licence Application documents, to the Inuvialuit Water Board's Information Request dated July 25, 2025, concerning water licence application N5L8-1848 for soil remediation at the former Unipkat I-22 wellsite, in the Inuvialuit Settlement Region, Northwest Territories.

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

Sincerely,

**Kyle Thompson** 

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

External Relations Advisor Shell Canada Limited Office (403) 384-5893 Mobile (250) 329-4094

E-mail - Dave.Kliewer@shell.com

Attachments: Information Request Responses for Water Licence Application N5L8-1848 for Soil Remediation at the Former Unipkat I-22 Wellsite, in the Inuvialuit Settlement Region, Northwest Territories – Shell Canada Limited



4 September 2025

Project No. CA0042726.0037

## Bijaya Adhikari, PhD

Science and Regulatory Coordinator Inuvialuit Water Board P.O. Box 2531, Inuvik, NT X0E 0T0

Tel: (867) 678-8610 Fax:(867) 678-2943

Email: adhikarib@inuvwb.ca

INFORMATION REQUEST RESPONSES FOR WATER LICENCE APPLICATION N5L8-1848 – SOIL REMEDIATION AT THE FORMER UNIPKAT I-22 WELLSITE, INUVIALUIT SETTLEMENT REGION, NORTHWEST TERRITORIES – SHELL CANADA LIMITED

Thank you for your Information Request (IR) dated 25 July 2025. On behalf of Shell Canada Limited (Shell), WSP Canada Inc. (WSP) is providing responses to the Inuvialuit Water Board (IWB) IR questions below and updated Water Licence Application documents attached to this letter. A summary table indicating how and where (e.g., document name, page and section numbers) the requested information was addressed is provided in Table 1.

#### A. Water Licence Application Fee and Water Use Fee:

1. The water licence fee was not included with the water licence application package received by the IWB on June 16, 2025. On the same day, IWB staff sent a letter to the applicant (i.e. Shell Canada Limited) requesting the submission of the \$30.00 water licence application fee to the IWB, by cheque payable to the GNWT - Department of Finance. As of today, the IWB has not received the water licence application fee. This fee is required for further processing of the water licence application. Please submit the water licence fee as outlined in the IWB correspondence sent to the applicant on June 16, 2025. If the fee has already been submitted directly to the GNWT - Department of Finance, the IWB requires a copy of the receipt for the IWB Public Register.

Response: The water licence application fee (\$30) and water use fee (\$138.60) were remitted to the GNWT Department of Finance by credit card on 19 June 2025. A copy of the receipt in the amount of \$168.60 is provided in Appendix A.

2. The water licence application package includes a water use fee calculator indicating a water use fee of \$138.60. The water use fees were not included with the water licence application fee and submission package. IWB staff distributed correspondence to the applicant (i.e. Shell Canada Limited) on June 16, 2025 requesting submission of the water use fees by cheque payable to the GNWT - Department of Finance. As of today, the IWB has not received the water use fees. Please submit the water use fees as

4 September 2025

outlined in the IWB correspondence dated June 16, 2025. If the fees have already been submitted directly to the GNWT - Department of Finance, the IWB requires a copy of the receipt for IWB Public Register.

Response: The water licence application fee (\$30) and water use fee (\$138.60) were remitted to the GNWT Department of Finance by credit card on 19 June 2025. A copy of the receipt in the amount of \$168.60 is provided in Appendix A.

# B. Project Description (PD):

1. Page 5, section 5.2.1, Paragraph 1 states: "Accommodations for the crew during soil remediation (summer / fall of 2025 to the summer / fall of 2026) and wood piling removal (planned for winter 2028) may either be provided by a self-contained barge camp or a self-contained winter camp (Figure A5, Appendix A)".

Appendix A, Figure A5 does not indicate the location of the self-contained barge camp and / or the self-contained winter camp on land and on ice. Please provide an updated Figure A5 showing the locations of the self-contained barge camp and the self-contained winter camp, both on land and / or on ice, including Global Positioning System (GPS) coordinates in Degrees, Minutes, Seconds (OMS) format (Latitude and Longitude). Note: Due to potential inconsistencies among individual GPS units, it is recommended to use Google Earth latitude and longitude values as the GPS points.

Response: The proposed locations of the self-contained barge camp and / or the self-contained winter camp on land and on ice is delineated by black dashed lines in Figure A5. The Coordinate Table in Figure A5 is updated to include the coordinates for the proposed locations as shown on the figure (i.e., coordinates A1 to A4, B1 to B4, and C1 to C4). Updated Figure A5 is provided in Appendix B. Note that the locations and coordinates on updated Figure A5 are proposed locations based on historical site reconnaissance; they are however subject to change based on site conditions at the time of execution. An updated Figure A5 (and coordinates table) will be provided if different locations are selected due to site conditions.

2. Page 6, section 5.2.4, bullet 4 states that "The ETC treatment process involves the transfer of a heated airstream (typically between 300 and 450 degrees Celsius [°C]) to volatilize and destroy PHCs in soil whose concentrations are above the proposed SQOs".

The elevated temperatures (typically ranging from 300 to 450°C) may cause changes in the physical properties of the soil, including a loss of organic matter, which can inhibit soil biological activity and vegetation re-growth. Consequently, this change may alter the site hydrology (e.g., runoff, soil erosion kinetics, etc.) of the backfilled area. The modification to site hydrology could negatively impact adjacent water bodies due to increased erosion and soil loss.

Please provide a description of the potential impacts of the backfilled ETC treated soil on site hydrology, the subsequent effects on adjacent water bodies and the proposed mitigation and monitoring measures.

Response: As described in Section 7.1.1.1.2 of the Remedial Action Plan, submitted with the Water License Application, soil samples were collected in 2024 and analyzed for total organic carbon (TOC) to evaluate the effect of the ETC treatment on natural soil carbon content. Minimal natural organic matter was present in the samples and distinct, segregated layers of organic soil (i.e., topsoil) or peat have not been observed in the remediation area or elsewhere at the Site to a significant degree. Based on the already low level of organic



4 September 2025

carbon in the soil, it is unlikely that any natural carbon losses via the ETC cycle will consequentially inhibit the regulation of nutrient supply or microbial activity once moisture content is restored.

Results from other Sites, where ETC has been used, demonstrate that the treated soil is both geotechnically stable and capable of supporting sustainable vegetative growth of equivalent capability to baseline conditions. The proposed operational temperatures are not high enough to affect soil texture or the concentration of mineral content of the soil (i.e., the treatment product is moisture deficient soil as opposed to "ash" produced via higher temperature treatments such as combustion or incineration). Following treatment and prior to its use as backfill (if temperatures allow), the soil will be re-hydrated, for both cooling and compaction purposes. Backfilling will occur in lifts, with nominal compaction. Once the final lift of backfill has been placed and compacted, the area will be graded to promote positive drainage and revegetated according to the reclamation plans for the Site.

Care will be taken to keep slopes in the remediation area as flat as possible (i.e., between 1 and 5%) to increase stability and decrease susceptibility to erosion. Grading and final surface compaction will be completed in thawed conditions to reduce potential for slumping, ponding of water, or changes in grade that may promote erosion. Erosion control measures (e.g., mats, blankets, or silt fences/curtains) will be implemented downgradient of the remediation area to mitigate potential sedimentation effects to the Arvoknar Channel, as determined by the Project Engineer. The erosion control measures will be placed in field verified locations and maintained/inspected daily throughout construction activities. Inspections will also be conducted following precipitation events.

3. Page 7, bullet 6 states: "Soil that does not meet the proposed site specific SQOs following subsequent treatment will be placed in closed 1 m<sup>3</sup> mega sacks and staged temporarily in the secondary containment (i.e., fuel storage area [Figure A5, Appendix A]. ......

Please clarify whether the secondary containment capacity of the fuel storage area will be designed to accommodate the combined containment requirements for both fuel and mega sacks of soil. Additionally, a contingency plan is required to manage fuel-impacted soil in the event of a fuel spill.

Response: Section 4.0 and of the Spill Contingency Plan is updated with the following text to address IR question B.3. Please refer to the updated Spill Contingency Plan Rev 1 (Appendix C).

- "The fuel storage and refueling areas will be bermed with a containment volume of at least 110% of the total volume of stored fuel. The containment capacity will be increased, as required, to accommodate soil storage (i.e., soil in which CoC concentrations do not meet SQOs objectives, post-treatment) through the life of the Project.
- Post-treatment soil that does not meet SQOs will be temporarily stored in the fuel storage area pending removal from Site for off-site disposal at KBL Environmental Ltd. or Secure Energy's Fox Creek facility in Alberta. The soil storage area will be bermed off from the fuel storage portion of the secondary containment (i.e., bermed soil storage for disposal in Figure A3) to minimize the possibility of impacts from a fuel spill at the fuel storage area. In the unlikely event that a fuel spill reaches the soil storage area, part of the clean up activities will be to re-treat the soil using ETC prior to off-site disposal."

Section 6.2.2 of the Spill Contingency Plan has been updated with the following text to further address IR question B.3. Please refer to the updated Spill Contingency Plan Rev 1 (Appendix C).

"Soil or water impacted by a fuel spill will be treated using the on-site ETC and water treatment systems. Post-treatment soil that does not meet SQOs after subsequent treatment will be temporarily stored in the bermed



area adjacent to but separated from the bermed fuel storage area (i.e., bermed soil storage area for disposal) pending removal from Site for off-site disposal (Section 4.0)."

- 4. Appendix A, Figure A5 indicates the location of the "Temporary Soil Storage" area. However, it is unclear whether this area is intended for:
- soil excavated prior to ETC treatment, or
- ETC treated soil prior to backfilling, or
- soil that does not meet the proposed site-specific SQOs following ETC treatment.

Please clarify.

Additionally, indicate the temporary soil storage locations for each of the following on Appendix A, Figure A5:

- 1) Soil excavated prior to ETC treatment,
- 2) ETC treated soil prior to backfilling, and
- 3) Soil that does not meet the proposed site-specific SQOs following ETC treatment.

Please include Global Positioning System (GPS) coordinates in Degrees, Minutes, Seconds (OMS) format (Latitude and Longitude). Note: Due to potential inconsistencies among individual GPS units, it is recommended to utilize Google Earth latitude and longitude as the GPS points.

Response: The Temporary Soil Storage Area will be separated into two areas by berms, to store either treated or untreated soils and they will not be allowed to come into contact with one another. Soil for off-site disposal (soil with barite concentrations above the SQOs, or soil with PHC concentrations above the SQOs after ETC treatment) will be temporarily stored in the bermed soil storage area for disposal. Figure A5 is updated to clarify this and is provided in Appendix B. Note that the locations and coordinates on updated Figure A5 are proposed locations based on historical site reconnaissance; they are however subject to change based on site conditions at the time of execution. A subsequent updated Figure A5 (and coordinates table) will be provided if different locations are selected once at site due to site conditions.

5. Page 71, Section 16.0, Table V, Row 10 indicates "ECT - Fuel." Please clarify whether this refers to "Enhanced Thermal Conduction (ETC) - Fuel".

Response: Correct, ECT-Fuel does refer for Enhanced Thermal Conduction (ETC) - Fuel.

## C. Remedial Action Plan (RAP):

1. Page ii, Executive Summary, paragraph 1: The GPS coordinates of the project site are listed as 69°11'37.00"N latitude and 135°20'36.95"W longitude. However, the GPS coordinates provided in Schedule C, Section 3, and in the Project Description (Page 1, Section 4.1) are 69°11 '36.07" N latitude and 135°20'33.88" W longitude. Please clarify these discrepancies.

Response: The GPS locations provided in both the Remedial Action Plan and the Project Description are within the historical working area of the Site. For consistency, the Executive Summary of the Remedial Action Plan is



4 September 2025

updated with the same GPS coordinates as the Project Description to address IR question C.1. Please refer to the amended text in the Remedial Action Plan Addendum 1, Executive Summary (Appendix D).

"The former Shell Unipkat I-22 wellsite (the Site) is 115 kilometres (km) northwest of Inuvik, Northwest Territories (NWT) in the Inuvialuit Settlement Region (ISR) (69°11'36.07"N latitude and 135°20'33.88"W longitude), within the Mackenzie Delta. The former operating area of the Site had an approximate area of 3.3 hectares (ha) and is surrounded by tundra to the north, east and west, as well as the Arvoknar Channel to the south (Figure 1)."

2. Page 4, Paragraph 3 describes the remediation activities conducted in 2011 and mentions the issue of river water seeping into the excavation, filling it, and halting the work. If a similar issue arises during the upcoming proposed excavation of contaminated soil, please describe the preventive and mitigation measures that will be implemented.

Response: The 2011 Stage 1 remediation included remediation of a camp sump, flare pit and drilling waste sump. These areas were either directly adjacent to the riverbank at the time, or within 5 m of the riverbank. Additionally, the past excavations reached depths of up to 4.5 meters below ground surface (mbgs). While the currently planned excavation has a small area within 5 m of the current riverbank (for targeted barite removal, southern most dashed blue area in Figure A5 [Appendix B]), the main excavation area is approximately 8 m north of the most recently measured shoreline and is expected to have a maximum depth of approximately 3 mbgs. The excavation areas closest to the current riverbank are expected to be completed to a depth of approximately 2 mbgs. While this depth is below the most recently measured surface water level (approximately 1.5 mbgs as of August 2025), the larger distance from the current shoreline and shallower excavation depth compared to the 2011 remediation is expected to reduce the likelihood of water infiltration.

Section 9.2.1 of the Remedial Action Plan is updated. A summary of the text added to Section 9.2.1 is provided below to address IR question C.2. Please refer to the complete amended text in the Remedial Action Plan Addendum 1, Section 9.2.1 (Appendix D).

"In the event, however, that water infiltration is encountered (either from surface runoff or river water infiltration) it is expected that a water treatment methodology approved under IWB Water Licence N5L8-1846 for a similar remediation currently being completed at the Former West Channel Staging Site (West Channel) may be employed, if approved. This treatment method involves utilizing waste heat from the ETC cells to heat the water through a quench tower system. Water may be input into the quench system either in an "intermittent/on-demand" or "continuous flow" process, depending on the water volume. The water that is sprayed into the thermal oxidizer's 1,000 to 1,250 °F (540 to 680 °C) air stream where 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 carbon dioxide). Any suspended solids in the water drop out and remain on site for treatment in the ETC system."

3. Page 25, the text below Table J states: "Although source excavation is common to both ETC and off-site disposal, soil hauling is expected to result in increased greenhouse emissions as compared to a remedial option on-site treatment". PD, Page 71, Section 16.0, Table V, provides the estimated GHG emissions for on-site treatment using the ETC soil treatment method, with a total estimated GHG emissions of 4,330 tonnes CO<sub>2</sub>e. For the support of statement, is there a corresponding estimate for GHG emissions associated with off-site disposal for comparison with the on-site ETC treatment?

Response: Section 5.1 of the Remedial Action Plan is updated with the following text to address IR question C.3. Please refer to the amended text in the Remedial Action Plan Addendum 1, Section 5.1 (Appendix D).



"If an off-site disposal option were to be pursued, carbon dioxide equivalent (CO<sub>2</sub>-e) emissions for the transportation of the soil to an out of territory landfill would be approximately 1,800 tonnes CO<sub>2</sub>-e, compared to the estimated 1,045 tonnes CO<sub>2</sub>-e resulting from the ETC treatment component of the project. This would increase the overall estimated CO<sub>2</sub>-e emissions for the project to 5,084 tonnes CO<sub>2</sub>-e."

4. Page 26, section 5.2, last paragraph states: "Given the low volume of soil exceeding the proposed SQOs for barite, no backfill is expected to be required and the excavated areas will be recontoured using balanced grading".

Is there a contingency plan for borrow source requirements if volumes of soil containing barite exceeds the expected volume and requires backfill material while doing real onsite soil excavation? If the use of a borrow source is expected as a contingency, please indicate the location of the potential borrow source on Appendix A, Figure A5, including Global Positioning System (GPS) coordinates in Degrees, Minutes, Seconds (OMS) format (Latitude and Longitude). Note: Due to potential inconsistencies among individual GPS units, it is recommended to utilize Google Earth latitude and longitude as the GPS points.

Response: Establishment of a borrow source is not currently planned. The remediation plan is for off-site disposal of approximately 100 m³ of soil containing barite at concentrations above the SQOs and on-site ETC soil treatment of soil containing PHCs at concentrations above the SQOs. Given the successful results of ETC treatment at another site (e.g. West Channel, under IWB Water Licence N5L8-1846) as well as the contingency to process recalcitrant soil through the treatment process multiple times until the SQOs are met, the amount of soil to be potentially hauled off site is not anticipated to be significant enough to require backfill to be imported to the Site; therefore, the development of a borrow site is not anticipated. The bench-scale testing planned for the Site (as described in Section 7.1.1.1.1 of the Remedial Action Plan submitted with the Water Licence Application) is ongoing and the results are not yet available. The results of this testing will determine the applicability of the ETC technology at the Site and the possible need for off-site disposal of soil containing PHCs at concentrations above the SQOs and subsequent need for a source of clean backfill material. If off-site disposal of soil containing PHCs or barite at concentrations above the SQOs is required in such a quantity that the site cannot be levelled through balance grading, then a source of backfill will be identified, either from an operating quarry in the ISR or a Quarrying Permit application may be submitted to the GNWT ECC for approval and the Reclamation, Closure and Monitoring Plan (RC&MP) including all relevant figures will be revised at that time.

5. Page 26, section 6.1, Paragraph 2 states: "To accommodate personnel on site, it is anticipated that a barge camp will be transported via the Mackenzie River (and connected channels) to the site prior to freezing conditions. A winter camp may be used instead, either on land or on river ice".

Please provide an updated Figure A5 under Appendix A, showing the location of the self-contained barge camp and the self-contained winter camp on land and on river ice, including Global Positioning System (GPS) coordinates in Degrees, Minutes, Seconds (OMS) format (Latitude and Longitude). Note: Due to potential inconsistencies among individual GPS units, it is recommended to utilize Google Earth latitude and longitude as the GPS points.

Response: The proposed locations of the self-contained barge camp and / or the self-contained winter camp on land and on ice is delineated by black dashed lines on the updated Figure A5. The Coordinate Table in Figure A5 is updated to include the coordinates for these proposed locations (i.e., coordinates A1 to A4, B1 to B4, and C1 to C4). The updated Figure A5 is provided in Appendix B. Note that the locations and coordinates on updated



Figure A5 are proposed locations based on historical site reconnaissance; they are however subject to change based on site conditions at the time of execution. The updated Figure (which is Figure 12 in the Remedial Action Plan) has also been added to Remedial Action Plan Addendum 1 (Appendix D). If locations change due to site conditions at the time of execution, an updated Figure A5 will be provided to reflect actual locations.

6. Page 27, section 6.1, last paragraph states: "The Site is known to flood during freshet, and as such, if remedial activities coincide with this timeframe, activities at the Site will be temporarily halted".

If the excavated area, contaminated soil staging area, soil treatment area and contact water storage area becomes flooded, there is a risk that contaminants could be washed into adjacent water bodies. If this worst-case scenario occurs, what contingency plan for preventive and mitigative measures will be implemented to protect such worst-case scenario.

Response: Section 6.1 of the Remedial Action Plan is updated with the following text to address IR question C.6. Please refer to the amended text in the Remedial Action Plan Addendum 1, Section 6.1 (Appendix D).

"While the estimated treatment duration is expected to be approximately 60 days, delays in startup or during excavation and treatment of soil may necessitate an extended project duration. The Site is known to flood during freshet, and as such, should the remediation extend into an additional season, the Site will be prepared for freshet. Mitigation measures may include increasing berm height in the soil staging, treatment and contact water storage areas, or emptying the bermed areas and treating residual soils prior to demobilization depending on the remediation progression. The excavation will be progressed in a manner that targets areas closest to the Arvoknar Channel first and backfilling as the excavation progresses to preserve the maximum distance between residual contaminated soil and the shoreline. If an excavation is left open, it is expected that the open excavation will, at a minimum, be backfilled to above the groundwater level observed and surface water runoff collected within the excavation during freshet will be extracted and treated as described in Section 9.2.1 of the Remedial Action Plan to meet the applicable guidelines prior to discharge."

7. Page 34, second paragraph from top of the page states: "The thermal oxidizer is operated such that minimum temperatures in the chamber, combined with chamber volume / residence time during treatment allows for CoC destruction efficiencies of greater than 99%. This will be verified through data collected by the treatment contractor at regular intervals (i.e., a datalogger set at 30-minute intervals) from airflow and temperature sensors (see Appendix F for an example) within the thermal oxidizer exhaust. In addition, air quality measurements will be collected using hand-held photoionization detectors twice daily during operational time in the predominant downwind direction of the exhaust".

The air quality parameters to be measured are not specified. For additional clarity, please provide a description of the parameters to be monitored (i.e. off-gas CoCs). This information will help confirm that the thermal oxidizer is operating optimally for the destruction of CoCs and that off-gases are not releasing CoCs into the atmosphere or depositing them aerially into the adjacent water body.

Response: Section 7.1.1.1 of the Remedial Action Plan is updated with the following text to address IR question C.7. Please refer to the amended text in the Remedial Action Plan Addendum 1, Section 7.1.1.1 (Appendix D).

"Off-gassing from the treatment process is managed through a single exit point in each treatment unit, diverting gasses for treatment via thermal oxidation and discharge. The thermal oxidizer is operated such that minimum temperatures in the chamber, combined with chamber volume/residence time during treatment allows for CoC



4 September 2025

destruction efficiencies of greater than 99%. Data collected during the thermal oxidizer's operations include airflow and temperature sensors (see Appendix F [in the Remedial Action Plan submitted with the Water Licence Application] for an example) within the thermal oxidizer exhaust. In addition to the operational data being collected, perimeter air monitoring of volatile organic compound (VOC) concentrations will be completed using hand-held photoionization detectors twice daily during operational time in the predominant downwind direction of the exhaust. Visual observation of opacity of the exhaust is conducted and recorded throughout soil treatment. Condensation plumes from moisture in the process are typically visible, particularly in ambient air temperatures below 0°C."

8. Page 41, section 8.3 states that "Wastewater is expected to be limited to sewage from portable washroom facilities. The proposed barge camp will include water and sewage tanks mobilized from and back to Inuvik for disposal during and at the completion of the project".

It is unclear whether "sewage" in this context includes both toilet waste and greywater. Other associated documents, such as the Waste Management Plan (Page 8, Section 3.2) refer to "sewage and greywater." For consistency and clarity, the statement on Page 41, Section 8.3 should be revised.

Response: Section 8.3 of the Remedial Action Plan is updated with the following text to address IR question C.8. Please refer to the amended text in the Remedial Action Plan Addendum 1, Section 8.3 (Appendix D).

"Wastewater is expected to be limited to sewage and greywater from portable washroom and kitchen facilities. The proposed barge or winter camp will include water and combined sewage / greywater tanks mobilized from and back to Inuvik for disposal during and at the completion of the project. Camp use of potable water is not expected to exceed a volume of 50 cubic metres (m³) per day."

## D. Wildlife Management and Monitoring Plan (WMMP):

1. Page 19, Section 6.0, Bullet 3 states: "For bear encounters, the GNWT's Bear Encounter Response Guidelines will be followed, including completion of the Bear Complaint Checklist (Appendix B)".

The information under "Contacts" and "Response Personnel" listed in Appendix B, Bear Encounter Response Guidelines, Section 111, may be outdated.

Please contact the GNWT ECC Regional Office in Inuvik- Wildlife and Forestry at 1-867-678-8091 ext. 53661 to verify whether the "Contacts" and "Response Personnel" information in Appendix B, Section III are still valid. If the information is outdated, please include updated contact details under Page 19, Section 6.0, Bullet 3. Up-to-date contact information is essential for reporting human-wildlife incidents.

Response: The Bear Encounter Response Guidelines have been removed from Appendix B and references to the Bear Encounter Response Guidelines have been removed from the text of the Wildlife Management and Monitoring Plan Rev 2 to address IR question D1. Please refer to the amended text in the Wildlife Management and Monitoring Plan Rev 2, various sections (Appendix E, attached).

The Bear Complaint Checklist remains in Appendix B and will continue to be completed, as applicable. The current contact information, to be used by field staff, for the GNWT ECC Regional Office in Inuvik and the GNWT ECC Wildlife Emergency are listed at the end of Section 6.0 of the Wildlife Management and Monitoring Plan.



4 September 2025

### E. Waste Management Plan (WMP):

1. Page 5, section 3.1 states: "Construction materials and other non-hazardous (domestic) waste will be stored temporarily at the Site inside the office trailer and / or inside the barge or winter camp (Figure A3, Appendix A), ......".

Figure A3 in Appendix A does not indicate the location of the office trailer, barge camp and winter camp on land or on river ice. Please indicate the location of the office trailer, barge camp and winter camp on land and on river ice, including Global Positioning System (GPS) coordinates in Degrees, Minutes, Seconds (OMS) format (latitude and longitude). Note: Due to potential inconsistencies among individual GPS units, it is recommended to utilize Google Earth latitude and longitude as the GPS points.

Response: The proposed locations of the office trailer, self-contained barge camp and / or the self-contained winter camp on land and on ice are delineated with solid black and black dashed lines, respectively in Figure A3. The Coordinate Table in Figure A3 of the Waste Management Plan Rev 1 (Appendix F) is updated to include the coordinates for these proposed locations as previously depicted on the figure. Note that the locations and coordinates on updated Figure A3 are proposed locations based on historical site reconnaissance; they are however subject to change based on site conditions at the time of execution. An updated Figure A3 (and coordinates table) will be provided if different locations are selected due to site conditions.

2. Appendix A, Figure A3 indicates location of "Water Treatment System." Please clarify whether this refers to the "Activated Carbon Water Treatment System".

Response: Yes, it is the same. The Water Treatment System in Figure A3 of the Waste Management Plan Rev 1 (Appendix F) has been re-labeled as the "Activated Carbon Water Treatment System".

Appendix B includes the email approval from the Water Resource Officer, GNWT Environment and Climate Change (ECC), Inuvik Region. The Town of Inuvik holds a Water Licence (#G17L3-001) for water use and waste disposal. To confirm the Town of Inuvik's acceptance of such waste, please provide the IWB with copies of a Third Party Agreement or letters between the applicant (i.e. Shell Canada Limited) and third parties (i.e. the Town of Inuvik) in which the third parties agree to dispose of each type of construction material and other non-hazardous (domestic) waste at the Inuvik Municipal Solid Waste Disposal Facility, including:

- type and estimated quantities of each waste; and
- disposal location(s) and proof of acceptance from third parties.

Response: The type and estimated quantities of waste are listed in Table A of the Waste Management Plan provided with the Water Licence Application. A letter from the Town of Inuvik accepting non-hazardous waste at the Solid Waste Disposal Facility now appears in Appendix B of the Waste Management Plan Rev 1 (Appendix F).



Bijaya Adhikari, PhD Project No. CA0042726.0037

4. Page 5, Section 3.1 states: " ... will be transported periodically ... ". Please provide clarification on whether the waste will be transported daily, weekly, bi-weekly or monthly.

Response: Section 3.1 of the Waste Management Plan is updated with the following text to address IR question E.4. Please refer to the updated Waste Management Plan Rev 1, Section 3.1 (Appendix F).

"Construction materials and other non-hazardous (domestic) waste will be stored temporarily at the Site inside the office trailer and/or inside the barge or winter camp (Figure A3, Appendix A) and will be transported at the end of each field season, at a minimum, to be disposed of at an approved landfill facility in Inuvik."

5. Page 6, section 3.1.1 describes a pre-existing incinerator installed on-board the barge camp for incineration of non-hazardous (domestic, combustible solid waste produced during the camp operation). The PD (Page 17, section 6.3.1, Paragraph 1 states: "To accommodations for the crew during soil remediation (summer / fall of 2025 to the summer / fall of 2026) and wood pilling removal (planned for winter 2028) may either be provided by a self-contained barge camp or a self-contained winter camp (Figure A5, Appendix A)".

Please clarify whether the winter camp on land and on river ice will utilize an incinerator for the incineration of non-hazardous (domestic), combustible solid waste generated during winter camp operations on land and on river ice. If yes, provide the following information:

- Specifications of the incinerator to be used at the winter camp;
- Operational procedures for the incinerator;
- Bottom ash testing protocols; and
- Disposal location(s) for incinerator bottom ash.

Response: Please refer to the existing text in paragraph 3 of Section 3.1.1 of the Waste Management Plan provided with the Water Licence Application. The incinerator is only proposed for use on the barge camp, as it is a pre-existing installation on the barge. No incineration of waste will occur if a winter camp on land or on river ice is utilized.

6. Page 6, Incinerator Ash Testing and Disposal, line 3 states: "Based on the test results, ash will be classified and then transported and disposed of accordingly". Please provide a copy of the agreement between the applicant (i.e. Shell Canada Limited) and the licensed facility that will accept and dispose of the incinerator bottom ash.

Response: Section 3.1.1 of the Waste Management Plan has now been updated with the following text to address IR question E.6. Please refer to the updated Waste Management Plan Rev 1, Section 3.1.1 (Appendix F).

"Based on the test results, ash will be classified and then transported and disposed of accordingly, either at an approved landfill facility in Inuvik, with KBL Environmental Ltd. [KBL], or at Secure Energy's Fox Creek facility in Alberta. Approval from the Town of Inuvik, KBL and Secure Energy are provided in Appendix B. Final disposition will be determined by characterization data provided by the analytical laboratory."

7. Page 8, section 3.2, Paragraph 1 states: "Soil that does not meet the SQQ for PHCs following secondary treatment will be stockpiled for off-site disposal at an appropriately licensed solid waste management



4 September 2025

facility (e.g. Secure Energy's Fox Creek facility in Alberta or a similar facility in British Columbia) via winter road or barge, depending on quantity. Soils containing barite above the proposed SQOs will be excavated for off-site disposal at an approved facility outside the NWT".

The Waste Management Plan (Appendix B) includes an acceptance letter from KBL for all waste streams and criteria. However, the text on Page 8, Section 3.2, Paragraph 1 refers to Secure Energy's Fox Creek facility in Alberta or a similar facility in British Columbia. A copy of the Third Party Agreement or letters between the applicant (i.e. Shell Canada Limited) and the third party (i.e. Secure Energy's Fox Creek facility in Alberta or a similar facility in British Columbia) is not included in Appendix B.

Please provide the IWB with copies of a Third Party Agreement or letters between the applicant (i.e. Shell Canada Limited) and the third party (e.g. Secure Energy's Fox Creek facility in Alberta or a similar facility in British Columbia) in which the third party agrees to accept and dispose of PHC contaminated soil and barite contaminated soil. Each agreement or letter should include:

- type (e.g. PHC contaminated soil, barite contaminated soil) and estimated quantities of each soil type; and
- disposal location(s) and proof of acceptance from third parties.

Response: The type and estimated quantity of soil containing barite at concentrations above the SQOs is listed in Table A of the Waste Management Plan provided with the Water Licence Application. It is not possible to estimate the volume of soil containing PHC at concentrations above the SQOs that will require off-site disposal as this will depend on the success of the ETC treatment process. However, based on experience at other sites (e.g., West Channel under IWB Water Licence N5L8-1846), this soil volume will be minimal. A letter from Secure Energy accepting contaminated soil at the Fox Creek facility (in Alberta) is provided, in addition to the letter from KBL, in Appendix B of the Waste Management Plan Rev 1 (Appendix F).

- 8. For the disposal of all hazardous waste expected to be generated during project activities, as described on Page 8, Section 3.2, Paragraphs 2, 3, and 4, please provide the IWB with copies of Third Party Agreements or letters between the applicant (i.e. Shell Canada Limited) and the third party (e.g. Secure Energy's Fox Creek facility in Alberta or a similar facility in British Columbia) confirming that the third party has agreed to accept and dispose of the hazardous waste specified in those sections. Each agreement or letter should include:
- type and estimated quantities of each hazardous waste; and
- disposal location(s) and proof of acceptance from third parties.

Response: The type and estimated quantities of waste are listed in Table A of the Waste Management Plan provided with the Water Licence Application. A letter from Secure Energy accepting hazardous waste at the Fox Creek facility (in Alberta) is provided, in addition to the letter from KBL, in Appendix B of the Waste Management Plan Rev 1 (Appendix F).

9. Page 8, section 3.2, Paragraph 5 states: "Greywater and sewage will be stored in the camp's holding tanks. Grey water and sewage will be securely transported for disposal at the licensed facility in Inuvik. The Inuvik Sewage Lagoon Facility is aware of the upcoming grey water and sewage disposal requirements for the Project. Approval from the local Authority is provided in Appendix B".



4 September 2025

Project No. CA0042726.0037 4 September 2025

The Waste Management Plan (Appendix B) includes an email approval from the Water Resource Officer, GNWT ECC, Inuvik Region. The Town of Inuvik holds a Water Licence (#G17L3-001) for water use and waste disposal. To further confirm the Town's acceptance of greywater and sewage, please provide the IWB with a copy of the Third Party Agreement or letter between the applicant (i.e. Shell Canada Limited) and the third party (i.e. Town of Inuvik) confirming that the Town has agreed to accept greywater and sewage generated from the barge camp and the winter camp, located on land or on river ice, into the Inuvik Municipal Sewage Disposal Facility. Each agreement or letter should include:

- type and estimated quantities of each waste; and
- disposal location(s) and proof of acceptance from third parties.

Response: The type and estimated quantities of waste are listed in Table A of the Waste Management Plan provided with the Water Licence Application. A letter from the Town of Inuvik accepting sewage/greywater at the Inuvik sewage lagoon is provided in Appendix B of the Waste Management Plan Rev 1 (Appendix F).

10. Page 8, section 3.2, Paragraph 6 states: "Solid waste generated from the wood pilings removal activities is expected to include a mix of wood piling debris and soil. It is estimated that the volume of waste generated by the wood pilings removal activities will be approximately 1.5 m<sup>3</sup> / piling. During the Project, the wood piling debris will be removed and transported to Inuvik for final off-site disposal at an appropriately licensed solid waste management facility (e.g. Secure Energy's Fox Creek facility in Alberta or a similar facility in British Columbia)".

Please provide the IWB with a copy of the Third Party Agreement or letters between the applicant (i.e. Shell Canada Limited) and a third party (e.g. Secure Energy's Fox Creek facility in Alberta or a similar facility in British Columbia) confirming that the third party has agreed to accept and dispose of the mixed wood piling debris and soil described in the Waste Management Plan (Page 8, Section 3.2, Paragraph 6). Each agreement or letter should include:

- type and estimated quantities of each waste; and
- disposal location(s) and proof of acceptance from third parties.

Response: The type and estimated quantities of waste are listed in Table A of the Waste Management Plan provided with the Water Licence Application. A letter from Secure Energy accepting hazardous waste at the Fox Creek facility (in Alberta) is provided, in addition to the letter from KBL, in Appendix B of the Waste Management Plan Rev 1 (Appendix F).

#### F. Spill Contingency Plan (SCP):

1. Appendix A, Figure A3 indicates the location of "Temporary Soil Storage." Please clarify whether this is the staging area for excavated soil (i.e. soil prior to ETC treatment).

Response: The Temporary Soil Storage Area will be separated into two areas by berms, to store either treated or untreated soils and which will not be allowed to come into contact with one another. Figure A3 is updated in the Spill Contingency Plan Rev 1 (Appendix C, attached) to reflect this separation. Note that the locations and coordinates on updated Figure A3 are proposed locations based on historical site reconnaissance; they are



Bijaya Adhikari, PhD Project No. CA0042726.0037

however subject to change based on site conditions at the time of execution. A subsequent updated Figure A3 (and coordinates table) will be provided if different locations are selected once on site due to site conditions.

2. Appendix A, Figure A3 indicates the "Direction of Water Channel Flow." Please clarify whether this is the Arvoknar Channel. Figure A1 indicates the Mackenzie River. If the channel shown is the Arvoknar Channel of the Mackenzie River, please label it accordingly on the figures in Appendix A.

Response: Figures A1 and A3 are updated and are provided in the Spill Contingency Plan Rev 1 (Appendix C).

- 3. Indicate the following additional features on Figure A3 under Appendix A:
- Flow direction of leachate from untreated soil stockpile, contaminated soil staging area and flow direction of ponded water from proposed contaminated soil excavation area, all surface water bodies and direction of water flow.
- Storage locations of each hazardous material; probable spill locations and direction of flow on land and in water.
- Locations of all emergency and spill response equipment.
- Indicate proposed temporary locations of barge camp, winter camp on land and on river ice, office trailer, excavated soil prior to ETC treatment, ETC treated soil prior to backfilling, contaminated soil that does not meet the SQO after ETC treatment, and barite contaminated soil including Global Positioning System (GPS) coordinates of all features in Degrees, Minutes, Seconds (OMS) format (latitude and longitude). Note: Due to potential inconsistencies among individual GPS units, it is recommended to utilize Google Earth latitude and longitude as the GPS points.
- Environmentally sensitive areas; and any other important on or off-site features.

Response: Figure A3 is updated and is provided in the Spill Contingency Plan Rev 1 (Appendix C). Note that the locations and coordinates on updated Figure A3 are proposed locations based on historical site reconnaissance; they are however subject to change based on site conditions at the time of execution. A subsequent updated Figure A3 (and coordinates table) will be provided if different locations are selected once on site due to site conditions.

Leachate from untreated soil stockpiles, contaminated soil staging area and ETC treatment area will be collected from within the bermed areas and treated as described in Section 9.2.1 of the Remedial Action Plan Addendum 1 (Appendix D).

- 4. Page 6, Section 2.3 describes the approximate capacity of the heated sewage tank for the barge camp and the sewage tank for the winter camp. Please clarify the following:
- Confirm whether the sewage tank is intended to hold both sewage and greywater.
- Provide a worst-case scenario description of a sewage / greywater spill.

Response: Section 2.3 of the Spill Contingency Plan is updated with the following text to address IR question F.4. Please refer to the amended text in the Spill Contingency Plan Rev 1, Section 2.3 (Appendix C, attached)



4 September 2025

Bijaya Adhikari, PhD Project No. CA0042726.0037

"An approximately 120,000 L heated combined sewage and greywater integrated tank on the barge camp, or approximately six 45,000 L combined sewage and greywater tanks on the deck of the barge, or a 40,000 L combined sewage and greywater tank for the winter camp, and portable heated toilets for the office trailer will be mobilized to the Site for the duration of the Project."

"In a worst-case scenario, the combined sewage and greywater tanks on the barge or the winter camp are punctured and the contents leak into the surrounding environment. This consists of between 120,000 L and 270,000 L of sewage and greywater, if using the barge camp, or 40,000 L if using the winter camp. Emergency response drills and daily safety meetings will address this scenario."

5. If the public may be impacted by a spill, describe notification procedures to alert the public.

Response: Section 9.0 of the Spill Contingency Plan provided with the Water Licence Application includes a description whereby the public will be notified of spills above the reporting threshold through the Tuktoyaktuk, Inuvik, and Aklavik Hunters and Trappers Committees, and the current contact numbers are provided.

6. Page 19, Section 7.2 refers to Off-Site Resources: "Spill response contact numbers are provided in Table C." However, on Page 9, Table C provides information on communication equipment for the Project, not off-site contact numbers. Please clarify and provide the "Off-Site Resources".

Response: Section 7.2 of the Spill Contingency Plan is updated with the following text to address IR question F.6. Please refer to the amended text in the Spill Contingency Plan Rev 1, Section 7.2 (Appendix C, attached).

"Current spill response contact numbers are provided in Table B, Spill Response Contact List."

- G. Erosion and Sediment Control Plan (E&SCP):
- 1. Page 6, section 2.2.3, Paragraph 2, line 5 states that "Holes generated by the removal of the pilings will be backfilled and compacted with the drill cuttings".

Please clarify how it will be ensured that the drill cuttings are not contaminated with any contaminants of potential concern (CoPCs). Will the drill cuttings be tested for CoPCs prior to backfilling? If the drill cuttings are found to be unsuitable for backfilling, please describe the alternative method(s) that will be used to backfill the holes created by the removal of the pilings.

Response: Please refer to Section 2.4 of the Remedial Action Plan provided with the Water Licence Application that describes collection of environmental soil samples from the pilings in 2024 for VOCs and select phenols based on their potential to leach from the wood pilings. Concentrations of these CoPCs were either below the applied guidelines or below the laboratory detection limits. As well, historical environmental site assessments completed in the areas of the wood pilings did not identify any CoPCs above the proposed SQOs for the Site. Based on this information, there are no plans to test the drill cuttings from pile removal and the drill cuttings will be used as backfill as planned. If field observations indicate the potential material presence of CoPCs while removing the pilings, soil samples may be collected and submitted for laboratory analysis, and if required based on analytical results, the cuttings may be transported off site for disposal at an approved facility.

2. Page 7, Section 3.0, Paragraph 1 mentions that additional Erosion and Sediment Control (ESC) measures may be required and will be documented. However, these additional ESC measures are not



4 September 2025

4 September 2025

described further. Please clarify and provide a description of the additional ESC measures that may be required during and following the remediation activities.

Response: Please refer to the text in bullet #6 of Section 2.2.2 of the Erosion and Sediment Control Plan provided with the Water Licence Application. Additional ESC controls may include the use of biodegradable erosion control blankets, silt fencing, and/or tarping of erosion susceptible areas and materials.

# H. Reclamation, Closure and Monitoring Plan (RC&MP):

1. Page 7, Section 3.1.3.1, Paragraphs 1 and 3 refer to Appendix A, Figure A5. However, Appendix A includes only Figures A 1, A2, A3, A4a and A4b. Figure A5 is not included in Appendix A. Please submit Figure A5 as referenced in Page 7, Section 3.1.3.1, Paragraphs 1 and 3.

Response: The updated Figure A5 (as described in multiple responses above) is provided in the Reclamation, Closure and Monitoring Plan Addendum 1 (Appendix G).

2. Page 18, Section 4.4, Paragraph 2 states: "In the unlikely event that bench-scale testing determines that the soil is not suitable for ETC treatment, soils exceeding the proposed SQOs for PHC will instead be excavated for appropriate out-of-territory disposal (e.g. Secure Energy's Fox Creek facility in Alberta or a similar facility in British Columbia). In this instance, an evaluation will be completed to determine if the excavations can be levelled through balanced grading or if a borrow source may be required".

This statement indicates that a borrow source may be required under certain conditions. In this case, please describe the potential borrow source location and include it on Figure A3 along with Global Positioning System (GPS) coordinates in Degrees, Minutes, Seconds (DMS) format (Latitude and Longitude). Note: Due to potential inconsistencies among individual GPS units, it is recommended to utilize Google Earth latitude and longitude as the GPS points.

Response: Please refer to response to IR question C.4

Establishment of a borrow source is not currently planned. The remediation plan is for off-site disposal of approximately 100 m³ of soil containing barite at concentrations above the SQOs and on-site ETC soil treatment of soil containing PHCs at concentrations above the SQOs. Given the successful results of ETC treatment at another site (e.g. West Channel, under IWB Water Licence N5L8-1846) as well as the contingency to process recalcitrant soil through the treatment process multiple times until the SQOs are met, the amount of soil to be potentially hauled off site is not anticipated to be significant enough to require backfill to be imported to the Site; therefore, the development of a borrow site is not anticipated. The bench scale testing planned for the Site (as described in Section 7.1.1.1.1 of the Remedial Action Plan submitted with the Water Licence Application) is ongoing and the results are not yet available. The results of this testing will determine the applicability of the ETC technology at the Site and the possible need for off-site disposal of soil containing PHCs at concentrations above the SQOs and subsequent need for a source of clean backfill material. If off-site disposal of soil containing PHCs or barite at concentrations above the SQOs is required in such a quantity that the site cannot be levelled through balanced grading, then a source of backfill will be identified, either from and operating quarry in the ISR or a Quarrying Permit application may be submitted to the GNWT ECC for approval and the Reclamation, Closure and Monitoring Plan (RC&MP) including all relevant figures will be revised at that time.



Project No. CA0042726.0037 4 September 2025

I. As per the Inuvialuit Final Agreement (IFA) and Section 11, all projects must undergo the Environmental Impact Screening Committee (EISC) process. The IWB requires the EISC decision letter before a decision on the water licence application. Please submit the EISC decision letter.

Response: The Project is currently being reviewed through the EISC (Registry File No. [05/25-04]) screening process; a copy of the decision letter will be provided to the IWB when it is received.

**Table 1: Summary of Response and Respective Documents** 

Information Request		Responses			
Section	Number	Document Name	Section	Page	
А	1	Receipt (Appendix A)	n/a	n/a	
	2	Receipt (Appendix A)	n/a	n/a	
В	1	Updated Figure A5 (Appendix B)	n/a	n/a	
	2	Remedial Action Plan provided with the Water Licence Application	Section 7.1.1.1.2	36	
	3	Spill Contingency Plan Rev 1 (Appendix C)	Section 4.0 Section 6.2.2	11 16	
	4	Updated Figure A5 (Appendix B)	n/a	n/a	
	5	Response in text above	n/a	n/a	
С	1	Remedial Action Plan Addendum 1 (Appendix D)	Executive Summary	1	
	2	Remedial Action Plan Addendum 1 (Appendix D)	Section 9.2.1	4	
	3	Remedial Action Plan Addendum 1 (Appendix D)	Section 5.1	2	
	4	Response in text of this letter	n/a	n/a	
	5	Updated Figure A5 (Appendix B)	n/a	n/a	
	6	Remedial Action Plan Addendum 1 (Appendix D)	Section 6.1	2	
	7	Remedial Action Plan Addendum 1 (Appendix D)	Section 7.1.1.1	3	
	8	Remedial Action Plan Addendum 1 (Appendix D)	Section 8.3	4	
D	1	Wildlife Management and Monitoring Rev 2 (Appendix E)	Section 2.2 Section 2.2.1 Section 2.2.2 Section 4.1 Section 4.4.1 Section 6.0 Appendix B	4 6 7 12 17 19 n/a	



Information Request		Responses			
Section	Number	Document Name	Section	Page	
E	1	Waste Management Plan Rev 1 (Appendix F)	Appendix A	n/a	
	2	Waste Management Plan Rev 1 (Appendix F)	Appendix A	n/a	
	3	Waste Management Plan Rev 1 (Appendix F)	Appendix B	n/a	
	4	Waste Management Plan Rev 1 (Appendix F)	Section 3.1	5	
	5	Waste Management Plan provided with the Water Licence Application	Section 3.1.1	6	
	6	Waste Management Plan Rev 1 (Appendix F)	Section 3.1.1 Appendix B	6 n/a	
	7	Waste Management Plan Rev 1 (Appendix F)	Appendix B	n/a	
	8	Waste Management Plan Rev 1 (Appendix F)	Appendix B	n/a	
	9	Waste Management Plan Rev 1 (Appendix F)	Appendix B	n/a	
	10	Waste Management Plan Rev 1 (Appendix F)	Appendix B	n/a	
F	1	Spill Contingency Plan Rev 1 (Appendix C)	Appendix A	n/a	
	2	Spill Contingency Plan Rev 1 (Appendix C)	Appendix A	n/a	
	3	Spill Contingency Plan Rev 1 (Appendix C)	Appendix A	n/a	
	4	Spill Contingency Plan Rev 1 (Appendix C)	Section 2.3	6	
	5	Spill Contingency Plan provided with the Water Licence Application	Section 9.0	20	
	6	Spill Contingency Plan Rev 1 (Appendix C)	Section 7.2	19	
G	1	Remedial Action Plan provided with the Water Licence Application	Section 2.4	6	
	2	Erosion and Sediment Control Plan provided with the Water Licence Application	Section 2.2.2	6	
Н	1	Reclamation, Closure and Monitoring Plan Addendum 1 (Appendix G)	Appendix A	n/a	
	2	Response in text of this letter	n/a	n/a	

Note: n/a - not applicable



4 September 2025

## **CLOSURE**

We trust the information provided herein meets your requirements. If you have any questions about the contents of this letter, please contact the undersigned at your convenience.

Yours truly,

**WSP** Canada Inc.

Shall

Stephanie Villeneuve, MSc Environmental Scientist

WSP Canada Inc. 902-476-5769

stephanie.villeneuve@wsp.com

Julia Krizan, MSc, PhD

Tolia Kiza

Senior Principal Biologist

WSP Canada Inc. 780-483-3499

julia.krizan@wsp.com

Brennan Vervoort, PEng Senior Project Manager WSP Canada Inc.

613-683-9031

brennan.vervoort@wsp.com

CC: Kyle Thompson, Shell Canada Limited

Attachments: Appendix A: Water Licence Application and Water Use Fees Receipt

Appendix B: Project Description Figure A5
Appendix C: Spill Contingency Plan Rev 1
Appendix D: Remedial Action Plan Addendum 1

Appendix E: Wildlife Management Monitoring Plan Rev 2

Appendix F: Waste Management Plan Rev 1

Appendix G: Reclamation, Closure and Monitoring Plan Addendum 1



\$30 application fee + \$138.60 water use fee = \$168.60



Gouvernement des Government of Northwest Territories Territoires du Nord-Ouest

GNWT1 - GOVERNMENT OF THE NWT **Financial Services** Department of Finance Government of the Northwest Territories Yellowknife, NT X1A 3S5

# **Cash Drawer Receipt**

Date:

2025-06-19 09.32

**Receipt Number:** 

337614

**Customer Number:** 

0002033207

Bill To:

WSP Canada Inc.

1600 Boul René-Lévesque Ouest 11th Floor

Montreal QC H3H 1P9

**Payment Purpose:** 

CC-019692-WSP-Water Use Fees

Payment Amount:

168.60

Visa

168.60

Auth #:

019692

**Total Tendered:** 

168.60

Change Due: 0.00 CAD

Drawer:

**YKFSS** 

Cashier:

lillian.paniloo

# **Lillian Paniloo**

From:

Chelsea Francis

Sent:

June 18, 2025 11:44 AM

To:

Lillian Paniloo

Subject:

FW: N5L8-1848 Shell Water Use Fees - Unipkat I-22 Wellsite

Can you respond please.

Thanks Chelsea

From: Sidhu, Manpreet <manpreet.sidhu@wsp.com>

Sent: June 17, 2025 3:28 PM

To: Financial SharedServices <Financial\_SharedServices@gov.nt.ca> Subject: RE: N5L8-1848 Shell Water Use Fees - Unipkat I-22 Wellsite

Hello,

Could you please help me to process the following fees by credit card:

Re: N518-1848 (New) Shell Canada Limited - Former Unipkat I-22 Wellsite - Soil Remediati Project, Inuvialuit Settlement Region, Northwest Territories - Application for Water Licence

The Inuvialuit Water Board (IWB) acknowledge receipt on June 16, 2025, of your Water Licen Application for the above-mentioned Wellsite Soil Remediation Project. The application f (\$30.00) and water use fees (\$138.60) were not included with the water licence application

Please call me at 403-291-1007 for the credit card #.

Thank you,

# Manpreet Sidhu

**Project Controls** 

(Upcoming vacation June 20 through June 27)

T+1 306-665-7989 D+1 306-986-2032



GNWT - FINANCE - FINANCIAL SHA 0 P.O. BOX 1320 (3RD FLOO YELLOWKNIFE NT

#### Purchase

Jun 18,2025 VISA TID: V4404218 15:51:30 \*\*\*\*\*\*\*\*\*\*\*\*8527 Entry: Manual (M)

Sequence: 099 002 Auth#: 019692

Response: 01-027

Batch: 099

\$ 168.60

Amount Total

\$ 168.60

Approved Signature Not Required

Merchant copy

From: Angela Voudrach < Angela\_Voudrach@gov.nt.ca>

Sent: May 21, 2025 1:13 PM

To: Sidhu, Manpreet < manpreet.sidhu@wsp.com >

Subject: RE: N5L8-1846 Shell Water Use Fees - west Channel

Good afternoon Manpreet,

Yes, this can be paid by visa. Which phone number can I call to get the visa card number?

Also, for future payments, please send an email to <a href="mailto-financial\_SharedServices@gov.nt.ca">Financial\_SharedServices@gov.nt.ca</a> and not Bertha or myself, as there are multiple people who take payments and some of us may be out of the office. If you email the above, you will be directed to the appropriate person who can take your payment at that time. Thank you!

Mársı | Kinanāskomitin | Thank you | Merci | Hąį' | Quana | Qujannamiik | Quyanainni | Máhsı | Máhsı | Mahsì

# **Ange Voudrach**

Senior Accounting Clerk Financial and Employee Shared Services Department of Finance Government of the Northwest Territories

3<sup>rd</sup> Floor, Kigiaq Centre PO Box 2480 106 Veterans Way Inuvik, NT X0E 0T0

# Modified Working Hours: 8:30am-11:45am, 1:00pm-5:15pm.

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please delete it immediately and notify us by telephone. Thank you.

From: Sidhu, Manpreet < manpreet.sidhu@wsp.com >

Sent: May 21, 2025 8:30 AM

**To:** Bertha Harrison < Bertha\_Harrison@gov.nt.ca >

Subject: FW: N5L8-1846 Shell Water Use Fees - west Channel

**EXTERNAL:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender's name and email address and know the content is safe.

Hi Bertha.

Please see the email below. Could you please let me know if we can pay this by credit card.

Thank you,

## Manpreet Sidhu

Project Controls/Administrator

T+1 306-665-7989



From: Mardy Semmler < semmlerm@inuvwb.ca>

Date: May 7, 2025 at 12:35:03 PM MDT

To: "Thompson, Kyle B SCAN-PTS/E/G" < Kyle. Thompson@shell.com>

Cc: Bijaya Adhikari <a href="mailto:adhikarib@inuvwb.ca">adhikarib@inuvwb.ca</a>, Admin IWB <a href="mailto:adhikarib@inuvwb.ca">admin@inuvwb.ca</a>, Lloyd

Gruben <Lloyd\_Gruben@gov.nt.ca>

Subject: N5L8-1846 Shell Water Use Fees

# Think Secure. This email is from an external source.

Good Afternoon Kyle

The IWB received the email below from WSP regarding water use fees for N5L8-1846 Shell Canada former West Channel Remediation Project.

Based on PART B: GENERAL CONDITIONS Item 1. The water use fee shall be paid by the Licensee annually in advance of any water use.

The Water Use Fee calculator can be found on the IWB website at <a href="www.inuvwb.ca">www.inuvwb.ca</a>. Shell Canada submitted a water use fee of \$70.00 for the previous year along with their \$30.00 application fee. Please copy the IWB for our water licence file and GNWT Water Resources Officer – Beaufort Delta Region the correspondence for water use fee submission to the GNWT.

Please submit your annual payment to:

Financial and Employee Shred Services GNWT Department of Finance 3rd Floor Yk Centre Building Bag Service 1511 Yellowknife, NT X1A 2R3

Please use the following coding:

Org: 23017 Prog: 55029 Acct: 44020 Fund: 01 Area: 31 The submitted document, including all related IWB correspondence, will be placed on the IWB Public Register. Should you have questions or concerns regarding this correspondence please contact Bijaya Adhikari at 867-678-8610 or <a href="mailto:adhikarib@inuvwb.ca">adhikarib@inuvwb.ca</a> or Mardy Semmler, Executive Director, at 867-678-8609 or <a href="mailto:semmlerm@inuvwb.ca">semmlerm@inuvwb.ca</a>.

Thank you

Mardy

Mardy Semmler Executive Director Inuvialuit Water Board P.O. Box 2531, Inuvik, NT X0E 0T0

Ph: 867-678-8609

Email: semmlerm@inuvwb.ca
Website: www.inuvwb.ca

From: Villeneuve, Stephanie < stephanie.villeneuve@wsp.com >

**Sent:** May 6, 2025 7:52 AM

To: Admin IWB <admin@inuvwb.ca>
Subject: N5L8-1846 Shell WL Fees

Hello Delores,

I hope you are doing well?

I wanted to touch base and ask about paying the annual water use fee for water licence N5L8-1846? I believe we paid the application fee (\$30) and water use fee (\$70) when we submitted the application in late 2023, but I do not believe we have paid the water use fee for 2025. Does the IWB send an invoice for this, or how does it work to pay these annual fees?

Thank you, Stephanie

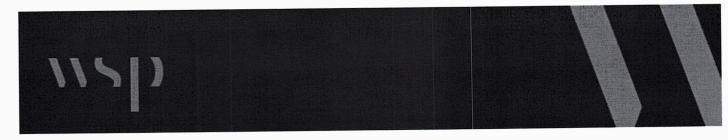
# Stephanie Villeneuve

Environmental Scientist MSc, PGeo She/Her

T+ 1 902-444-8351 M+ 1 902-476-5769

## **WSP**

1 Spectacle Lake Drive Dartmouth, Nova Scotia B3B 1X7 Canada



NOTICE: This communication and any attachments ("this message") may contain information which is privileged, confidential, proprietary or otherwise subject to restricted disclosure under applicable law. This message is for the sole use of the intended recipient(s). Any unauthorized use, disclosure, viewing, copying, alteration, dissemination or distribution of, or reliance on, this message is strictly prohibited. If you have received this message in error, or you are not an authorized or intended recipient, please notify the sender immediately by replying to this message, delete this message and all copies from your e-mail system and destroy any printed copies. You are receiving this communication because you are listed as a current WSP contact. Should you have any questions regarding WSP's electronic communications policy, please consult our Anti-Spam Commitment at www.wsp.com/casl. For any concern or if you believe you should not be receiving this message, please forward this message to <a href="mailto:caslcompliance@wsp.com">caslcompliance@wsp.com</a> so that we can promptly address your request. Note that not all messages sent by WSP qualify as commercial electronic messages.

AVIS: Ce message, incluant tout fichier l'accompagnant (« le message »), peut contenir des renseignements ou de l'information privilégiés, confidentiels, propriétaires ou à divulgation restreinte en vertu de la loi. Ce message est destiné à l'usage exclusif du/des destinataire(s) voulu(s). Toute utilisation non permise, divulgation, lecture, reproduction, modification, diffusion ou distribution est interdite. Si vous avez reçu ce message par erreur, ou que vous n'êtes pas un destinataire autorisé ou voulu, veuillez en aviser l'expéditeur immédiatement et détruire le message et toute copie électronique ou imprimée. Vous recevez cette communication car vous faites partie des contacts de WSP. Si vous avez des questions concernant la politique de communications électroniques de WSP, veuillez consulter notre Engagement anti-pourriel au <a href="www.wsp.com/lcap">www.wsp.com/lcap</a>. Pour toute question ou si vous croyez que vous ne devriez pas recevoir ce message, prière de le transférer au conformitelcap@wsp.com afin que nous puissions rapidement traiter votre demande. Notez que ce ne sont pas tous les messages transmis par WSP qui constituent des messages electroniques commerciaux.

-LAEmHhHzdJzBlTWfa4Hgs7pbKl

