

April 22, 1999

Attention: Glen J. Indra, President  
Starfield Resources Inc.  
Suite 420 - 625 Howe Street  
Vancouver, BC

RE: NWB Permit No. NWB2FER9901

Dear Mr. Indra:

Please find attached permit No. NWB2FER9901 issued by the Nunavut Water 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*. The terms and conditions of the attached permit related to water use and waste disposal are an integral part of this approval.

In accordance section 13.7.4 of the Agreement, the NWB waived the requirement for a public hearing as no public concerns were expressed, and furthermore delegated its authority to approve this application to its Chief Administrative Officer pursuant to section 13.7.5 of the Agreement (**Motion #: 99-01-12**).

Sincerely,

Philippe di Pizzo  
Executive Director

Enclosure: Permit No. NWB2FER9901  
NIRB Screening Decision

cc: Nunavut Coordinator, Indian and Northern Affairs Canada  
Kivalliq Inuit Association  
Executive Director, Nunavut Impact Review Board  
Executive Director, Nunavut Planning Commission

**WATER USE AND WASTE DISPOSAL PERMIT NWB2FER9901**

**Pursuant to Article 13 of 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 Starfield Resources Inc., authorization to use water and dispose of waste in conjunction with exploration near Ferguson Lake for the Ferguson Lake Copper Nickel Project, subject to the terms and conditions outlined herein and in the applicable Land Use Permits.**

|                         |                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PERMIT NO:</b>       | <b>NWB2FER9901</b>                                                                                                                             |
| <b>PERMITTEE:</b>       | <b>Starfield Resources Inc.<br/>Suite 420 - 625 Howe Street<br/>Vancouver, BC<br/>Tel: 604-608-0400                      Fax: 604-608-0344</b> |
| <b>START DATE:</b>      | <b>April 22, 1999</b>                                                                                                                          |
| <b>COMPLETION DATE:</b> | <b>April 22, 2001</b>                                                                                                                          |
| <b>PURPOSE:</b>         | <b>Water Use And Waste Disposal Associated With<br/>Exploration.</b>                                                                           |
| <b>LOCATION:</b>        | <b>Ferguson Lake, Kivalliq Region<br/>General Latitude: 62°51' - 63°00' Longitude: 96°45' - 97°00'<br/>NTS: 65I/15W (1:50,000)</b>             |

This permit issued and recorded at Gjoa Haven includes and is subject to the annexed conditions.

Approved by,

Philippe di Pizzo  
Executive Director

**1. SCOPE:**

1. Compliance with the terms and conditions of this permit does not absolve the Permittee from responsibility for compliance with all applicable legislation, guidelines, or directive.
2. This permit 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, and with respect to any other impacts of the Permittee's activities on water quality, quantity or flow, including on surface drainage.
3. Definition:
  - a. **"sump"** means a man-made pit, trench hollow or cavity in the earth's surface used for the purpose of depositing waste material therein; and
  - b. **"drill waste"** means all materials or chemicals, solid or liquid, associated with drilling of bore holes and includes bore hole cuttings.
4. The Permittee shall ensure a copy of this Permit is maintained at the site of operation at all times.

**2. CONDITIONS FOR THE USE AND PROTECTION OF WATER:**

1. The Permittee shall obtain water for domestic purposes from Ferguson Lake up to a maximum volume of 100 cubic metres per day.
4. The Permittee shall equip all water intake hoses with a screen with an appropriate mesh size to ensure that there is no entrapment of fish.
5. The Permittee shall ensure compliance with Section 36 of the *Fisheries Act* which requires that no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance may enter such water body.
6. The *Fisheries Act* prohibits the harmful alteration, disruption or destruction of fish habitat. No construction or disturbance of any stream, lake bed or banks of any definable watercourse is permitted unless formally authorized by the

Department of Fisheries and Oceans.

7. The Permittee shall ensure that the drill sites avoid known environmentally sensitive areas by a minimum of 250 metres.
8. No land-based drilling is to be done within thirty (30) metres of the normal high water mark of any water body or watercourse. Drilling wastes from land-based drilling shall be disposed of and contained in a sump such that they do not enter any water body.
9. The Permittee shall follow the *Interim Guidelines for On-Ice Drilling in the NWT* for all on-ice drilling operations. These are:
  - i. All drill cuttings shall be removed from the ice surface.
  - ii. The release of total suspended solid in the receiving environment shall be in compliance with the *Guidelines for Total Suspended Solids* contained in the *Canadian Council of Ministers of the Environment's (CCME) Canadian Water Quality Guidelines, Chapter 3 - Freshwater Aquatic Life* (i.e. 10 mg/L for lakes with background level under 100 mg/L, or 10% for those above 100 mg/L).
  - iii. For kimberlite targets, non-toxicity must be demonstrated; toxicity testing shall be done on the effluent from the drilling operation and the results shall be submitted to the Board.
10. The Permittee shall establish baseline conditions of water quality before drilling through lake ice.
11. If artesian flow is encountered, drill holes shall be plugged and permanently sealed upon project termination.

### **3. CONDITIONS FOR THE DISPOSAL OF WASTE:**

1. The Permittee shall not deposit any waste in any body of water, or on the banks thereof, which may impair the quality, quantity, or flow of water.
2. Areas designated for waste disposal shall not be located within thirty (30) metres of the ordinary high water mark of any body of water, unless otherwise authorized.
3. The Permittee shall ensure that waste water that cannot be re-circulated be disposed of in a sump that does not drain into a waterbody.

4. The sump or depression shall be of sufficient capacity to accommodate the volumes of waste such that no additional impacts are created.
5. The Permittee shall ensure that disturbance of vegetation from deposit of drill fluids/cuttings is restricted to the area of the sump and the ground prepared for revegetation upon abandonment.
6. The Permittee shall construct a sump to contain all sewage/greywater to the Ferguson Lake Lodge septic tank.
7. The Permittee shall keep all garbage and debris in a covered metal container prior to final disposal.
8. All combustible and kitchen waste shall be incinerated.
9. All non-combustible wastes, scrap metal, discarded machinery and parts, and other bulky material shall be disposed of in an approved disposal site.
10. The Permittee shall not bury any wastes.
11. The Permittee shall dispose of all toxic or persistent substance in a manner approved by the NWB.

**4. CONDITIONS FOR CAMPS AND ACCESS INFRASTRUCTURES:**

1. Camps shall be located on gravel, sand or other durable land in order to minimize impacts on surface drainage.
2. The Permittee shall not erect camps or store material on the surface ice of lakes or streams.
3. The Permittee shall ensure that the land use area is clean and tidy at all times.
4. To minimize impacts on surface drainage, the Permittee shall prepare all sites in such a manner as to prevent rutting of the ground surface.
5. The Permittee shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging.

6. The Permittee shall suspend overland travel of equipment or vehicles if rutting occurs.
7. The Permittee shall be required to undertake any corrective measures in the event of any impacts on surface drainage as a result of the Permittee's operations.

**5. CONDITIONS FOR THE USE AND STORAGE OF FUEL, CHEMICALS AND ADDITIVES:**

1. All spills of oil, fuel, or other deleterious materials shall be reported immediately to the 24-Hour Spill Line at (867) 920-8130 and to the DIAND Water Resources Inspector at (867) 979-4405.
2. If, during the period of this permit, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Permittee shall:
  - i. Employ the Contingency Plan;
  - ii. Report the incident immediately to the 24-Hour Spill Line at (867) 920-8130 and to the DIAND Water Resources Inspector at (867) 979-4405; and
  - iii. Submit to the Inspector a detailed report on each occurrence no later than thirty (30) days after initially reporting the event.
2. The Permittee shall ensure that any chemicals, fuel or wastes associated with the project do not enter waters frequented by fish. All fuel caches shall be located a minimum of thirty-one (31) metres from the normal high water mark and in such a manner that no fuel can enter any such water body.
3. The Permittee shall ensure that drill additives or muds used in connection with this drilling program are re-circulated or contained such that they do not enter the water, or are certified to be non-toxic.
4. The Permittee shall have one extra fuel storage container on site equal to, or greater than, the size of the largest fuel container.
5. The Permittee shall examine regularly all fuel and chemical storage containers for leaks, and all leaks shall be repaired immediately.
6. The Permittee shall seal all container outlets except the outlet currently in use.
7. The Permittee shall mark all fuel containers with the Permittee's name.

8. The Permittee shall dispose of all combustible waste petroleum products by incineration and removal from the site.

**6. CONDITIONS FOR ABANDONMENT AND RESTORATION:**

1. The Permittee shall advise the Water Board at least 30 days prior to the completion of the operation on but not limited to the following:
  - (a) the plan for removal and storage of equipment and materials,
  - (b) backfilling and reclamation of sumps, and
  - (c) when final clean-up and restoration will be completed.
2. Upon abandonment, the Permittee shall remove all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building material to an approved landfill site.
3. The Permittee shall backfill and restore to the satisfaction of the Inspector all sumps back to the natural surrounding contours of the land prior to the expiry of this permit.
4. The Permittee shall cap all drill holes and cut off any drill casings that remain above ground to ground level upon abandonment.
5. The Permittee shall undertake progressive and immediate restoration for any components of the project which are no longer required for the Permittee's operations.

**7. OTHER CONDITIONS:**

1. The NWB shall be notified of any changes in operating plans or conditions associated with this project.
3. If operating plans change, the Board shall be informed thirty (30) days prior to any such change.
4. Annually and within thirty (30) days upon expiration of the permit, the Permittee shall submit to the Nunavut Water Board and to the Inspector a summary report of activities, water quality data, abandonment and restoration of the site, and list of unauthorized spills and follow-up action taken.

2. The NWB reserves the right to impose closure of any area to the Permittee in periods when dangers to natural resources are severe.

**GENERAL REQUIREMENTS FOR THE ADMINISTRATION OF PERMITS ISSUED  
BY THE NUNAVUT WATER BOARD (NWB)**

The following form an integral part of Permit No. NWB2FER9901:

1. A copy of this permit and associated documents are placed on the NWB Public Register.
2. If the Permittee contemplates the renewal of Permit No. NWB2FER9901, it is its responsibility to apply to the NWB for its renewal. The past performance of the Permittee, new 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 Permit renewal. If the permit expires before the NWB issues a new one, then water use and waste disposal must cease, or the Permittee will be in contravention of the Nunavut Land Claims Agreement. **The NWB recommends that an application for renewal of Permit No. NWB2FER9901 be filed at least two months before the expiry date.**
3. If Permit No. NWB2FER9901 requires amendment, then a public hearing may be required. The Permittee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The process may vary depending on the nature and scope of the amendment requested. Applications for permit renewal and amendment may be subject to environmental screening by the Nunavut Impact Review Board under Article 12 of the Nunavut Land Claims Agreement.
4. The Inspector for this permit is:  

Paul Smith  
Water Resources Officer  
Department of Indian and Northern Affairs  
Iqaluit, NT X0A 0H0  
Tel.: (867) 979-4405  
Fax: (867) 979-6445
5. Any communication with respect to this permit shall be made in writing to the attention of:  

Philippe di Pizzo  
Executive Director  
Nunavut Water Board  
Gjoa Haven, NT X0E 1J0  
Tel.: (867) 360-6338  
Fax: (867) 360-6369
6. The Permittee shall submit all reports, studies, and plans to the Board in triplicate, and include an Executive Summary in English and Inuktitut.