



File No: **8BC-ERK2131**

November 22, 2021

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**RE: NWB Licence No: 8BC-ERK2131**

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Dear Colonel Henley:

Please find attached Licence No: **8BC-ERK2131** issued to Department of National Defence (DND) by the Nunavut Water Board (NWB or Board) pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (Nunavut Agreement)*. The terms and conditions of the attached Licence related to Water use and Waste disposal are an integral part of this approval.

If the Licensee contemplates the renewal of this Licence, it is the responsibility of the Licensee to apply to the NWB for its renewal. The past performance of the Licensee, new documentation and information, and issues raised during a public hearing, if the NWB is required to hold one, will be used to determine the terms and conditions of the Licence renewal. Note that if the Licence expires before the NWB issues a new one, then Water use and waste disposal must cease, or the Licensee may be in contravention of the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the Licence. The NWB recommends that an application for the renewal of this Licence be filed at least three (3) months prior to the Licence expiry date.

If the Licensee contemplates or requires an amendment to this Licence, the NWB may decide, in the public's interest, to hold a public hearing. The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The process and timing may vary depending on the scope of the amendment; however, a minimum of sixty (60) days is required from time of acceptance by the NWB. It is the responsibility of the Licensee to ensure that all application materials have been received and are

acknowledged by the Manager of Licensing.

The NWB strongly recommends that the Licensee consult the comments received by interested persons on issues identified. This information is attached for your consideration.<sup>1</sup>

Sincerely,

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Lootie Toomasie  
Nunavut Water Board  
Chair

LT/as/se

Enclosure:    Licence No: **8BC-ERK2131**  
                 Comments – CIRNA, ECCC

Cc:    Qikiqtani Distribution List

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<sup>1</sup> Crown Indigenous Relations and Northern Affairs Canada (CIRNA), October 12, 2021; Environment and Climate Change Canada (ECCC), October 27, 2021.

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## **DECISION**

### **LICENCE NUMBER: 8BC-ERK2131**

This is the decision of the Nunavut Water Board (NWB) with respect to an application received on April 28, 2021 for a new Type “B” Water Licence made by:

### **DEPARTMENT OF NATIONAL DEFENCE (DND)**

to allow for the continued disposal of waste during operation and maintenance of Canadian Forces Station (CFS) Eureka, located on Ellesmere Island within the Qikiqtani Region, Nunavut, generally located at the geographical coordinates as follows:

Latitude: 79° 59' 40" N

Longitude: 85° 50' 34" W

### **DECISION**

After having been satisfied that the project proposal conforms to the North Baffin Region Land Use Plan (NBRLUP) and, is exempt from screening by the Nunavut Impact Review Board (NIRB) under section 12.4.3 of the *Nunavut Agreement* as per Nunavut Planning Commission (NPC) September 15, 2021<sup>2</sup>, the NWB decided that the application could proceed through the regulatory process. In accordance with s. 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (*Act*) and Article 13 of the *Nunavut Agreement*, public notice of the application was given and interested persons were invited to make representations to the NWB.

After reviewing the submission of the Applicant and considering the representations made by interested persons, the NWB, having given due regard to the facts and circumstances, the merits of the submissions made to it and to the purpose, scope and intent of the *Nunavut Agreement* and of the *Act*, waived the requirement to hold a public hearing, and determined that:

**Licence No: 8BC-ERK2131 be issued subject to the terms and conditions contained therein.  
(Motion #: 2021-B1-19)**

Signed this 22<sup>nd</sup> day of November, 2021 at Gjoa Haven, NU.

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Lootie Toomasie  
Nunavut Water Board, Chair  
LT/as/se

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<sup>2</sup> Nunavut Planning Commission (NPC) Conformity Determination, September 15, 2021

## I. BACKGROUND

The Application is by the Department of National Defence (DND) for the Canadian Forces Station (CFS) Eureka on Ellesmere Island. The term requested is ten years. The application is to allow for the continued disposal of waste during operation and maintenance of CFS Eureka, located on Ellesmere Island within the Qikiqtani Region.

No water use is requested in this Licence. CFS Eureka obtains water by truck from the Environment and Climate Change Canada's Eureka Weather Station. CFS Eureka discharges sewage into a two-cell sewage lagoon.

## II. PROCEDURAL HISTORY

The NWB received the Type "B" water licence application and supporting information (Application) for the renewal of Water Licence 8BC-ERK1621 on September 09, 2021. The Application consisted of the following documents:

- Renewal Application Email
- Application for Water Licence Renewal
- Abandonment and Restoration Plan, CFS Eureka
- Compliance Plan
- Cover Letter
- Executive-Summary English
- Executive-Summary French
- Executive-Summary Inuktitut
- Operation and Maintenance Plan, CFS Eureka
- QAQC Plan, CFS Eureka
- Spill Contingency Plan, CFS Eureka

A conformity determination from the Nunavut Planning Commission (NPC) was received on September 15, 2021. The NWB conducted a preliminary review, which determined that the Application meets requirement for public review. The Application was distributed for a twenty-one (21) day comment period on September 20, 2021 with the deadline for submission set for **October 12, 2021**. On or before the deadline for submission, comments were received from Crown-Indigenous Relations and Northern Affairs Canada (CIRNA) and Environment and Climate Change Canada (ECCC). The Applicant provided responses on October 27, 2021 and again on November 08, 2021 to further answer queries from Interveners. On November 16, 2021, Interveners confirmed that Applicant responses are satisfactory.

The NWB has placed in its Public Registry copies of the Application and all comments received from Interveners. This information can be accessed on the NWB's FTP site using the following link:

<ftp://ftp.nwb-oen.ca/registry/8%20MISCELLANEOUS/8B/8BC%20-%20Camp/8BC-EUR2131%20ECCC/1%20APPLICATION/2021%20Renewal/>

### **III. FILE HISTORY**

According to information included on the NWB's Public Registry, the Nunavut Water Board (NWB or Board) has issued two licences to DND in the past for this Undertaking classified as "Other".

- Licence No: 3BC-ERK1015  
Issued on June 18, 2010 and expired on June 30, 2015. This Licence did not include any Water use and only allowed for the deposit of Waste.
- Licence No: 8BC-ERK1621  
Issued on November 25, 2016 and expiring on November 24, 2021. This Licence did not include any Water use and only allowed for the deposit of Waste.

### **IV. GENERAL CONSIDERATIONS**

The following sections provide background information relevant to the terms and conditions included in this Licence, in the context of submissions received and/or the Board's rationale.

#### **Term of the Licence**

In accordance with s. 45 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA or Act), the NWB may issue a licence for a term not exceeding twenty-five (25) years. In determining an appropriate term for a renewal licence, the Board generally takes into consideration several factors including Interveners' comments, the Licensee's compliance history, as well as the rationale contained in the application.

The Licensee requested in its Application, a ten (10) year term for the licence, with a proposed expiry date in November 2031. The Interveners in their submissions did not comment on the term requested. The Board, in examining the requirements of the licensee, felt that a **ten-year term** was appropriate. The Board has therefore granted the term requested by the Licensee.

#### **Annual Reports**

Under Part B, Item 1 of the Licence, the Licensee is required to submit Annual Reports for the purpose of ensuring that the NWB has an accurate annual update of activities related to Water use and deposit of Waste during each calendar year. This information is maintained on the Public Registry and is available to interested parties upon request. A "Standardized Form for Annual Reporting" is to be used by the Licensee and is available from the NWB FTP site under the Public Registry link at the NWB Website:

[ftp://ftp.nwb-oen.ca/other documents/Standardized Forms/](ftp://ftp.nwb-oen.ca/other%20documents/Standardized%20Forms/)

#### **Water Use**

The Licensee has stated they do not require any freshwater intake. DND will obtain its Water

from the Environment and Climate Change Canada Eureka Weather Station located adjacent to their site and licensed under Water Licence No: 8BC-EUR2131. Therefore, no Water use is authorized in this Licence.

### **Waste Disposal**

Conditions regarding Waste disposal activities are included in Part D of the Licence. These conditions remain unchanged from the previous Licence, as no changes have occurred.

### **Monitoring Program**

**Part J** of this Licence, contains conditions for monitoring of Water and Effluent. These conditions have been carried on from the previous Licence. Some additional conditions have been added after recommendations from interveners during the Application review process.

The Licensee is required to include in-situ measurements of pH, temperature and conductivity, while conducting water sampling. The Licensee will ensure that a duplicate sample, a field blank and travel blanks are collected for each sampling event.

To address concerns regarding exceedances in the quality of Effluent at ERK-1 the Licensee has volunteered to take samples down gradient of Monitoring Station ERK-1 during the 2022 sampling event and provide a detailed report of the findings to demonstrate there is no discharge down gradient of ERK-1.

The Licensee is required to seek approval and/or confirmation from the Board prior to making any changes to the monitoring program. It should also be noted that additional sampling may be required upon request by the Board or the Inspector.

### **Management Plans and Related Information**

The Applicant has submitted revised plans for CFS Eureka operation. The following plans are being approved with the issuance of this Licence.

- Operation and Maintenance Plan CFS Eureka (ERK), Nunavut,; Revised: June 2021;
- Spill Contingency Plan Canadian Forces Station Alert (ERK), Nunavut, Revised June 2021; and
- Abandonment and Restoration Plan, Battery and Barrel Dumps, CFS Eureka (ERK), Nunavut, Revised: August 2021.

The Licensee is required to develop and submit a Sewage Management Plan within the 2022 Annual Report. This Plan will include field sampling data planned for summer 2022 and analysis of findings as per DND's response to ECCC comments regarding Effluent discharge down gradient of ERK-1. This Plan will also include sludge management procedures.

The Licensee is required to submit an updated QA/QC plan along with the 2021 Annual Report. The updates must include recommendations received during the technical review of the

Application.

**Summary of comments received:**

*CIRNA – October 12, 2021*

- CIRNA recommended that in-situ measurements of sensitive parameters such as pH, temperature and conductivity be measured in-situ using portable instruments and included in the sampling program. DND agreed to include in-situ measurements going forward.
- CIRNA recommended that a duplicate sample, a field blank and a travel blank be collected in each sampling event. DND agreed with this recommendation.
- CIRNA requested an update to the Operation and Maintenance Plan where it referenced the expired Licence 8BC-EUR1116. DND agreed to make the changes to reflect the renewed Water Licence 8BC-EUR2131.

*ECCC – October 27, 2021*

- ECCC recommended the Licensee provide an update on the status of the Sludge Management Plan, whether it was developed. DND stated that the sludge from a lagoon system requires removal every 20-30 years. The existing system was built to only be occupied for approximately one month out of the year, and the fact that the current system is well under capacity, it is DND's opinion that the requirement to develop a Sewage Sludge Management Plan is excessive as there would be limited information to be provided in the plan being requested.
- ECCC recommended the Proponent provide an evaluation of the lagoon performance and overall effluent quality at ERK-1, including analysis of trends over time, and potential measures or changes in operating procedures that may be implemented to improve effluent quality. DND suggested that current criteria requirements need to be adjusted or more closely aligned with a closed sewage lagoon system with no active outflow. This would better help all parties in monitoring, achieving compliance, and planning going forward.
- ECCC recommended that the Quality Assurance and Quality Control Plan be updated to include relevant and current site details. DND agreed to update the QA/QC Plan.

*ECCC – November 05, 2021*

- ECCC requested additional clarification on the discharge of sewage effluent. DND suggested that to demonstrate there is no discharge from two-cell lagoon system DND will take several samples down gradient of the lagoon during the 2022 sampling event and provide a report of the findings. ECCC agreed with this commitment.



## NUNAVUT WATER BOARD WATER LICENCE

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**Licence No: 8BC-ERK2131**

Pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

**DEPARTMENT OF NATIONAL DEFENCE (DND)**

(Licensee)

**1502 FEDERAL ROAD, P.O. BOX 717, IQALUIT, NU X0A 0H0**

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use Water or dispose of waste for a period subject to restrictions and conditions contained within this Licence:

**Licence Number/Type:** **8BC-ERK2131 TYPE “B”**

**Water Management Area:** **NANSEN AND EUREKA SOUNDS WATERSHED (59)**

**Location:** **CFS EUREKA ON ELLESmere ISLAND, QIKIQTANI REGION, NUNAVUT**

**Classification:** **OTHER UNDERTAKING**

**Purpose:** **DEPOSIT OF WASTE**

**Quantity of Water Use  
Not to Exceed:** **NO WATER USE IS AUTHORIZED**

**Effective Date:** **NOVEMBER 25, 2021**

**Expiry of Licence:** **NOVEMBER 24, 2031**

This Licence, issued and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

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**Lootie Toomasie,  
Nunavut Water Board, Chair**

## **PART A: SCOPE, DEFINITIONS AND ENFORCEMENT**

### **1. Scope**

This Licence allows for the disposal of waste for an undertaking classified as Other as per Schedule 1 of the *Regulations*, for the Canadian Forces Station (CFS) Eureka, located on the western shore of Ellesmere Island within the Qikiqtani Region, Nunavut.

- a. This Licence is issued subject to the conditions contained herein with respect to the taking of water and the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new Regulations are made or existing *Regulations* are amended by the Governor in Council under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, or other statutes imposing more stringent conditions relating to the quantity or type of waste that may be so deposited or under which any such waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be subject to such requirements; and
- b. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial and Municipal legislation.

### **2. Definitions**

In this Licence: 8BC-ERK2131

**“Act”** means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

**“Addendum”** means the supplemental text that is added to a full plan or report usually included at the end of the document and is not intended to require a full resubmission of the revised report;

**“Amendment”** means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence; modifications inconsistent with the terms of the set terms and conditions of the Licence;

**“Appurtenant Undertaking”** means an undertaking in relation to which a use of Water or a deposit of Waste is permitted by a licence issued by the Board;

**“Board”** means the Nunavut Water Board established under the *Nunavut Land Claims Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

**“Effluent”** means treated or untreated liquid Waste material that is discharged into the environment from a structure such as a settling pond, landfarm or a treatment plant;

“**Engineer**” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

“**Greywater**” means all liquid Wastes from showers, baths, sinks, kitchens and domestic washing facilities, but does not include toilet wastes;

“**Hazardous Waste**” means Waste classified as “hazardous” by Nunavut Territorial or Federal legislation, or as “dangerous goods” under the Transportation of Dangerous Goods Act;

“**High Water Mark**” means the usual or average level to which a water body rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);

“**Inspector**” means an Inspector designated by the Minister under Section 85 (1) of the *Act*;

“**Landfarm Facility**”; means the facility designed to treat hydrocarbon contaminated soil as described in the water licence application dated November 16, 2009;

“**Landfill**” means the facility designed to contain non-hazardous solid waste as described in the application dated November 16, 2009;

“**Licensee**” means the holder of this Licence;

“**Modification**” means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;

“**Monitoring Program**” means a monitoring program established to collect data on surface water and groundwater quality to assess impacts to the freshwater aquatic environment of an appurtenant undertaking;

“**Nunavut Agreement**” means the “*Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*”, including its preamble and schedules, and any amendments to that agreement made pursuant to it;

“**Regulations**” means the *Nunavut Waters Regulations SOR/2013-69 18<sup>th</sup> April, 2013*;

“**Sewage**” means all toilet wastes and greywater;

**“Sewage Treatment Facility”** means the two-cell lagoon used to treat black and greywater on site, located on the south side of the main station as described in the Operation and Maintenance Plan, CFS Eureka (ERK), Nunavut;

**“Spill Contingency Plan”** means a Plan developed to deal with unforeseen petroleum and hazardous materials events that may occur during the operations conducted under the Licence;

**“Sump or Sumps”** A structure or depression that collects, controls, and filters liquid waste before it is released to the environment. This structure should be designed to prevent erosion while allowing percolation of liquid waste;

**“Toilet Wastes”** means all human excreta and associated products, but does not include greywater;

**“Waste”** means, as defined in S.4 of the *Act*, any substance that, by itself or in combination with other substances found in Water, would have the effect of altering the quality of any Water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any Water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means;

**“Waste Disposal Facilities”** means the Sewage Treatment Facility, Landfill and Landfarm;

**“Water” or “Waters”** means Waters as defined in section 4 of the *Act*.

### 3. **Enforcement**

- a. Failure to comply with this Licence will be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*;
- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*; and
- c. For the purpose of enforcing this Licence and with respect to the use of Water and deposit or discharge of waste by the Licensee, Inspectors appointed under the *Act*, hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable law.

### **PART B: GENERAL CONDITIONS**

1. The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31 of the year following the calendar year being reported, containing the following information:

- a. A summary report of Waste disposal activities;
  - b. Quantity of Waste backhauled to approved facility for disposal;
  - c. A list of unauthorized discharges and a summary of follow-up actions taken;
  - d. The location of Waste deposition in accordance with Part J, Item 2;
  - e. Any revisions to the Spill Response Plan and any other Plans associated with this Licence, as required by Part B, Item 5, submitted in the form of an Addendum;
  - f. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
  - g. A summary of all information requested and results of the Monitoring Program; and
  - h. Any other details on Water use or waste disposal requested by the Board by November 1 of the year being reported.
2. The Licensee shall notify the NWB of any changes in operating plans or conditions associated with the Project at least thirty (30) days prior to any such change.
3. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.
4. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
5. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted in the form of an Addendum to be included with the Annual Report.
6. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board shall become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
7. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:

**(a) Manager of Licensing:**  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0B 1J0  
Telephone: (867) 360-6338  
Fax: (867) 360-6369

Email: [licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)

**(b) Inspector Contact:**

Manager of Field Operations, CIRNA (known previously as CIRNAC)  
Nunavut District, Nunavut Region  
P.O. Box 100  
Iqaluit, NU X0A 0H0  
Telephone: (867) 975-4284  
Fax: (867) 979-6445

8. The Licensee shall submit one electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut.
9. The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the NWB is received and acknowledged by the Manager of Licensing.
10. This Licence is assignable as provided for in Section 44 of the *Act*.

**PART C: CONDITIONS APPLYING TO WATER USE**

1. The use of Water is not authorized under this Licence.

**PART D: CONDITIONS APPLYING TO WASTE DISPOSAL**

1. The Licensee shall locate areas designated for Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body such that the quality, quantity or flow of Water is not impaired, unless otherwise approved by the Board in writing.
2. The Licensee is authorized to deposit all non-hazardous, non-combustible Waste in the onsite Landfill.
3. The Licensee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an incinerator.
4. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of Waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing.
5. The Licensee shall backhaul and dispose of all hazardous Wastes, waste oil and non-combustible Waste generated through the course of the operation at a licensed waste disposal site.

6. The Licensee shall backhaul and dispose of incinerator ash generated through the course of the operation in a licensed waste disposal facility, unless otherwise approved by the Board in writing.
7. The Licensee shall maintain records of all Waste backhauled and records of confirmation of proper disposal of backhauled Waste. These records shall be made available to an Inspector upon request.
8. The Licensee shall provide at least ten (10) days notification to an Inspector, prior to initiating any Effluent discharge from the Sewage Treatment Facility or Landfarm.
9. The Licensee shall direct all Sewage to the Sewage Treatment Facility.
10. Effluent discharged from the Sewage Treatment Facility at monitoring station ERK-1 shall not exceed the following Effluent quality limits:

<b>Parameter</b>	<b>Maximum Concentration of any Grab Sample</b>
BOD5	80 mg/L
Total Suspended Solids	70 mg/L
Fecal Coliforms	1 x 10 <sup>6</sup> CFU/100 mL
Oil and grease	No visible sheen
pH	Between 6 and 9

11. The Effluent discharge from the Landfarm Facility at monitoring station ERK-2 shall not exceed the following Effluent quality limits.

<b>Parameter</b>	<b>Maximum Concentration of any Grab Sample</b>
Benzene	370 (µg/L)
Toluene	2 (µg/L)
Ethylbenzene	90 (µg/L)
Lead	1 (µg/L)
Oil and Grease	15 (mg/L) and no visible sheen
Phenols	20 (µg /L)

12. If the Effluent does not meet the Effluent quality limits of Part D, Item 11, it shall be considered hazardous Waste and disposed off-site at an approved facility.

**PART E: CONDITIONS APPLYING TO CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS**

1. The Board has approved the Plan entitled “Operation and Maintenance Plan, CFS Eureka (ERK), Nunavut”, Revised June 2021, that was submitted as additional information with the Application.
2. The Licensee shall not erect camps or store material on the surface of frozen streams or lakes including the adjacent banks except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.
3. The Licensee shall conduct all activities in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake corrective measures in the event of any impacts on surface drainage.
4. With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the water.
5. The Licensee shall not mobilize heavy equipment or vehicles for trenching or other activities unless the ground surface is capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall be suspended if rutting occurs.

**PART F: CONDITIONS APPLYING TO MODIFICATIONS AND CONSTRUCTION**

1. The Licensee may, without written consent from the Board, carry out Modifications to the Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
  - a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
  - b. such Modifications do not place the Licensee in contravention of the Licence or the Act;
  - c. such Modifications are consistent with the NIRB Screening Decision;
  - d. the Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
  - e. the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part F, Item 1 have not been met can be carried out only with written approval from the Board.
3. The Licensee shall provide as-built plans and drawings of the Modifications referred to in

this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.

#### **PART G: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING**

1. The Board has approved the Plan entitled “Spill Contingency Plan, Canadian Forces Station Alert (ERK), Nunavut”, Revision 3.2, dated June 2021, that was submitted as additional information with the Application.
2. The Licensee shall prevent any chemicals, petroleum products or Wastes associated with the project from entering water. All Sumps and fuel caches shall be located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent water body and inspected on a regular basis.
3. The Licensee shall conduct any equipment maintenance and servicing in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other Waste and contain potential spills.
4. If during the term of this Licence, an unauthorized discharge of Waste occurs, or if such a discharge is foreseeable, the Licensee shall:
  - a. employ the approved Spill Contingency Plan;
  - b. report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4284; and
  - c. for each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
5. The Licensee shall, in addition to Part G, Item 4, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a water body.

#### **PART H: CONDITIONS APPLYING TO OPERATIONS AND MAINTENANCE**

1. The Board has approved the Plan entitled “Operation and Maintenance Plan CFS Eureka (ERK), Nunavut” Revised June 2021 that was submitted as additional information with the Application.
2. The Licensee will develop and submit to the Board for review, within the 2022 Annual Report, a Sewage Management Plan, including potential sludge management procedures. This plan will clearly state the design purpose of the closed system lagoon, and describe its operations, to address the concerns received from interveners during the Application.

3. The Licensee shall conduct an inspection of all engineered facilities related to the management of water and waste, annually during site activity by an Engineer. The Engineer's report shall be submitted to the Board within sixty (60) days of the inspection, including a covering letter from the Licensee outlining an implementation plan addressing the Engineer's recommendations.
4. An inspection of the Waste Disposal Facilities by a Geotechnical Engineer may be requested by an Inspector.

**PART I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION**

1. The Board has approved the Plan entitled "Abandonment and Restoration Plan, Battery and Barrel Dumps, CFS Eureka (ERK), Nunavut", Version 2.0, dated August 21, 2021 that was submitted as additional information with the Application.
2. The Licensee shall submit to the Board for approval in writing, six (6) months prior to the abandonment of the CFS-Eureka site, a Final Closure and Reclamation Plan using as reference and in accordance with the principles of the Mine Site Reclamation Guidelines for the Northwest Territories (INAC 2007), the Abandoned Military Site Remediation Protocol (INAC 2008) and other relevant policies.
3. The Licensee shall complete the restoration work within the time schedule specified in the Plan, or as subsequently revised and approved by the Board in writing.
4. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.
5. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut's Environmental Guideline for Site Remediation, 2010. The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.

**PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM**

1. The Licensee shall maintain Monitoring Stations at the following locations:

<b>Monitoring Program Station Number</b>	<b>Description</b>	<b>Status</b>
ERK-1	Final Discharge Point of the Sewage Treatment Facility	Active (Quality)
ERK-2	Final Discharge Point of the Landfarm Facility	Active (Quality)

ERK-3	Runoff and leachate from the Landfill	Active (Quality)
ERK-4	Runoff and leachate from the Battery Dump	Active (Quality)
ERK-5	Runoff and leachate from the Barrel Dump	Active (Quality)

2. The Licensee shall determine, in consultation with the Inspector, the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where Wastes associated with operations and maintenance are deposited and have been deposited. Locations shall be reported in the Annual Report.
3. The Licensee shall analyze samples, prior to the release of Effluent from the Sewage Treatment Facility at ERK-1 for demonstrating compliance with the parameters listed under Part D, Item 10.
4. The Licensee shall analyze samples, prior to the release of effluent from the Landfarm Facility at ERK-2 for demonstrating compliance with the parameters listed under Part D, Item 11.
5. The Licensee shall take samples down gradient of Sewage Treatment Facility during the 2022 sampling event and provide detailed analysis of findings within the Plan referred to in Part H, Item 2, to demonstrate there is no discharge from Sewage Treatment Facility down gradient of ERK-1.
6. The Licensee will include in-situ measurements of pH, temperature and conductivity, while conducting water sampling, and include them in the monitoring results submitted to the Board.
7. The Licensee shall sample at Monitoring Program Station ERK-3, 4 and 5 monthly during periods of runoff or seepage. Samples shall be analyzed for the following parameters:

TPH (Total Petroleum Hydrocarbons)  
 PAH (Polycyclic Aromatic Hydrocarbons)  
 BTEX (Benzene, Toluene, Ethylbenzene, Xylene)

BOD5	Fecal Coliforms
pH	Conductivity
Total Suspended Solids	Oil and Grease
Nitrate-Nitrite	Ammonia Nitrogen
Calcium	Magnesium
Potassium	Sodium
Sulphate	Total Hardness
Total Phenols	Total Alkalinity
Total Arsenic	Total Cadmium

Total Copper	Total Chromium
Total Iron	Total Lead
Total Mercury	Total Nickel

8. The Licensee shall measure and record, in cubic metres, the daily quantities of effluent released from monitoring Station ERK-1.
9. All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board in writing.
10. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
11. The Licensee shall update the plan entitled “Quality Assurance (QA) and Quality Control (QC) Plan CFS Eureka (ERK), Nunavut” revised August 2021, which was submitted with the Application. The update will include recommendations received from interveners and will be submitted to the Board with the 2021 Annual Report.
12. The Licensee shall annually review the Quality Assurance /Quality Control plan and modify accordingly as required by changes in operation and/or technology. Revisions to the Plans are to be submitted to the NWB in the form of an Addendum, complete with an approval letter from an accredited lab that meets standards set in Part J, Item 10 and Item 11, to be included with the Annual Report.
13. The Licensee shall include in the Annual Report required under Part B, Item 1 all data, monitoring results and information required by this Part.
14. Additional monitoring requirements may be requested by the Inspector and NWB.
15. Modifications to the Monitoring Program may be made only upon written request and subsequent approval of the Board in writing.