

2024 CAM-3 ANNUAL NUNAVUT WATER BOARD REPORT

**FOR THE
NORTH WARNING SYSTEM**

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Prepared for
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EXECUTIVE SUMMARY IN ENGLISH FOLLOWS

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ԵՐԵՎԱՐԾ 260.0 կմ³ հաշվածությունները (մ³) ելեկտրական աշխատավայրերում 2024-ի համար հաշված է 3,000 հաշվածություն:

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EXECUTIVE SUMMARY

This 2024 Annual Report for the Nunavut Water Board (NWB) has been prepared by Nasittuq for the Department of National Defence in order to meet the requirements of Part B "General Conditions", paragraph 1 of its licence 8BC-SHE1929. This report covers 01 January to 31 December 2024.

Nasittuq is the Operations and Maintenance (O&M) Contractor for the North Warning System (NWS) including CAM-3. CAM-3 is a North Warning System (NWS) radar site located at Shepherd Bay, Nunavut. In 2024 the site was transitioned to year-round staffing.

A total of 260.0 cubic meters (m^3) was drawn from the water supply lake in 2024. This is below the annual maximum of 3,000 m^3 allowed by the licence.

In 2024 hazardous waste and waste oil was sent to an approved hazardous waste disposal site outside of Nunavut as required by the licence. Waste consisted of 47 drums of various hazardous waste, 3 crates of batteries, and 3 drums of scrap metal.

Non-hazardous domestic solid waste was disposed of through a contract with the Hamlet of Cambridge Bay at the local landfill. Nasittuq has documented authorization from the community for receiving the waste.

Accumulated rain and meltwater contained in the berms of fuel storage facilities was planned to be analyzed with hydrocarbon test strips. Water did not accumulate in the berms enough to require discharge, and therefore was not tested.

No spills to the environment occurred at CAM-3 in 2024.

No progressive reclamation work was completed at CAM-3.

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1.0 INTRODUCTION

This 2024 Annual Report for the Nunavut Water Board (NWB) has been prepared by Nasittuq for the Department of National Defence in order to meet the requirements of Part B "General Conditions", paragraph 1 of its licence 8BC-SHE1929 issued on 01 September 2019 and amended effective 14 April 2022. The amendment now allows for 3,000 cubic metres per year.

This report covers 01 January to 31 December 2024.

Nasittuq is the Operations and Maintenance (O&M) Contractor for the North Warning System (NWS) including CAM-3.

CAM-3 is a North Warning System radar site located at Shepherd Bay, Nunavut and is typically staffed year-round.

1.1 Report Details

Licensee: Department of National Defence, Government of Canada
Licence: 8BC-SHE1929 – Type "B"
Location: CAM-3 North Warning System Site, Shepherd Bay, Kitikmeot Region, Nunavut
Report Prepared by: Alaina Leslie and reviewed by Don Beattie
Nasittuq Corporation, 26-Mar-2025
Time period covered: 01 January to 31 December 2024

2.0 WATER USE

A total of **260.0 cubic metres** (m^3) was drawn from the water supply lake in 2024. The daily water usage (a maximum of **16 m³ per day**) was below the maximum of **299 m³ per day** allowed by the licence. The total water used in 2024 was below the threshold set in the licence of **3,000 m³ per year**. See Table 2-1 for the volume of water drawn at CAM-3 each month in 2024.

Table 2-1: Monthly Raw Water Usage at CAM-3 in 2024

Month	Raw water usage (m^3)
January	0
February	0
March	13.5
April	4.7
May	28.7
June	29.3
July	33.3
August	26.7
September	27.7
October	27.4
November	34.1
December	34.6
TOTAL	260.0

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3.0 HAZARDOUS WASTE AND WASTE OIL DISPOSAL

The movement of hazardous waste outside of Nunavut is regulated under both the *Transportation of Dangerous Goods Regulations* (TDG) and the *Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations* (XBR).

Hazardous waste, including waste oil, from CAM-3 was sent to an approved hazardous waste disposal facility outside of Nunavut as required by the licence. The hazardous waste was shipped to Qikiqtaaluk Environmental.

See Table 3-1 for the list of items sent for disposal.

See Annex A for the shipping documents including the completed movement documents for waste regulated under the *Transportation of Dangerous Goods Regulations* (TDGR) and non-regulated waste.

The hazardous waste shipped from CAM-3 in 2024 consisted of **47 drums of various hazardous waste (waste oil, waste oil filters etc.), 3 crates of waste batteries, and 3 drums of scrap metal**.

Notes: 8 carbon dioxide cylinders were mistakenly included on the Movement Document however these are not waste as they were being sent for refill.

Table 3-1: Hazardous Waste and Waste Oil Sent for Disposal from CAM-3 in 2024

TDG shipping name	Description	Manifest # (TCN)	Movement Document	Quantity
Waste Gasoline	WASTE - GASOLINE, UN 1203	48668	IZ01407-9	1 Drum
Waste Aerosols	WASTE - AEROSOLS, FLAMMABLE (DRUM OR CRATE)	48677	IZ01407-9	1 Drum
Waste Batteries, Wet, Filled With Acid	WASTE - BATTERIES, WET, FILLED WITH ACID (CONTAINER)	48695, 46596, 46597	IZ01407-9	3 Crates
Waste Fuel, Aviation, Turbine Engine Mixture	WASTE - FUEL AND WATER MIXTURE (DRUM)	48668, 48675	IZ01407-9	4 Drums*
Waste Solids Containing Flammable Liquid, N.O.S. (Fuel, Aviation, Turbine Engine)	WASTE - FUEL FILTERS (DRUM)	48673, 48679	IZ01407-9	2 Drums
Waste Solids Containing Flammable Liquid, N.O.S. (Fuel, Aviation, Turbine Engine)	WASTE - FUEL SOAKED ABSORBENT	48673	IZ01407-9	1 Drum
<i>Not TDG Regulated</i>	WASTE - OILY RAGS	48671, 48671, 48672	IZ01407-9	3 Drums
<i>Not TDG Regulated</i>	Scrap metal	48310, 48696, 48681	IZ01407-9	3 Drums*
<i>Not TDG Regulated</i>	WASTE - OIL (45 GALLON DRUM)	48708, 48709, 48674, 48676	IZ01407-9	13 Drums
<i>Not TDG Regulated</i>	WASTE - GLYCOL (DRUM)	48670, 48670	IZ01407-9	2 Drums
<i>Not TDG Regulated</i>	WASTE - OIL FILTERS (DRUM)	48672, 46566	IZ01407-9	3 Drums*
<i>Not TDG Regulated</i>	WASTE - COOKING OIL	48676	IZ01407-9	1 Drum

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* The Movement Document mistakenly lists 3 drums fuel/water mix, 2 drums oil filters, and 5 drum scrap metal. Movement Document to be updated.

4.0 NON-HAZARDOUS SOLID WASTE DISPOSAL

Non-hazardous domestic solid waste was flown from CAM-3 to CAM-M and disposed of through a contract with the Municipality of Cambridge Bay at the local landfill. Nasittuq has documented authorization from the community for receiving the waste.

See Table 4-1 for the quantity of waste generated.

Table 4-1: Non-hazardous Domestic Solid Waste Sent for Disposal from CAM-3 in 2024

Month	Waste Generated (kg)
January	0
February	1030
March	0
April	625
May	818
June	1015
July	753
August	652
September	1406
October	1006
November	1068
December	1633
TOTAL	10,006

5.0 MONITORING PROGRAM

In 2024 a monitoring program was implemented at CAM-3 as required by the water licence.

The monitoring program included the following:

1. Volume of raw water drawn from the water Supply Lake (SHE-1). The raw water monitoring information is shown in **Section 2.0 Water Use**. The volume of water drawn was within the limit stated in the water licence.
2. Quality of sewage discharged from the final discharge point of the sewage disposal facility (SHE-2). The location of the sewage effluent outfall is shown in **Annex B: Sewage Effluent Outfall (CDL-2) Location with Coordinates**, including coordinates. A sump for the sewage outfall was constructed in 2010.

The sewage outfall was not discharged in 2024 and therefore no samples were required. **Annex C: Analysis of Discharged Sewage Effluent** has been left blank.

3. Accumulated rain and meltwater contained in the berms of fuel storage facilities was planned to be analyzed with hydrocarbon test strips in order to confirm it was within the effluent quality limits listed in the water licence, Part D, prior to discharge (SHE-3). Water did not accumulate in the berms enough

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to require discharge, and therefore was not tested. The coordinates of the facilities are shown in **Annex D: Location of Bermed Fuel Storage Facilities**.

4. Final Discharge Point from the Landfarm (SHE-4). No landfarm has been established at CAM-3, so this monitoring station remains inactive.

6.0 SPILLS (UNAUTHORIZED DISCHARGES)

No spills occurred at CAM-3 in 2024.

7.0 REVISIONS TO THE SPILL CONTINGENCY PLAN

The Spill Contingency Plan was updated on **27-Mar-2025**. An updated copy of the Spill Contingency Plan has been submitted to the NWB with this annual report.

8.0 PROGRESSIVE RECLAMATION WORK UNDERTAKEN

No progressive reclamation work was undertaken in 2024.

9.0 ACRONYMS

Table 9-1: Acronyms

Acronym	Definition
CO2	Carbon Dioxide
n.o.s.	Not Otherwise Specified
NWB	Nunavut Water Board
NWS	North Warning System
O&M	Operations and Maintenance
POL	Petroleum, Oil & Lubricant
TDGR	Transportation of Dangerous Goods Regulations

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ANNEX A. HAZARDOUS WASTE AND WASTE OIL DISPOSAL

The Movement Documents in accordance with the XBR are included below.

MOVEMENT DOCUMENT / MANIFEST DOCUMENT DE MOUVEMENT / MANIFESTE

A	Generator / consignor name NASITIUQ CORP	Unique Identification Number NUG100003
		Number of Identification unique

Mailing addr. / Adr. postale	City / Ville	Prov.	Country / Postal code / Pays	Post office / Code postal
22 WING BLDG 109	HORNELL HEIGHTS	CAN	H0P 1P0	

E-mail / Courrier électronique NWS-ENVIRONMENT@NASITIUQ.COM	Unique Identification Number 705-494-2013 X 3400
Shipping facility company name / Nom de l'entreprise du/instalation de l'envoi NWS CAM-3	Unique Identification Number 40

Shipping facility addr. / Adr. de l'installation d'envoi SHEPHERD BAY, NU	City / Ville	Prov.	Country / Postal code / Pays	Post office / Code postal
	NU	CAN	X0B0C0	

E-mail / Courrier électronique

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IZ01407-9

Mouvement Document / Manifeste (Reference No. N° de référence du document de mouvement / manifeste)

Additional waste lines information / Lignes d'informations supplémentaires de déchets

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MOVEMENT DOCUMENT / MANIFEST DOCUMENT DE MOUVEMENT / MANIFESTE

NASITIUQ CORP A **Generator / consignor name**
Nom de producteur / expéditeur **Unique identification Number**
Numéro d'identification unique
NUG10003

ECCC XBR v1.1 (2022/08) Additional carriers and waste

tion officielle tous regards
évitables.

déchets additifs

Year / Année
Month / Mois

Mois Day / Jour A.M.
5 2 4

Year / Année

Month / Mois Day / Jour

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IZ01407-9

Movement Document / Manifest Reference No. N° de référence du document de mouvement / manifest

Additional waste lines information / Lignes d'informations supplémentaires de déchets

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ANNEX B. SEWAGE EFFLUENT OUTFALL (CDL-2) LOCATION WITH COORDINATES

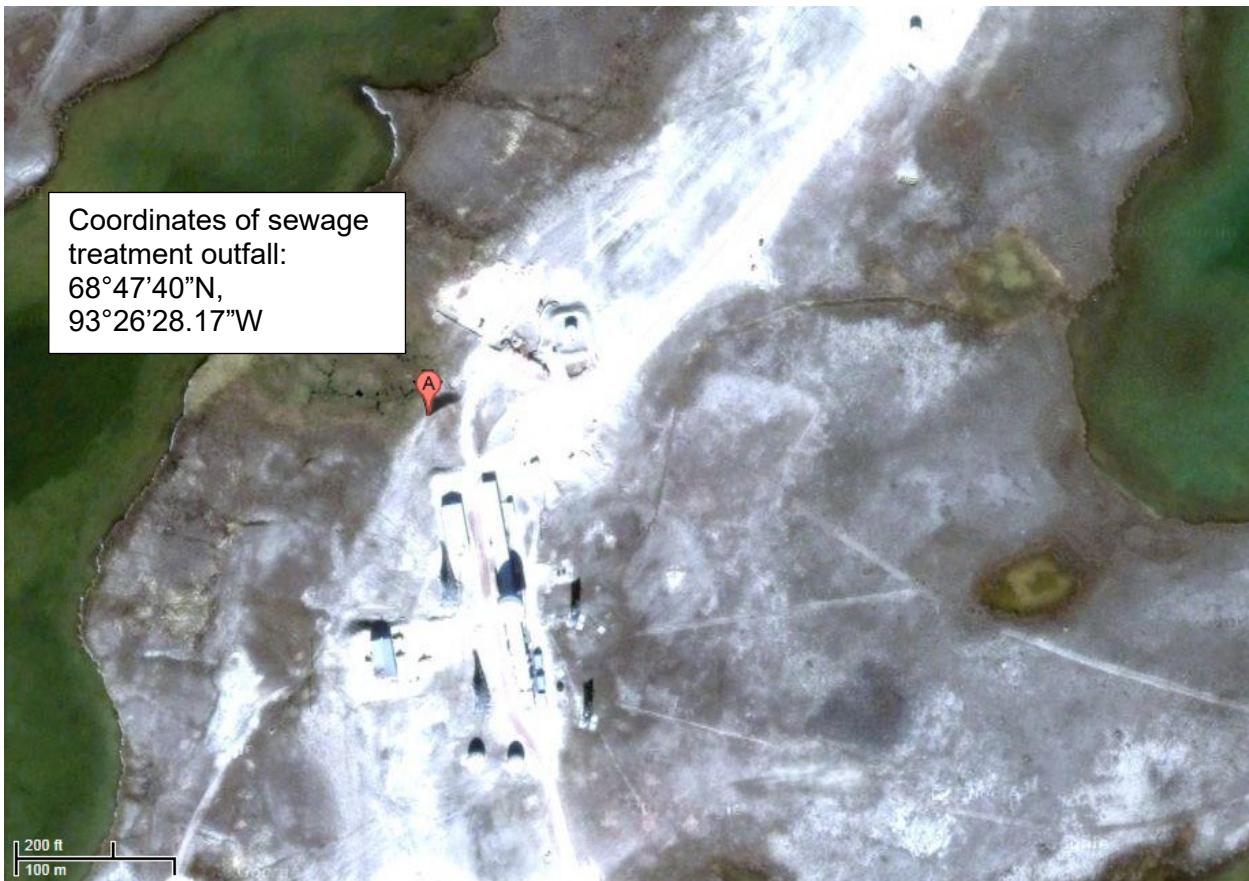


Figure 9.0.0-1: Coordinates of sewage outfall: 68°47'40"N, 93°26'28.17"W

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ANNEX C. ANALYSIS OF DISCHARGED SEWAGE EFFLUENT

The sewage outfall was not discharged in 2024 and therefore sampling was not required. This annex has been left blank.

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ANNEX D. LOCATION OF BERMED FUEL STORAGE FACILITIES

Table D-1, below, shows the locations of the bermed facilities.

Table D-1: Location of Bermed Fuel Storage Facilities at CAM-3

Berm	Location on-site	Berm Latitude ¹	Berm Longitude	Date
SHE W22A	Summit	68°47'42.00"N	93°26'19.58"W	n/a
SHE W22D	Beach	68°48'07.82"N	93°36'50.12"W	n/a

¹ Final discharge point of bermed fuel storage facility

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ANNEX E. ANALYSIS OF BERM WATER

The berms at CAM-3 were monitored over the winter and it was noted that snow did not accumulate in the berms due to wind. As no snow accumulated, only a few inches of water accumulated in the berms which was not enough to discharge.

In the future, if berm water² at CAM-3 requires discharge, it will be tested using hydrocarbon test strips as per the approved QA/QC Plan for Berm Water Sampling as stated in the water licence 8BC-FOH1929, PART D, Item 11.

² Effluent from bermed fuel storage facilities.

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