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**NUNATTA ENVIRONMENTAL SERVICES**
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1575 Sivumugiaq Street Iqaluit, NU, X0A 3H0
(867) 979-1488
nunatta@northwestel.net

**2025 Annual Reporting**
**Water License NWB-1BR-NUN1828**

**Prepared for:**
Nunavut Water Board
PO Box 119, Gjoa Haven, NU X0B 1J0

**Attention:**
licensing@nwb-oen.ca

**Prepared by:**
Nunatta Environmental Services
Pitseolak Shoo, James Wilson, Jennifer Denis

**Submission Date:**
March 2, 2026

# Nunavut Water Board - Notes for Use

**Standard Form for Annual Reporting Requirements of NWB2 Exploration Water Licenses**

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Under the terms of your water licence issued by the Nunavut Water Board ("NWB") for the use of water and the disposal of waste into water associated with mineral exploration (NWB2 Licenses), Licensees are required to submit to the NWB an Annual Report no later than March 31st of the year following the calendar year being reported.

In order to aid the Licensee with the preparation of the Annual Report and facilitate its review by the NWB, Licensees are **required** to use the following form.

**Recommendation and Helpful tips for use:**

**Metric units shall be used to report any relevant data.**

**How to Add additional space within Text boxes** - Right click mouse on the row number (directly to the left of your screen) which falls within the text box range and click insert. **Do not drag or drop text box to modify size of the text box because formatting will not be maintained and data will be lost.** If you have large amounts of data recommend adding additional worksheets. Go to the help menu for assistance.

**Electronic versions should be submitted in Adobe to ensure protection of your information.** If you do not have shortcut keys to save as a PDF. Go to print menu . Choose to print "Entire Worksheet" then select printer option Adobe PDF and you will be prompted to save the document as a PDF document. Reminder ensure you have saved your document in Excel so that future changes can be made.

**Modify the Header -** Select "View" then "Header" from the main menu. Select "Custom Header" and change to reflect the valid Water Licence No.

Textboxes denoted with * are optional.

Annual Reports shall be submitted by either fax, mail or email in adobe acrobat or Excel format to:

Nunavut Water Board
c/o Manager of Licensing
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Tel: 867-360-6338
Fax:867-360-6369
Email: licensing@nwb-oen.ca

**NWB Annual Report** **Year being reported:** 2025

**License No:** NWB 1BR-NUN1828 **Issued Date:** April 11, 2018
**Expiry Date:** April 10, 2028

**Project Name:** Nunatta Environmental Services Inc. "Landfarm"

**Licensee:** Nunatta Environmental Services Inc. "NESI"

**Mailing Address:**
1575 Sivumugiaq St.
Iqaluit,
Nunavut
X0A 3H0

**Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):**

**General Background Information on the Project (optional):**
NESI owns and operates a Hydrocarbon Impacted Soil Landfarm on the outskirts of Iqaluit, Nu. Operations consists of accepting soils impacted with petroleum products at various concentrations at the geosynthetic lined platform and using indigenous soil microorganisms and unique soil farming practices break down compounds into, water, carbon and hydrogen sulphide.

**Licence Requirements: the licensee must provide the following information in accodance with**

**A summary report of water use and waste disposal activities, including, but not limited to: methods of obtaining water; sewage and greywater management; drill waste management; solid and hazardous waste management.**

Water Source(s): Rain and melt water. Hydrocarbon contaminated.
Water Quantity:
- Quantity Allowable Domestic (cu.m)
- Actual Quantity Used Domestic (cu.m)
- Quantity Allowable Drilling (cu.m)
- Total Quantity Used Drilling (cu.m)

Waste Management and/or Disposal

No water was released into the environment 2025

Additional Details:

**A list of unauthorized discharges and a summary of follow-up actions taken.**

Spill No.: (as reported to the Spill Hot-line)
Date of Spill:
Date of Notification to an Inspector:
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

**Revisions to the Spill Contingency Plan**

Additional Details: No revisions to the Spill Contingency plan

**Revisions to the Abandonment and Restoration Plan**

Additional Details: Abandonment and Restoration plan updated

**Progressive Reclamation Work Undertaken**

Additional Details (i.e., work completed and future works proposed)

**Results of the Monitoring Program including:**

**The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;**

Additional Details: No water was drawn from source

**The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited;**

Additional Details:

**Results of any additional sampling and/or analysis that was requested by an Inspector**

Additional Details: No requests by Inspector

**Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.**

Additional Details: No request by NWB

**Any responses or follow-up actions on inspection/compliance reports**

Additional Details: (Dates of Report, Follow-up by the Licensee)

**Any additional comments or information for the Board to consider**

**Date Submitted:** February 28, 2025
**Submitted/Prepared by:** James H. Wilson for Nunatta Environmental Services Inc.
**Contact Information:**
**Tel:** 867-979-1488
**Fax:** n/a
**email:** jim@nunatta.ca

## GPS Coordinates

### GPS Coordinates for water sources utilized

| Source Description | Latitude | | | Longitude | | |
|---|---|---|---|---|---|---|
| | Deg ° | Min ′ | Sec ″ | Deg ° | Min ′ | Sec ″ |
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### GPS Locations of areas of waste disposal

| Location Description (type) | Latitude | | | Longitude | | |
|---|---|---|---|---|---|---|
| | Deg ° | Min ′ | Sec ″ | Deg ° | Min ′ | Sec ″ |
| Treated water discharge point | 68 | 32 | 46.47 | 63 | 45 | 49.9 |
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**Soils accepted at Landfarm in 2025**

| Project # | Customer | Cubic Metres | Date | Contaminant |
|---|---|---|---|---|
| 25-31 | Northern Properties REIT | 159.00 | April 18-Sept 12 | diesel fuel |
| 25-39 | Northern Properties REIT | 204.0 | May 13 - Sept 16 | diesel fuel |
| 25-53 | City of Iqaluit | 423.2 | July 3 to Aug 1 | diesel fuel |
| 25-56 | Quilliq Energy | 3 | 7/26/2025 | Propolene glycol from burst heat transfer line |
| | | | | |
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| | | | | |
| | **Total Soils 2025** | **789.20** | | |

**Soils removed from Landfarm 2025**

| Project # | Customer | Cu/M |
|---|---|---|
| | City of Iqaluit for dump cover | 340 |
| | | |
| | | |
| | **Cubic meters** | |
| | **Total removed** | **340** |

LAB RESULT WERE USED TO CONFIRM THIS SOIL WAS GOOD TO BE USED
CIRNAC inspector Sean Naullaq approved removal of soil

## Water/Snow received at Landfarm 2025

**SNOW**

| Project # | Customer | Cu/m | Date | | Contaminant |
|---|---|---|---|---|---|
| 25-16 | Nunavut airport services | 3 | Feb 17 2026 | | hydraulic oil |
| 25-15 | Northern Properties #5064 | 66 | 04/29/2026 | Snow | sewage and city says hydrocarbons in sample |
| 25-24 | Northern properties #5064 | 55 | 3/20/2025 | snow | sewage |
| 25-24B | Northview | 121 | 5/1/2025 | | snow with sewage and city says hydrocarbons |

| | | | |
|---|---|---|---|
| | **Total cu/M snow received in** | **245** | Approximatly .6 cubic meters water from each |
| | cu/M water | 147 | |

**WATER**

| Project # | Customer | Litres | Date | Contaminant |
|---|---|---|---|---|
| 25-31 | Northview | 22 | Summer of 2025 fuel spill cleanup | P50 diesel fuel |
| 25-39 | Northview | 7 | over summer of cleanup fuel spill | P 50 Arctic diesel |

| | | |
|---|---|---|
| | **cu/L water received 2025** | **29** |
| | cubic meters of water | |
| | Grand total of water received | 176 |

**Soils contained in Landfarm cells freezeup 2024**

| Cell # | Dimension | Cell reference | Soil in progress | Rocks | Protective layer | Total soil contained | Soil remediated and ready to remove. |
|---|---|---|---|---|---|---|---|
| | **Meters** | | **Cu/M** | **Cu/M** | **Cu/M** | **Cu/M** | |
| 1 | 60X30 | tipping point cell #1 | 1200 | | 687 | 1887 | |
| | | | | | | | |
| 2 | 50X25 | QEC cell #2 | 0 | 10 | 290 | 300 | |
| | | | | | | | |
| 3 | 90X30 | final cell cell#3 | 0 | 6 | 900 | 900 | |
| | | | | | | | |
| 4 | 60X30 | fertilized soil Cell #4 | 3200 | 60 | 800 | 800 | |
| | | | | | | | |
| | | **Totals** | **4400** | **76** | **2677** | 7153 | 0 |

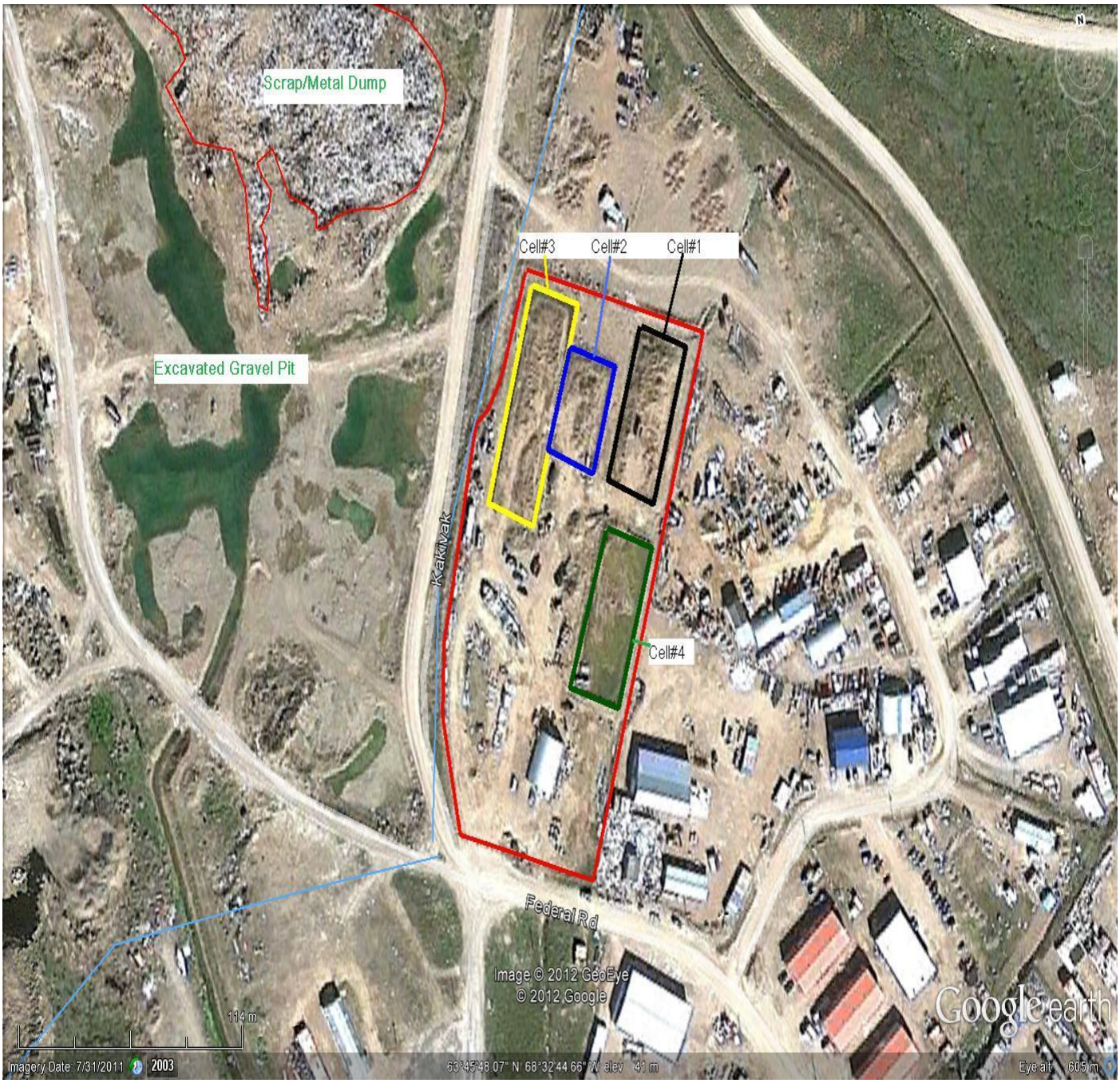
Cell #2 which was to be rebuilt and made bigger. Instead it has been repurposed to contain all the consumables from the Quilliq Energy Plant. We store the oil, solvents and antifreeze to be delivered to the plant as required. The waste from there is brought back and stored in that cell until the following summer when it is shipped south for disposal the following year. Moving and storage is done by Nunatta.

**Map Overview**

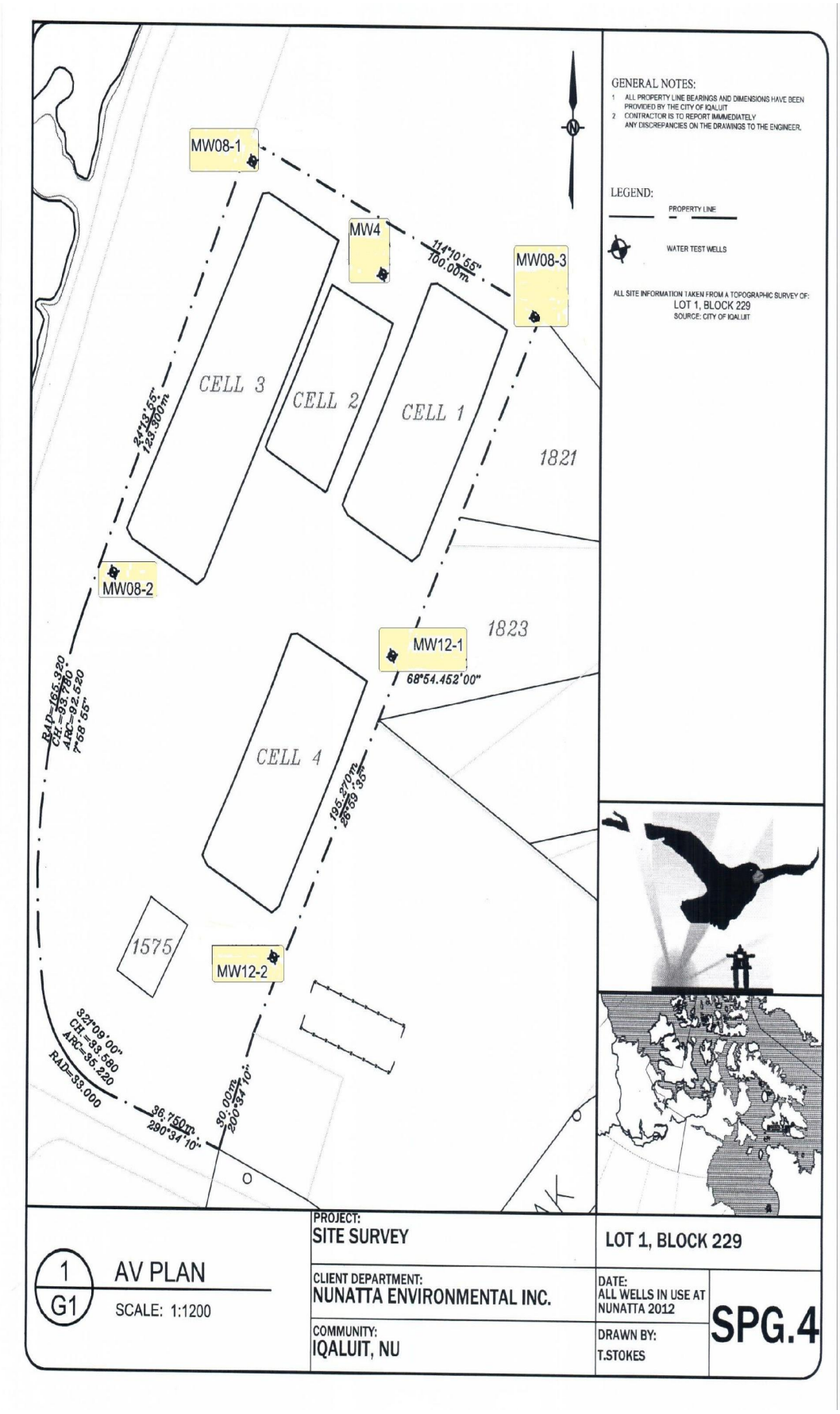

**Landfarm**


Blue: Gravel pits
Red: metal Dump
Nunatta Landfarm
Kakivak
Federal Rd
Industrial Park
Image © 2012 GeoEye
© 2012 Google
Google earth
Imagery Date 7/31/2011
2003
63°45'59.24" N 68°32'48.98" W elev 52 m
Eye alt 1.82 km
408 m

**Landfarm Details**



**Monitoring Well Locations**



## 2025 Monitoring Summary

With the construction of the new Garbage sorting plant down grade from our landfarm we have seen them build the ground level of our lot. This has caused shadows on our wells which are located close to the property line.
The other issue is the city has allowed airport and any construction work being done in the city to pile asphault along our fence and now it is 3 meters above our ground level. The asphault pile is taller than our 8 foot fence.
This was our discharge point for water discharged after it was tested and confirmed good enough to release.

## Water pumped within landfarm cells 2025

| Date | Action | From | Destination | Litre |
|---|---|---|---|---|
| May 29 | pump | cell #4 | totes | 21,000 |
| May 30 | pump | Cell #4 | black tank | 56,000 |
| May 31 | pump | Cell #4 | totes | 16,000 |
| | | | **TOTAL PUMPED** | 93,000 Liters |

Water is pumped into pond hole dug into the soil in our cell. This strips the water of hydrocarbons and thaws out the soil faster. It aids in the evaporation of the water in the cell, reducing the amount to be treated on a windy, sunny day we estimate we can evaporate off more than 2000 liters.
Water is pumped as required. If melt is fast we pump more often or if it rains.
This also helps us reduce or eliminate the need for pumping out at seasons end.

**No water released in to the environment in 2025**

| | |
|---|---|
| **Total pumped** | **93,000** |
| **Total Cu/M** | **93 cubic meters** |

**Consruction of cell #2**

In 2013 Nunatta Environmental applied for and was approved for an extension and replacement of liner for cell #2. The cell was used for rocks and cobbles removed from the screening process. The liner used in cell #2 was only 20 mm and Nunatta felt this liner should be brought up to the 30 mm minimum standard & at the same time the cell could be made longer to accommodate our equipment. Nunatta purchased 40 mil liner and #16 cloth to make it better than code. Liner is on site in Iqaluit. Permission was granted for the summer of 2014 construction season but due to cold weather and no place to put all the rocks stored in that cell delayed the work.

Since 2018 Nunatta Staff has been busy dealing with large projects in all parts of Nunavut. To do this work we have to be away during the summer months. When Covid hit we thought this would be a good time to work on the landfarm bringing cell #2 up to code with a new thicker liner.
The lockdown of southern travelers made extra work for Nunatta who were on the road all summer doing work in Grise Fiord, Umingmaktok, Bathurst Inlet, Cape Dorset and the landfarm got missed.
This trend has continued to 2022 with our staff working remotly most of the summer months.
In fall of 2022 Quilliq Energy approached Nunatta to see if they could have all their consumables stored at Nunatta inside a lined cell. This was due in part to the water crisis that happened in Iqaluit over the summer when diesel fuel was found in drinking water samples. It was suggested it might have coming from items stored at the Quilliq energy power plant located next to the water treatment plant.
So everything was removed from site and oils, glycols, and waste were moved to Nunatta Landfarm cell #2. Since then it has been decided Quilliq Energy was not the cause of the contamination.

In the mean time, Quilliq energy has concluded that it is much easier to have consumables delivered and waste removed when required rather than try to store it all on site.
Nunatta has cell #2 full of drums and totes but still has plans to replace the liner should a warm summer with less remote work come into play in the near future.
There has been no change in our plans to replace the liner at some point.

**TABLE 1** **CLIENT:** **Nunatta Environmental Services Inc.**
**PARACEL LABORATORIES** **ATTENTION:** **Jim Wilson**
**WORKORDER: 2531343** **PROJECT:** **Land Farm Spring Samples**
**REPORT DATE: 08/07/2025** **REFERENCE:**

| Parameter | Units | MDL | Regulation | Sample | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Land farm cell #1 | Land farm cell #1 | Land farm cell #1 | Land farm cell #1 | Land farm cell #1 | Land farm cell #1 | Land farm cell #1 | Land farm cell #1 |
| **Sample Date (m/d/y)** | | | **Select Reg** | **07/29/2025 09:00** | **07/29/2025 09:00** | **07/29/2025 09:00** | **07/29/2025 09:00** | **07/29/2025 09:00** | **07/29/2025 09:00** | **07/29/2025 09:00** | **07/29/2025 09:20** |
| ***Physical Characteristics*** | | | | | | | | | | | |
| % Solids | % by Wt. | 0.1 | REGS | 93.6 | 91.7 | 92.4 | 92.0 | 92.6 | 92.9 | 92.6 | 92.2 |
| ***Microbiological*** | | | | | | | | | | | |
| Heterotrophic Plate Count | CFU/g | 1000 | REGS | NDOGHPC | NDOGHPC | NDOGHPC | NDOGHPC | NDOGHPC | NDOGHPC | NDOGHPC | NDOGHPC |
| ***Metals*** | | | | | | | | | | | |
| Antimony | ug/g dry | 1.0 | REGS | ND (1.0) | N/A | N/A | ND (1.0) | N/A | N/A | ND (1.0) | N/A |
| Arsenic | ug/g dry | 1.0 | REGS | 1.9 | N/A | N/A | 2.0 | N/A | N/A | 1.5 | N/A |
| Barium | ug/g dry | 1.0 | REGS | 23.9 | N/A | N/A | 29.2 | N/A | N/A | 23.7 | N/A |
| Beryllium | ug/g dry | 0.5 | REGS | ND (0.5) | N/A | N/A | ND (0.5) | N/A | N/A | ND (0.5) | N/A |
| Boron | ug/g dry | 1.0 | REGS | 3.3 | N/A | N/A | 1.7 | N/A | N/A | 1.8 | N/A |
| Cadmium | ug/g dry | 0.5 | REGS | ND (0.5) | N/A | N/A | ND (0.5) | N/A | N/A | ND (0.5) | N/A |
| Chromium | ug/g dry | 5.0 | REGS | 21.6 | N/A | N/A | 23.6 | N/A | N/A | 19.1 | N/A |
| Cobalt | ug/g dry | 5.0 | REGS | 5.3 | N/A | N/A | 6.1 | N/A | N/A | ND (5.0) | N/A |
| Copper | ug/g dry | 5.0 | REGS | 14.5 | N/A | N/A | 13.6 | N/A | N/A | 9.2 | N/A |
| Lead | ug/g dry | 1.0 | REGS | 4.5 | N/A | N/A | 7.8 | N/A | N/A | 3.5 | N/A |
| Lead | ug/g dry | 1.0 | REGS | N/A | N/A | N/A | N/A | 7.3 | N/A | N/A | N/A |
| Molybdenum | ug/g dry | 1.0 | REGS | 1.3 | N/A | N/A | 1.1 | N/A | N/A | ND (1.0) | N/A |
| Nickel | ug/g dry | 5.0 | REGS | 7.9 | N/A | N/A | 9.7 | N/A | N/A | 7.1 | N/A |
| Selenium | ug/g dry | 1.0 | REGS | ND (1.0) | N/A | N/A | ND (1.0) | N/A | N/A | ND (1.0) | N/A |
| Silver | ug/g dry | 0.3 | REGS | ND (0.3) | N/A | N/A | ND (0.3) | N/A | N/A | ND (0.3) | N/A |
| Thallium | ug/g dry | 1.0 | REGS | ND (1.0) | N/A | N/A | ND (1.0) | N/A | N/A | ND (1.0) | N/A |
| Tin | ug/g dry | 5.0 | REGS | ND (5.0) | N/A | N/A | ND (5.0) | N/A | N/A | ND (5.0) | N/A |
| Uranium | ug/g dry | 1.0 | REGS | ND (1.0) | N/A | N/A | ND (1.0) | N/A | N/A | ND (1.0) | N/A |
| Vanadium | ug/g dry | 10.0 | REGS | 44.1 | N/A | N/A | 46.9 | N/A | N/A | 40.6 | N/A |
| Zinc | ug/g dry | 20.0 | REGS | 46.7 | N/A | N/A | 42.4 | N/A | N/A | 38.8 | N/A |
| ***Volatiles*** | | | | | | | | | | | |
| Benzene | mg/kg dry | 0.02 | REGS | ND (0.02) | ND (0.02) | ND (0.02) | ND (0.02) | ND (0.02) | ND (0.02) | ND (0.02) | ND (0.02) |
| Ethylbenzene | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| Toluene | mg/kg dry | 0.05 | REGS | 0.07 | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| m/p-Xylene | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| o-Xylene | mg/kg dry | 0.05 | REGS | 0.62 | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| Xylenes, total | mg/kg dry | 0.05 | REGS | 0.67 | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| ***Hydrocarbons*** | | | | | | | | | | | |
| F1 PHCs (C6-C10) | mg/kg dry | 7 | REGS | 135 | 62 | 61 | 33 | 65 | 114 | 44 | 61 |
| F2 PHCs (C10-C16) | mg/kg dry | 4 | REGS | 1650 | 625 | 544 | 254 | 766 | 2050 | 568 | 648 |
| F3 PHCs (C16-C34) | mg/kg dry | 8 | REGS | 821 | 284 | 344 | 67 | 241 | 1070 | 322 | 141 |
| F4 PHCs (C34-C50) | mg/kg dry | 6 | REGS | 148 | 51 | 81 | ND (6) | 46 | 249 | 77 | 28 |

NOTE - Cell #3 is empty except for the cover layer (liner) and is being used for storage of waste.

**There is no soil in cell #4 this**

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**TABLE 1**
**PARACEL LABORATORIES LTD.**
**WORKORDER: 2541382**
**REPORT DATE: 10/16/2025**

**CLIENT: Nunatta Environmental Services**
**ATTENTION: Jim Wilson**
**PROJECT: Nunatta Fall Landfarm Sample**
**REFERENCE: Preferred Pricing**

| Parameter | Units | MDL | Regulation | Sample | | | |
|---|---|---|---|---|---|---|---|
| | | | | Cell #1 Skaker | Cell #1 Middle Side | Cell #1 Middle | Cell #1 Back |
| **Sample Date (m/d/y)** | | | **Select Reg** | **10/07/2025 08:00** | **10/07/2025 08:00** | **10/07/2025 08:00** | **10/07/2025 08:** |
| ***Physical Characteristics*** | | | | | | | |
| % Solids | % by Wt. | 0.1 | REGS | 90.5 | 90.5 | 91.5 | 89.6 |
| ***Microbiological Parameters*** | | | | | | | |
| Heterotrophic Plate Count | CFU/g | 1000 | REGS | >200000 | >200000 | >200000 | >200000 |
| ***Metals*** | | | | | | | |
| Antimony | ug/g dry | 1.0 | REGS | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) |
| Arsenic | ug/g dry | 1.0 | REGS | 2.7 | 2.2 | 2.3 | 2.4 |
| Barium | ug/g dry | 1.0 | REGS | 40.9 | 33.4 | 33.0 | 39.8 |
| Beryllium | ug/g dry | 0.5 | REGS | ND (0.5) | ND (0.5) | ND (0.5) | ND (0.5) |
| Boron | ug/g dry | 5.0 | REGS | ND (5.0) | ND (5.0) | ND (5.0) | ND (5.0) |
| Cadmium | ug/g dry | 0.5 | REGS | ND (0.5) | ND (0.5) | ND (0.5) | ND (0.5) |
| Chromium | ug/g dry | 5.0 | REGS | 26.2 | 22.5 | 24.3 | 28.3 |
| Cobalt | ug/g dry | 1.0 | REGS | 6.5 | 5.4 | 5.8 | 6.8 |
| Copper | ug/g dry | 5.0 | REGS | 16.7 | 15.7 | 15.9 | 15.9 |
| Lead | ug/g dry | 1.0 | REGS | 5.3 | 8.5 | 8.6 | 6.9 |
| Mercury | ug/g dry | 0.1 | REGS | ND (0.1) | ND (0.1) | ND (0.1) | ND (0.1) |
| Molybdenum | ug/g dry | 1.0 | REGS | 1.4 | ND (1.0) | 1.1 | ND (1.0) |
| Nickel | ug/g dry | 5.0 | REGS | 10.2 | 8.8 | 9.0 | 10.9 |
| Selenium | ug/g dry | 1.0 | REGS | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) |
| Silver | ug/g dry | 0.3 | REGS | ND (0.3) | ND (0.3) | ND (0.3) | ND (0.3) |
| Thallium | ug/g dry | 1.0 | REGS | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) |
| Tin | ug/g dry | 5.0 | REGS | ND (5.0) | ND (5.0) | ND (5.0) | ND (5.0) |
| Uranium | ug/g dry | 1.0 | REGS | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) |
| Vanadium | ug/g dry | 10.0 | REGS | 50.1 | 42.8 | 47.2 | 55.0 |
| Zinc | ug/g dry | 20.0 | REGS | 61.4 | 45.1 | 92.4 | 50.8 |
| ***Volatiles*** | | | | | | | |
| Benzene | mg/kg dry | 0.02 | REGS | ND (0.02) | ND (0.02) | ND (0.02) | ND (0.02) |
| Ethylbenzene | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| Toluene | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| m/p-Xylene | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| o-Xylene | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| Xylenes, total | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| ***Hydrocarbons*** | | | | | | | |
| F1 PHCs (C6-C10) | mg/kg dry | 7 | REGS | ND (7) | ND (7) | ND (7) | ND (7) |
| F2 PHCs (C10-C16) | mg/kg dry | 4 | REGS | 267 | 114 | 59 | 165 |
| F3 PHCs (C16-C34) | mg/kg dry | 8 | REGS | 277 | 229 | 786 | 193 |
| F4 PHCs (C34-C50) | mg/kg dry | 6 | REGS | 76 | 151 | 369 | 48 |
| F4G PHCs (gravimetric) | ug/g dry | 50 | REGS | N/A | 818 | 175 | N/A |

NOTE - Cell #3 is empty except for the cover layer (liner) and is being used for storage of waste.

**TABLE 1**
**PARACEL LABORATORIES LTD.**
**WORKORDER: 2541382**
**REPORT DATE: 10/16/2025**

**CLIENT: Nunatta**
**ATTENTION: Jim Wilson**
**PROJECT: Nunatta Fall**
**REFERENCE: Preferred**

| Parameter | Units | MDL | Regulation | Sample | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Cell #4 front Left | Cell #4 front Right | Cell #4 Middle Left | Cell #4 Middle Right | Cell #4 Rear Left | Cell #4 Rear Right |
| **Sample Date (m/d/y)** | | | **Select Reg** | **10/07/2025 08:00** | **10/07/2025 08:00 AM** | **10/07/2025 08:00 AM** | **10/07/2025 08:00 AM** | **10/07/2025 08:00** | **10/07/2025 08:00** |
| ***Physical Characteristics*** | | | | | | | | | |
| % Solids | % by Wt. | 0.1 | REGS | 90.1 | 90.0 | 90.7 | 90.2 | 90.1 | 90.2 |
| ***Microbiological Parameters*** | | | | | | | | | |
| Heterotrophic Plate Count | CFU/g | 1000 | REGS | Confluent | >200000 | >200000 | >200000 | >200000 | >200000 |
| ***Metals*** | | | | | | | | | |
| Antimony | ug/g dry | 1.0 | REGS | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) |
| Arsenic | ug/g dry | 1.0 | REGS | 2.1 | 2.4 | 2.1 | 2.8 | 2.6 | 2.4 |
| Barium | ug/g dry | 1.0 | REGS | 34.5 | 36.4 | 34.8 | 38.3 | 41.3 | 40.4 |
| Beryllium | ug/g dry | 0.5 | REGS | ND (0.5) | ND (0.5) | ND (0.5) | ND (0.5) | ND (0.5) | ND (0.5) |
| Boron | ug/g dry | 5.0 | REGS | ND (5.0) | ND (5.0) | ND (5.0) | ND (5.0) | ND (5.0) | ND (5.0) |
| Cadmium | ug/g dry | 0.5 | REGS | ND (0.5) | ND (0.5) | ND (0.5) | ND (0.5) | ND (0.5) | ND (0.5) |
| Chromium | ug/g dry | 5.0 | REGS | 20.5 | 25.1 | 24.0 | 23.7 | 28.3 | 26.5 |
| Cobalt | ug/g dry | 1.0 | REGS | 5.5 | 6.1 | 6.0 | 6.4 | 7.1 | 7.1 |
| Copper | ug/g dry | 5.0 | REGS | 20.9 | 18.4 | 15.9 | 16.5 | 17.6 | 17.8 |
| Lead | ug/g dry | 1.0 | REGS | 6.5 | 5.4 | 5.2 | 5.5 | 6.3 | 5.5 |
| Mercury | ug/g dry | 0.1 | REGS | N/A | N/A | N/A | N/A | N/A | N/A |
| Molybdenum | ug/g dry | 1.0 | REGS | 1.1 | ND (1.0) | ND (1.0) | 1.0 | 1.3 | ND (1.0) |
| Nickel | ug/g dry | 5.0 | REGS | 8.9 | 9.7 | 9.5 | 10.1 | 10.9 | 10.9 |
| Selenium | ug/g dry | 1.0 | REGS | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) |
| Silver | ug/g dry | 0.3 | REGS | ND (0.3) | ND (0.3) | ND (0.3) | ND (0.3) | ND (0.3) | ND (0.3) |
| Thallium | ug/g dry | 1.0 | REGS | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) |
| Tin | ug/g dry | 5.0 | REGS | ND (5.0) | ND (5.0) | ND (5.0) | ND (5.0) | ND (5.0) | ND (5.0) |
| Uranium | ug/g dry | 1.0 | REGS | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) | ND (1.0) |
| Vanadium | ug/g dry | 10.0 | REGS | 41.1 | 49.1 | 48.1 | 47.1 | 55.6 | 53.4 |
| Zinc | ug/g dry | 20.0 | REGS | 46.9 | 46.4 | 44.2 | 49.2 | 51.8 | 48.8 |
| ***Volatiles*** | | | | | | | | | |
| Benzene | mg/kg dry | 0.02 | REGS | ND (0.02) | ND (0.02) | ND (0.02) | ND (0.02) | ND (0.02) | ND (0.02) |
| Ethylbenzene | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| Toluene | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| m/p-Xylene | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| o-Xylene | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| Xylenes, total | mg/kg dry | 0.05 | REGS | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) | ND (0.05) |
| ***Hydrocarbons*** | | | | | | | | | |
| F1 PHCs (C6-C10) | mg/kg dry | 7 | REGS | ND (7) | ND (7) | ND (7) | ND (7) | ND (7) | ND (7) |
| F2 PHCs (C10-C16) | mg/kg dry | 4 | REGS | 135 | 180 | 153 | 197 | 125 | 203 |
| F3 PHCs (C16-C34) | mg/kg dry | 8 | REGS | 176 | 142 | 214 | 171 | 131 | 182 |
| F4 PHCs (C34-C50) | mg/kg dry | 6 | REGS | 52 | 30 | 62 | 55 | 47 | 50 |
| F4G PHCs (gravimetric) | ug/g dry | 50 | REGS | N/A | N/A | N/A | N/A | N/A | N/A |

**2025 Water Wells Sample Results**

During the summer of 2025 no water samples were collected by Nunatta
All wells were either dry or frozen. See explanation below

In the summer of 2023 the City of Iqaluit started construction of a new garbage sorting facility behind and beside Nunatta Environmental
The new building has a very large foot print and includes storage for sea cans, bulk bins, a large inground scale and scale house
In order to drain the property they added to the grade and elevated their land by more than 1 meter. In soing so they left Nunatta Environmental sitting in a hole. The pile snow up against the fence which will melt and run into Nunatta property and might disturb our old cell which has been built with a low berm wall. Now that the city has built up the land it might cause our cells #1 to overtop during the spring freshet
Nunatta will attempt to remove as much snow around the berm to keep this from happening.
We do not understand how the city can regrade this lot without consulting Nunatta or understanding they have blocked off the natural drainage of the lands above this facility.
Nunatta was in Baker Lake doing work for the GN when the regrading and changing of the fence happened.
Now our water test wells have been burried even deeper and are shadowed so there is no thawing of the soil at all
On another note the airport had the apron ripped up and fixed then repaved. All of the old pavement has been removed and piled beside out fence on the water discharge side of our lot. The pile of asphault is now almost 3 meters taller than ground level and it above our fence.
This is causing a lot of drifting snow to collect on and around our cell #3. Since this has been an area we store things it will be difficult to clear all the snow out and we run the risk of overtopping during the spring melt.

**TABLE 1** **CLIENT: Nunatta**
**PARACEL LABORATORIES LTD.** **ATTENTION: Jim Wilson**
**WORKORDER: 2532037** **PROJECT: Landfarm Water**
**REPORT DATE: 08/11/2025** **REFERENCE: Preferred**

| Parameter | Units | MDL | Regulation | Sample | | |
|---|---|---|---|---|---|---|
| | | | | Black tank | Tote X | Tote O |
| **Sample Date (m/d/y)** | | | **Select Reg** | **08/01/2025 08:30 AM** | **08/01/2025 08:30 AM** | **08/01/20** |
| ***Volatiles*** | | | | | | |
| Benzene | mg/L | 0.0005 | REGS | ND (0.0005) | ND (0.0005) | ND |
| Ethylbenzene | mg/L | 0.0005 | REGS | ND (0.0005) | ND (0.0005) | ND |
| Toluene | mg/L | 0.0005 | REGS | ND (0.0005) | ND (0.0005) | ND |
| m/p-Xylene | mg/L | 0.0005 | REGS | ND (0.0005) | ND (0.0005) | ND |
| o-Xylene | mg/L | 0.0005 | REGS | ND (0.0005) | ND (0.0005) | ND |
| Xylenes, total | mg/L | 0.0005 | REGS | ND (0.0005) | ND (0.0005) | ND |
| ***Hydrocarbons*** | | | | | | |
| F1 PHCs (C6-C10) | mg/L | 0.025 | REGS | ND (0.025) | ND (0.025) | ND |
| F2 PHCs (C10-C16) | mg/L | 0.1 | REGS | ND (0.1) | ND (0.1) | ND (0.1) |
| F3 PHCs (C16-C34) | mg/L | 0.1 | REGS | ND (0.1) | ND (0.1) | ND (0.1) |
| F4 PHCs (C34-C50) | mg/L | 0.1 | REGS | ND (0.1) | ND (0.1) | ND (0.1) |

**Summary of Activities at Nunatta Environmental Services Inc. (NESI)**

**NWB licence 1BR-NUN-1828 Type "B"**

Landfarm in Iqaluit for 2025 season

**Water/ Snow**

Snow was brought in from job at 4086 contaminated with diesel fuel this snow was put into a small sub berm inside cell #1 so when it melted the fuel could not run off into the water ditch around the cell berm/ When the water leached through the soil it was stripped of the hydrocarbons and they remained in the soil

Water from job at 2600"E"was delivered and again put into holes in the soil we dug with excavator. this water was allowed to seep through the soil and again stripping any hydrocarbons out and leaving them in the soil

**Soils**

Soil brought into landfarm this year were treated as we put them into the pile. Treatment was with a fertilizer and it remained there until we ran the soil through the screening plant in September. This screening removes all big rocks and stones over 3 inches then the soil is put into Cell #3 in smaller piles. this aloows the soil to breath and allows water and sun to help in remediating the soil.

This year the city of Iqaluit wanted soil for dump cover. Nunatta samples cell #3 separatly so the results could be forward3ed to the city for their environmental check. All the soil met their standards and was removed and put taken to the landfill site. In total 800 cubic meters removed from cell #3.

Soil in back of cell #1 has tested clean for last couple years but we have not been able to get to it due to so much soil in front. The plan for 2024 is to clean up the soil in front and remove the soil in back of the cell. It was put here due to cell #3 being over full and we needed to store soil and cell 31 had least amount at the time

Plans for 2024 is to clean up and remove more soil from within the landfarm. Cell #4 is very close and screening it during summer should make it pass and the city can use it in the fall as dump cover

**Test Wells**

Monitoring wells did not thaw out on the south east end or the south side of the property. Ones on north side are always dry due to excavation practices of the pit next door. The level of the pit floor ranges from 3 to 5 meters below the level of Nunatta landfarm. We test often to see if we can get water in the wells. sometimes we get mud but mostly frozen or no water

**Remediation practices**

Nunatta Environmental Services has been improving soil remediation practices and each year find ways of reducing the time the soil spends in our landfarm. With these practices of careful monitoring and proper additions to the soil including innoculation of bacteria and enzymes from remediated soil into the new soils, Nunatta has been able to reduce the remediation time to less than 1/2 of what it was 6 years ago.

Information gathered from soil sampling and testing in association with the University of Saskatchewan's Soil Toxicology Department, Nunatta has been able to put them into practice at its landfarm.

We cannot thank Dr. Stephen Sciciliano enough for his assistance and for taking my phone calls and answering my emails over the past few years.