



GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR
Department of Environment and Climate Change

CERTIFICATE OF APPROVAL

Pursuant to the Environmental Protection Act, SNL 2002 c E-14.2 Section 83

Issue Date: *August 17, 2022*

Approval No. AA22-085691

Expiration: *August 17, 2027*

File No. 738.032.1

Proponent: **Canada Fluorspar (NL) Inc.**
P.O. Box 337
St. Lawrence, NL, Canada
A0E 2V0


Attention: **Shelly Adams – Environmental Coordinator**

Re: **St. Lawrence Fluorspar Mine**

Approval is hereby given for the operation of a fluorspar mine near St. Lawrence, NL, including: open pit mines at Grebes Nest Pit, Centre Pit and Open Cut Pit; AGS Mill; South Waste Dump stockpiles; overburden and organic soil stockpiles; AGS East Tailings Management Facility; transportation of concentrate to a marine terminal; associated project infrastructure including settlement ponds; and the Blue Beach Marine Terminal and associated access road.

This Certificate of Approval does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies. Nothing in this Certificate of Approval negates any regulatory requirement placed on the proponent. Where there is a conflict between conditions in this Certificate of Approval and a regulation, the condition in the regulation shall take precedence. Approval from the Department of Environment and Climate Change shall be obtained prior to any significant change in the design, construction, installation, or operation of the St. Lawrence Fluorspar Mine, including any future expansion of the St. Lawrence Fluorspar Mine. This Certificate of Approval shall not be sold, assigned, transferred, leased, mortgaged, sublet or otherwise alienated by the proponent without obtaining prior approval from the Minister.

This Certificate of Approval is subject to the terms and conditions as contained therein, as may be revised from time to time by the Department. Failure to comply with any of the terms and conditions may render this Certificate of Approval null and void, may require the proponent to cease all activities associated with this Certificate of Approval, may place the proponent and its agent(s) in violation of the *Environmental Protection Act*, and will make the proponent responsible for taking such remedial measures as may be prescribed by the Department. The Department reserves the right to add, delete or modify conditions to correct errors in the Certificate of Approval or to address significant environmental or health concerns.


For **MINISTER**

TERMS AND CONDITIONS FOR APPROVAL No. AA22-085691

August 17, 2022

General

1. Approval is hereby given for the operation of a fluorspar mine near St. Lawrence, NL, including: open pit mines at Grebes Nest Pit, Centre Pit and Open Cut Pit; AGS Mill; South Waste Dump stockpiles; overburden and organic soil stockpiles; AGS East Tailings Management Facility; transportation of concentrate to a marine terminal; associated project infrastructure including settlement ponds; and the Blue Beach Marine Terminal and associated access road.
2. Significant future expansion or change of activities will require a separate Certificate of Approval or an amendment.
3. Any inquiries concerning this approval shall be directed to the St. John's office of the Pollution Prevention Division (telephone: (709) 729-2556; or facsimile: (709) 729-6969).
4. In this Certificate of Approval:
 - **accredited** means the formal recognition of the competence of a laboratory to carry out specific functions;
 - **acid mine drainage** means any flow or drainage of water having a pH of less than 5.5 from areas affected by mining activities;
 - **associated product** means petroleum or a derivative of it, except gasoline, which is in a liquid state at ambient temperature and pressure;
 - **CFI** means Canada Fluorspar (NL) Inc.;
 - **Department** means the Department of Environment and Climate Change and its successors;
 - **DGSNL** means Digital Government and Service NL and its successors;
 - **effluent discharge criteria (EDC)** means the maximum allowable levels for the parameters listed in Table 3;
 - **EDMS** means Environmental Data Management System;
 - **grab sample** means a quantity of undiluted sample collected at any given time. In this Approval it refers to waste oil and effluent;
 - **hazardous waste** means a product, substance or organism that is intended for disposal or recycling, including storage prior to disposal or recycling, and that:
 - (a) is listed in Schedule III of the *Export and Import of Hazardous Waste Regulations under the Canadian Environmental Protection Act, 1999*;
 - (b) is included in any of Classes 2 to 6, and 8 and 9 of the *Transportation of Dangerous Goods Regulations under the Transportation of Dangerous Goods Act, 1992*; or

(c) exhibits a hazard classification of a gas, a flammable liquid, an oxidizer, or a substance that is dangerously reactive, toxic, infectious, corrosive or environmentally hazardous;

- **leak or leakage** means any discharge of gasoline, associated product, used oil or used glycol from a storage tank system, pipeline, tank vessel, tank car or tank vehicle, other than through the usual function for which the storage tank system, pipeline, tank vessel, tank car or tank vehicle was designed;
- **licensed** means has a Certificate of Approval issued by the Minister to conduct an activity;
- **malfunction** means any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, wastewater treatment equipment, process equipment, or a process to operate in a normal or usual manner. Failures caused in part by poor maintenance or careless operation are not malfunctions;
- **Minister** means the Minister of the Department;
- **NO_x** means oxides of nitrogen;
- **NO₂** means nitrogen dioxide;
- **oil separator** means a device used to separate and remove oily wastes from oil and water mixtures;
- **Plan** means the specific plan as identified in the section of this Approval within which it is used. For example, in the *Waste Management Plan* section it refers to the Waste Management Plan;
- **PM_{2.5}** means particulate matter with a diameter of 2.5 µm or less;
- **QA/QC** means Quality Assurance/Quality Control;
- **register(ed)**, in the context of storage tanks, means that information regarding the storage tank system has been submitted to a DGSNL office and a registration number has been assigned to the storage tank system. In the context of environmental site assessment and impacted site management work, registered means approved by the Department in accordance with departmental policy and guidelines;
- **regulated substance** means a substance subject to discharge limit(s) under the *Environmental Control Water and Sewage Regulations, 2003*;
- **Site Professional** means an individual who is registered with the Department to oversee environmental site assessment, remediation and contaminated site management work in Newfoundland and Labrador;
- **spill or spillage** means a loss of gasoline, associated product, used oil or used glycol in excess of 70 litres from a storage tank system, pipeline, tank vessel or vehicle, or an uncontrolled release of any volume of a regulated substance onto or into soil or a body of water;
- **storage tank system** means a tank and all vent, fill and withdrawal piping

associated with it installed in a fixed location and includes a temporary arrangement;

- **TDS** means total dissolved solids;
- **TPH** means total petroleum hydrocarbons, as measured by the Atlantic PIRI method;
- **TPM** means total particulate matter with diameters less than 100µm;
- **TSS** means total suspended solids;
- **used glycol** means glycol that, through use, storage or handling, can no longer be used for its original purpose; and
- **used oil** means oil that, through use, storage or handling, can no longer be used for its original purpose.

5. All necessary measures shall be taken to ensure compliance with all applicable acts, regulations, policies and guidelines, including the following, or their successors:

- *Environmental Protection Act;*
- *Water Resources Act;*
- *Air Pollution Control Regulations, 2022;*
- *Environmental Control Water and Sewage Regulations, 2003;*
- *Halocarbon Regulations;*
- *Storage and Handling of Gasoline and Associated Products Regulations, 2003;*
- *Used Oil and Used Glycol Control Regulations;*
- *Heating Oil Storage Tank System Regulations, 2003;*
- *Storage of PCB Waste Regulations, 2003;*
- *Ambient Air Monitoring Guidance Document;*
- *Sampling of Water and Wastewater - Industrial Effluent Applications Guidance Document;*
- *Accredited Laboratory Policy;*
- *Effluent Schedule Determination Policy for Industries*
- *Compliance Determination Guidance Document;*
- *Precipitation Drainage of Dyke Areas Guidance Document;*
- *Environmental Guidelines for Controlling Emissions of Volatile Organic Compounds from Above Ground Storage Tank; and*
- *Guidance Document for the Management of Impacted Sites.*

This Approval provides terms and conditions to satisfy various requirements of the above listed acts, regulations, Departmental policies and guidelines. If it appears that any of the pertinent requirements of these acts, regulations, policies and guidelines are not being met, then a further review of the works shall be conducted, and suitable pollution control measures may be required by the Minister.

6. All reasonable efforts shall be taken to minimize the impact of the operation on the environment. Such efforts include:

- minimizing the area disturbed by the operation,
- minimizing air, water or soil pollution,
- finding alternative uses, acceptable to the Department, for waste or rejected materials,

- removing equipment or structures when they no longer have further use, and
 - considering the requirement for the eventual rehabilitation of disturbed areas when planning the development of any area on the facility property.
7. CFI shall provide to the Department, within a reasonable time, any information, records, reports or access to data requested or specified by the Department.
 8. CFI shall keep all records or other documents required by this Approval at the St. Lawrence facility for a period of not less than three (3) years, beginning the day they were made. These records shall be made available for review by officials of the Department or DGSNL when requested.
 9. Should CFI wish to deviate in any way from the terms and conditions of this Certificate of Approval, a written request detailing the proposed deviation shall be made to the Minister. CFI shall comply with the most current terms and conditions until the Minister has authorized otherwise. In the case of meeting a deadline requirement, the request shall be made at least 60 days ahead of the applicable date as specified in this Approval or elsewhere by the Department.

Activities Affecting Bodies of Water

10. Any work that must be performed in a body of water below the high water mark shall be carried out during a period of low water levels, unless otherwise permitted in writing by the Department.
11. All construction operations shall be carried out in a manner that minimizes damage to land, vegetation, and watercourses, and which prevents the discharge of substances, to bodies of water, in excess of applicable regulatory limits.
12. The use of heavy equipment shall be confined to dry stable areas and shall not be carried out in streams or bodies of water, unless otherwise permitted in writing by the Department.
13. All vehicles and equipment shall be in good repair, and shall be free of leaks of oil or other harmful substances that could impair water quality.
14. During the construction of concrete components, formwork shall be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.
15. Waste hardened concrete shall not be disposed as unsuitable material at the project site. Waste hardened concrete shall be put to beneficial use on site as fill material, or it shall be sent to an approved waste disposal site.
16. All areas affected by this project shall be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if necessary in the opinion of this Department.
17. Prior written permission is required from the Department for all work that takes place within 15 metres of a body of water, including but not limited to bridges, culverts, fording, stream modifications, infilling and dredging.

Environmental Protection Plan

18. CFI shall implement the most recent version of the St. Lawrence Fluorspar Mine Environmental Protection Plan. This Plan shall be reviewed annually and revised as necessary, accounting for expanding or alteration of activities. All proposed revisions shall be submitted to the Department for review.

Waste Management

19. The management of waste generated at the facility is subject to compliance with the *Environmental Protection Act*. All non-industrial waste shall be stored in a manner acceptable to the Department and, on at least a weekly basis, be disposed of:
- at an authorized waste disposal site, with the permission of the owner/operator of the site; or
 - by some other means acceptable to the Department.

If required, industrial waste shall be disposed of by a licensed operator.

20. CFI shall ensure that all volatile chemical and solvent wastes, if they cannot be reused, are placed in suitable covered containers for disposal in a manner acceptable to the Department. Disposal of liquid wastes at waste disposal sites in the province is not permitted.
21. Disposal of hazardous waste in a municipal or regional waste disposal site in this Province is prohibited. Transporters of hazardous waste shall have an approval issued by the Minister. Those generating hazardous waste shall have a waste generators number issued by the Department and shall also complete the required information outlined in the Waste Manifest Form.

Waste Management Plan

22. CFI shall continue to implement the Waste Management Plan (*June 2018*) for their St. Lawrence operations. Every year the Plan shall be reviewed and revised as necessary, accounting for expanding or alteration of activities. All proposed revisions shall be submitted to the Department for review.

Acid Generating Waste Rock

23. Only non-acid generating waste rock shall be reused on the surface. If waste rock is identified as potentially acid generating or metal leaching, an appropriate waste rock management program shall be developed to handle, store, and appropriately dispose of the material.

Burning Prohibition

24. Materials listed in Table 1 shall not be burned in a fire, unless the burning of the material is recommended, in writing, by the Office of the Fire Commissioner or the burning occurs in combustion process equipment that has been approved, in writing, by the Department for that purpose.

Table 1 - Materials Prohibited from Burning in a Fire	
(a) tires	(k) manure
(b) plastics	(l) rubber
(c) treated lumber	(m) tar paper
(d) asphalt and asphalt products	(n) railway ties
(e) drywall	(o) paint and paint products
(f) demolition waste	(p) fuel and lubricant containers
(g) hazardous waste	(q) used oil
(h) biomedical waste	(r) animal cadavers
(i) domestic waste	(s) hazardous substances
(j) trash, garbage, or other waste from commercial, industrial or municipal operations	(t) materials disposed of as part of the removal or decontamination of equipment, buildings or other structures

25. The Department shall be notified prior to the burning of any materials not listed in Table 1.

Noise

26. Efforts shall be made to minimize and control noise resulting from the St. Lawrence Fluorspar Mine's construction and operational activities. All vehicles hauling materials within the facility shall have exhaust and muffling devices in good working order.

Dust Suppression

27. CFI shall control dusting resulting from construction and operational activities at the site. Use of dust suppressants other than water or calcium chloride shall require approval of the Department. CFI are encouraged to use best management practices when applying calcium chloride or any other approved dust suppressant.

Spill Prevention and Containment

28. Areas in which chemicals are used or stored shall have spill containment systems constructed with impermeable floors, walls, dykes or curbs as applicable and be configured, maintained, inspected and repaired as follows:
- they shall not discharge to the environment;
 - they shall have an effective secondary containment capacity of at least 110 per cent of the chemical storage tank capacity, in the case of a single storage container;
 - if there is more than one storage container, they shall have an effective secondary containment capacity of at least 110 per cent of the capacity of the largest container, or 100 per cent of the capacity of the largest container plus 10 per cent of the aggregate capacity of all additional containers, whichever is greater;
 - they shall be kept clear of material that may compromise the containment

- capacity;
 - they may include a floor drain system provided that the floor drains, and the place or device to which they drain, are configured in such a manner that the required effective secondary containment capacity is maintained;
 - every year they shall be visually inspected for their liquid containing integrity, and repairs shall be made when required; and
 - once every 10 years, spill and leak containment systems shall be inspected, by a means other than visual inspection, for their liquid containing integrity, and repairs shall be made when required.
29. All on site storage of petroleum shall comply with the *Storage and Handling of Gasoline and Associated Products Regulations, 2003*, or its successor. Storage tank systems shall be registered with DGSNL.
30. Where applicable, all tanks and fuel delivery systems shall be inspected to appropriate American Petroleum Institute or Underwriters' Laboratories of Canada standards, or any other standards acceptable to this Department. The required frequency of inspections may be changed at the discretion of the Department.
31. Refuelling and maintenance of vehicles and equipment shall, whenever possible, be undertaken on a prepared impermeable surface with containment or collection system for spills or leaks of fluids (eg. hydrocarbons, coolants and other associated fluids). When this is not possible, due care shall be taken to prevent spillage on the ground and to the surrounding environment, particularly streams and other water bodies. The Contingency Plan for St. Lawrence facility shall detail the specific response actions in the event of a spill from refuelling or maintenance activities.

Contingency Plan

32. CFI shall continue to implement the Contingency Plan (*September 2020*) for their St. Lawrence operations. This Plan describes the actions to be taken in the event of a spill or leak a toxic or hazardous material. Copies of the Plan shall be placed in convenient areas throughout the facility so that employees can easily refer to it when needed. CFI shall ensure that all employees are aware of the Plan and understand the procedures and the reporting protocol to be followed in the event of an emergency. An annual response exercise is recommended for response personnel. Every year, as a minimum, the Plan shall be reviewed and revised as necessary. Any proposed significant revisions shall be submitted to the Department for review. Changes which are not considered significant include minor variations in equipment or personnel characteristics which do not affect implementation of the Plan.
33. Every time CFI implements the Contingency Plan, information shall be recorded for future reference. This will assist in reviewing and updating the Plan. The record is to consist of all incidents with environmental implications, and include such details as:
- date;
 - time of day;
 - type of incident (i.e. liquid leak/spill, gas leak/spill, granular chemical spill, equipment malfunction, etc.);
 - actions taken;
 - problems encountered; and
 - other relevant information that would aid in later review of the Plan performance.

Each incident report shall be submitted to the Department as per the *Reporting* section.

Rehabilitation and Closure Plan

34. A Rehabilitation and Closure Plan detailing the actions to be taken to restore areas disturbed by the operation has been submitted to the Department (*August 2021*). The Plan shall be implemented progressively as required and completed upon site closure.
35. As part of the site decommissioning and restoration process, CFI shall employ a registered Site Professional to complete a site-wide environmental site assessment, as defined in the *Guidance Document for the Management of Impacted Sites*. Should impacts be identified, CFI shall proceed through the process outlined in the Guidance Document to achieve regulatory site closure.

Used Oil

36. Used oil shall not be mixed and shall be stored in separate:
 - closed containers;
 - registered tanks; or
 - tanks that have an active approval from DGSNL.
37. Where greater than 205 litres of used oil is stored in one or more containers, the storage shall require approval from the Department or DGSNL.
38. Used oil shall be disposed of by a company licensed for the handling and disposal of such products.
39. Information on used oil that is generated at the facility shall be submitted to the Department for review by *January 31* of each year. This shall include a description of:
 - the type(s) of oil;
 - the approximate total volume of used oil generated during the previous year; and
 - the method of disposal for the used oil.
40. In the event that used oil generated off-site is stored in the on-site storage tank(s), the information listed above shall also be required for the off-site systems.
41. The use or operation of an oil separator requires registration under the *Used Oil and Used Glycol Control Regulations*. Applications for registration shall be submitted to, and registration numbers are assigned by DGSNL.

Fuel Usage

42. CFI shall maintain, and submit to the Department on a monthly basis as per the *Reporting* section, the monthly volume of No. 2 fuel oil used by vehicles at the site and marine terminal.

Effluent Monitoring and Discharge

43. CFI shall perform an Effluent Monitoring Program as per Table 2. Refer to Table 3 for the effluent discharge criteria. Analytical results shall be submitted to the Department as per the **Reporting** section.

Table 2 - Effluent Monitoring Program				
Reference	EDMS Location Code	Location	Parameters	Frequency †
WQ STA 13	00409	Unnamed Pond Located Downstream and Northeast of the Tailings Impoundment	EDC (except for TPH and Ra226)	Weekly (at least 24 hours apart)
			TPH and Ra226	Monthly (at least 15 days apart)
WQ STA 22	00416	Mine Site Sediment Pond #1 Discharge	EDC (except for TPH and Ra226)	Weekly (at least 24 hours apart)
			TPH and Ra226	Monthly (at least 15 days apart)
WQ STA 23	00417	Polishing Pond Discharge (Construction Phase Location)	EDC (except for TPH and Ra226)	Weekly (at least 24 hours apart)
			TPH and Ra226	Monthly (at least 15 days apart)
WQ STA 24	00418	Mill Site Event Pond Discharge	EDC (except for TPH and Ra226)	Weekly (at least 24 hours apart)
			TPH and Ra226	Monthly (at least 15 days apart)
WQ STA 25	00634	Mine Site Sediment Pond #2 Discharge	EDC (except for TPH and Ra226)	Weekly (at least 24 hours apart)
			TPH and Ra226	Monthly (at least 15 days apart)

Table 3: Effluent Discharge Criteria (EDC)	
Parameter	Maximum Allowable or Range (all units are mg/L unless otherwise noted)
Total Dissolved Solids (TDS)	1000
Total Suspended Solids (TSS)	30
Total Petroleum Hydrocarbon (TPH)	15
Arsenic	0.5
Barium	5.0
Boron	5.0
Cadmium	0.05
Chromium	1.0
Copper	0.3
Iron	10

Lead	0.2
Nickel	0.5
Nitrates	10
Ammonia	2.0
Selenium	0.01
Silver	0.05
Zinc	0.5
pH	5.5 – 9.0 pH units
Radium 226	0.37 Bq/L

44. CFI may reduce the frequency of testing for a parameter that is set out in the EDC with the exception of pH, TSS, and Radium 226 to not less than once in each calendar quarter, at least 30 days apart, if that parameter's monthly mean concentration in the effluent is less than 10 per cent of the maximum authorized monthly mean concentration for the 12 months immediately preceding the most recent test. CFI shall notify the Department in writing, at least 30 days in advance of a reduction in the frequency of testing.
45. CFI may reduce the frequency of testing for Radium 226 to not less than once in each calendar quarter, at least 30 days apart, if that substance's concentration in the effluent is less than 0.037Bq/L in 10 consecutive tests. CFI shall notify the Department in writing, at least 30 days in advance of a reduction in the frequency of testing.
46. CFI shall increase the frequency of testing to the originally prescribed frequency for a parameter that is set out in the EDC with the exception of pH and TSS if the parameter's monthly mean concentration is equal to or greater than 10 per cent of the maximum authorized monthly mean concentration.

Water Chemistry Analysis

47. Four times per calendar year and not less than 30 days apart, CFI shall perform Water Quality Analysis as per Table 4. Analytical results shall be submitted as per the *Reporting* section.

Table 4 – Water Chemistry Analysis Program			
Reference	EDMS Location Code	Location	Parameters
WS-2	00741	Clarke's Pond Outlet, Upstream of Port Access Road	General Parameters: temperature, dissolved oxygen (DO), nitrate + nitrite, nitrate, nitrite, pH, TSS, colour, sodium, potassium, calcium, sulphide, magnesium, ammonia, alkalinity,
WS-5	00740	Shoal Cove Pond Outlet, Upstream of Port Access Road	
WS-10	00405	Salt Cove Brook – Farfield	
WQ STA 1	00399	Upper Island Pond	

Table 4 – Water Chemistry Analysis Program

Reference	EDMS Location Code	Location	Parameters
WQ STA 2	00400	Outlet of Grebes Nest Pond	sulphate, chloride, turbidity, reactive silica, orthophosphate, phosphorous, DOC, conductance, TDS (calculated), phenols, carbonate (CaCO ₃), hardness (CaCO ₃), bicarbonate (CaCO ₃) Note: Groundwater monitoring does not require TSS, temperature and dissolved oxygen Metals Scan: aluminium, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, mercury, nickel, selenium, silver, strontium, thallium, tin, titanium, uranium, vanadium, zinc
WQ STA 3	00401	Outlet of John Fitzpatrick Pond	
WQ STA 6	00402	Downstream of John Fitzpatrick Pond	
WQ STA 7	00403	Downstream of Upper Island Pond	
WQ STA 9	00404	Downstream of Unnamed Pond	
WQ STA 11	00406	Downstream of proposed South Dump and Central North Pit	
WQ STA 13	00407	Unnamed Stream Downstream of Open Cut Pit	
WQ STA 15	00409	Unnamed Pond Located Downstream and Northeast of the Tailings Impoundment	
WQ STA 16	00410	Long Pond	
WQ STA 17	00411	Unnamed Pond Located Downstream and Southeast of the Tailings Impoundment	
WQ STA 18	00412	Unnamed Stream Draining the Unnamed Pond located Southeast of the Tailings Impoundment	
WQ STA 19	00413	Unnamed Stream Located Downstream of the Polishing Pond	
WQ STA 20	00414	Unnamed Stream located Downstream of the Mill Site	
WQ STA 21	00415	Unnamed Stream located at Proposed Access Road Downstream of the TMF	
WQ STA 22	00416	Mine Site Sediment Pond Discharge	
WQ STA 23	00418	Polishing Pond Discharge (Construction Phase Location)	
WQ STA 24	00419	Mill Site Sediment Pond #2 Discharge	
WQ STA 25	00634	Mill Site Event Pond Discharge	
WQ STA 26	00737	Hay Pook Pond Outlet #1, Downstream of Port Access Road	
WQ STA 27	00738	Hay Pook Pond Outlet #2, Downstream of Port Access Road	
WQ STA 28	00739	Clarke's Pond Outlet, Downstream of Port Access Road	
MW14-04	00701	Northwest of Center Pit	
MW15-01	00702	Northeast of the Polishing Pond	
MW16-05	00703	Southwest of Grebes Nest Pit	
MW16-07	00704	South of the Mill	
MW17-08	00705	Southeast of the Tailings Pond	
MW17-09	00706	Northeast of the Tailings Pond	

Ambient Air

48. CFI shall operate an ambient air monitoring program as per the conditions in this Approval and its amendments. Approval shall be obtained from the Department prior to purchase or installation of any monitoring equipment.
49. Parameters to be monitored are outlined in Table 5.

Table 5 - Ambient Air Monitoring Program		
Location	EDMS Location Code	Parameters
Director Drive (near the Warehouse)	006679	PM _{2.5} , TPM, NO _x , NO ₂

50. Ambient air monitoring shall be done in accordance with the *Ambient Air Monitoring Guidance Document (GD-PPD-065)*, or its successors.
51. Information regarding calibrations, site visits and maintenance for all continuous ambient air monitors shall be recorded into the DR DAS electronic logbook.

Analysis and QA/QC

52. Unless otherwise stated herein, all solids and liquids analysis performed pursuant to this Approval shall be done by either a contracted commercial laboratory or an in-house laboratory. Contracted commercial laboratories shall have a recognized form of accreditation. In-house laboratories have the option of either obtaining accreditation or submitting to an annual inspection by a representative of the Department, for which CFI shall be billed for each laboratory inspection in accordance with Schedule 1 of the *Accredited Laboratory Policy (PD:PP2001-01.2)*. Recommendations of the Department stemming from an annual inspection shall be addressed within 6 months, otherwise further analytical results shall not be accepted by the Department.
53. The exact location of each sampling point shall remain consistent over the life of the monitoring programs, unless otherwise approved by the Department. Using a GPS or similar device, the northing and easting of each sampling location shall be recorded and submitted by **December 31, 2022** to the Department.
54. CFI shall bear all expenses incurred in carrying out the environmental monitoring and analysis required under conditions of this Approval.

Monitoring Alteration

55. The Department has the authority to alter monitoring programs or require additional testing at any time when:
- pollutants might be released to the surrounding environment without being detected;
 - an adverse environmental effect may occur; or
 - it is no longer necessary to maintain the current frequency of sampling and/or

the monitoring of parameters.

56. CFI may, at any time, request that monitoring program or requirements of this Approval be altered by:

- requesting the change in writing to the Department; and
- providing sufficient justification, as determined by the Department.

The requirements of this Approval shall remain in effect until altered, in writing, by the Department.

Reporting

57. Monthly reports containing the environmental compliance monitoring and sampling information required in this Approval shall be received by the Department in digital format within 30 calendar days of the reporting month. All related laboratory reports shall be submitted with the monthly report in Extensible Markup Language (XML) format and Adobe Portable Document Format (PDF). Digital report submissions shall be uploaded through the EDMS web portal.

58. Each monthly report shall include a summary of all environmental monitoring components and shall include an explanation for the omission of any requisite data. The monthly summary reports shall be in Microsoft Word or Adobe PDF and shall be uploaded through the EDMS web portal with the data submissions.

59. All incidents of:

- *Contingency Plan* implementation; or
- non-conformance of any condition within this Approval; or
- spillage or leakage of a regulated substance; or
- effluent discharge criteria being, or suspected of being, exceeded; or
- verbal or written complaints of an environmental nature received from the public by CFI and related to the St. Lawrence facility, including complaints submitted anonymously;

shall be immediately reported, within one working day, to the Department.

A written comprehensive incident report, including a detailed description of the incident, a summary of contributing factors, and an Action Plan to prevent future incidents of a similar nature, shall be prepared. The report shall include a description of actions already taken and future actions to be implemented, and shall be submitted to the Department within 30 days of the date of the initial incident.

60. Any spillage or leakage of:

- gasoline or associated product from a vehicle, pipeline or storage tank system; or
- used oil or used glycol from a storage tank system;

shall be reported immediately through the Environmental Emergencies 24-hour report line at 1-800-563-9089.

Expiration

61. This Certificate of Approval expires *August 17, 2027*.
62. Should CFI wish to continue to operate the St. Lawrence facility beyond this expiry date, a written request shall be submitted to the Department for the renewal of this approval. Such request shall be made prior to *February 17, 2027*.

cc: Mr. Gary Kennell
Environment and Climate Change Canada
6 Bruce Street
Mount Pearl, NL
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Mr. Wayne Lynch - Regional Director
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Mr. Keith Bradbury – Director
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Town Manager
Town of St. Lawrence
P.O. Box 128
St. Lawrence NL
A0E 2V0

File 738.032.1

March 14, 2024

Gillian Kearney – Environmental Coordinator
 Canada Fluorspar (NL) Inc.
 P.O. Box 337
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 A0E 2V0

Dear Mrs. Kearney

RE: Amendment to Certificate of Approval AA22-085691

As per your February 15, 2024, request, Table 2 of the approval has been amended to include WQSTA11 as shown below.

Table 2 - Effluent Monitoring Program				
Reference	EDMS Location Code	Location	Parameters	Frequency †
WQ STA 11	00406	Downstream of South Dump and Central North Pit	EDC (except for TPH and Ra226)	Weekly (at least 24 hours apart)
			TPH and Ra226	Monthly (at least 15 days apart)
WQ STA 13	00407	Unnamed stream downstream of Open Cut Pit	EDC (except for TPH and Ra226)	Weekly (at least 24 hours apart)
			TPH and Ra226	Monthly (at least 15 days apart)
WQ STA 22	00416	Mine Site Sediment Pond #1 Discharge	EDC (except for TPH and Ra226)	Weekly (at least 24 hours apart)
			TPH and Ra226	Monthly (at least 15 days apart)
WQ STA 23	00417	Polishing Pond Discharge	EDC (except for TPH and Ra226)	Weekly (at least 24 hours apart)

		(Construction Phase Location)	TPH and Ra226	Monthly (at least 15 days apart)
WQ STA 24	00418	Mill Site Event Pond Discharge	EDC (except for TPH and Ra226)	Weekly (at least 24 hours apart)
			TPH and Ra226	Monthly (at least 15 days apart)
WQ STA 25	00634	Mine Site Sediment Pond #2 Discharge	EDC (except for TPH and Ra226)	Weekly (at least 24 hours apart)
			TPH and Ra226	Monthly (at least 15 days apart)

If you have any questions or comments regarding this matter, please contact Stephen Dyke at (709) 729-2738 or myself.

Sincerely,



Dexter Pittman, P.Eng.
Manager, Environmental Compliance



Government of Newfoundland and Labrador
Department of Environment & Climate Change

Pollution Prevention Division
(Environment)

January 3, 2025

James Churchill
Environmental Monitor
P.O. Box 337
St. Lawrence, NL
A0E 2V0

Dear Mr. Churchill:

RE: Amendment to C-of-A AA22-085691 - Table 4

As per CFI's request of August 29, 2024, the operating approval AA22-085691 is hereby amended such that the decommissioned monitoring well MW16-05 has been removed from Table 4 and replaced with the new monitoring wells labelled MWS16-05 and MWD16-05. The 'S' and 'D' refer to shallow and deep and the EDMS codes for these are 00977 and 00978, respectively. Please refer to the attached amended Table 4.

If you have any questions or comments regarding this matter, please contact Stephen Dyke at (709) 729-2738 or myself.

Sincerely,

Dexter Pittman, P.Eng.
Manager, Environmental Compliance

Table 4 – Water Chemistry Analysis Program

Reference	EDMS Location Code	Location	Parameters
WS-2	00741	Clarke's Pond Outlet, Upstream of Port Access Road	General Parameters: temperature, dissolved oxygen (DO), nitrate + nitrite, nitrate, nitrite, pH, TSS, colour, sodium, potassium, calcium, sulphide, magnesium, ammonia, alkalinity, sulphate, chloride, turbidity, reactive silica, orthophosphate, phosphorous, DOC, conductance, TDS (calculated), phenols, carbonate (CaCO ₃), hardness (CaCO ₃), bicarbonate (CaCO ₃) Note: Groundwater monitoring does not require TSS, temperature and dissolved oxygen Metals Scan: aluminium, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, mercury, nickel, selenium, silver, strontium, thallium, tin, titanium, uranium, vanadium, zinc
WS-5	00740	Shoal Cove Pond Outlet, Upstream of Port Access Road	
WS-10	00405	Salt Cove Brook – Farfield	
WQ STA 1	00399	Upper Island Pond	
WQ STA 2	00400	Outlet of Grebes Nest Pond	
WQ STA 3	00401	Outlet of John Fitzpatrick Pond	
WQ STA 6	00402	Downstream of John Fitzpatrick Pond	
WQ STA 7	00403	Downstream of Upper Island Pond	
WQ STA 9	00404	Downstream of Unnamed Pond	
WQ STA 11	00406	Downstream of proposed South Dump and Central North Pit	
WQ STA 13	00407	Unnamed Stream Downstream of Open Cut Pit	
WQ STA 15	00409	Unnamed Pond Located Downstream and Northeast of the Tailings Impoundment	
WQ STA 16	00410	Long Pond	
WQ STA 17	00411	Unnamed Pond Located Downstream and Southeast of the Tailings Impoundment	
WQ STA 18	00412	Unnamed Stream Draining the Unnamed Pond located Southeast of the Tailings Impoundment	
WQ STA 19	00413	Unnamed Stream Located Downstream of the Polishing Pond	
WQ STA 20	00414	Unnamed Stream located Downstream of the Mill Site	
WQ STA 21	00415	Unnamed Stream located at Proposed Access Road Downstream of the TMF	
WQ STA 22	00416	Mine Site Sediment Pond Discharge	
WQ STA 23	00418	Polishing Pond Discharge (Construction Phase Location)	
WQ STA 24	00419	Mill Site Sediment Pond #2 Discharge	
WQ STA 25	00634	Mill Site Event Pond Discharge	
WQ STA 26	00737	Hay Pook Pond Outlet #1, Downstream of Port Access Road	
WQ STA 27	00738	Hay Pook Pond Outlet #2, Downstream of Port Access Road	
WQ STA 28	00739	Clarke's Pond Outlet, Downstream of Port Access Road	
MW14-04	00701	Northwest of Center Pit	

Table 4 – Water Chemistry Analysis Program			
Reference	EDMS Location Code	Location	Parameters
MW15-01	00702	Northeast of the Polishing Pond	(con't)
MWS16-05	00977	Southwest of Grebes Nest Pit	
MWD16-05	00978	Southwest of Grebes Nest Pit	
MW16-07	00704	South of the Mill	
MW17-08	00705	Southeast of the Tailings Pond	
MW17-09	00706	Northeast of the Tailings Pond	

