



GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR
Department of Municipal Affairs and Environment

CERTIFICATE OF APPROVAL

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

Issue Date: *November 26, 2019*

Approval No. AA19-115657

Expiration: *November 26, 2024*

File No. 745.222.2

Proponent: **Newfoundland Sulfur Limited Partnership**
NARL Refining LP
1 Refinery Road, Box 40
Come By Chance, NL
A0B 1N0

Attention: **Mr. Jamie Beach, Vice President**

Re: **Sulfur Prilling Plant**

Approval is hereby given for the operation of a sulfur prilling plant and associated material handling equipment at Come By Chance, NL.

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 requirement in the regulation shall take precedence. Approval from the Department of Municipal Affairs and Environment shall be obtained prior to any significant change in the design, construction, installation, or operation of the sulfur prilling plant, including any future expansion of the sulfur prilling plant. 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. AA19-115657

November 26, 2019

General

1. This Certificate of Approval is for the operation of a sulfur prilling plant and associated material handling equipment at Come By Chance, NL, as per plans and specifications previously supplied by Newsul Enterprises Inc. for their Certificate of Approval. Extensive future expansion or change of activities will require a separate Certificate of Approval.
2. 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).
3. In this Certificate of Approval:
 - **Department** means the Department of Municipal Affairs and Environment and its successors;
 - **Director** means the Director of the Pollution Prevention Division of the Department;
 - **GAP** means *Storage and Handling of Gasoline and Associated Products Regulations, 2003*;
 - **licensed** means has a Certificate of Approval issued by the Minister to conduct an activity;
 - **liquid waste** is defined by the *Slump Test* (Canadian Standards Association test method A23.2-5C for determining the slump of concrete). The liquid waste slump test involves placing the waste in a 30 cm open inverted cone. The cone is removed and the immediate decrease (slump) in height of the waste material is measured. If the material slumps such that the original height is reduced by 15 cm or more, the waste is considered liquid;
 - **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;
 - **NSLP** means Newfoundland Sulfur Limited Partnership;
 - **regulated substance** means a substance subject to discharge limit(s) under the *Environmental Control Water and Sewage Regulations, 2003*;
 - **spill or spillage** means a loss of gasoline or associated product 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;

- **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.

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

- *Environmental Protection Act;*
- *Water Resources Act;*
- *Air Pollution Control Regulations, 2004;*
- *Environmental Control Water and Sewage Regulations, 2003;*
- *Halocarbon Regulations;*
- *Storage and Handling of Gasoline and Associated Products Regulations, 2003; and*
- *Used Oil and Used Glycol Control Regulations.*

This Approval provides terms and conditions to satisfy various requirements of the above listed acts, regulations, Departmental policies, guidance documents 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.

5. 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 or water pollution,
- finding alternative uses, acceptable to the Director, 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.

6. NSLP shall provide to the Department, within a reasonable time, any information, records, reports or access to data requested or specified by the Department.

7. NSLP shall keep all records or other documents required by this Approval at the sulfur prilling plant at Come By Chance 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 Service NL when requested.

8. Should NSLP 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. NSLP 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.

Waste Management

9. 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.
10. NSLP 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.
11. 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 generator's number issued by the Director and shall also complete the required information outlined in the Waste Manifest Form.

Waste Sulfur

12. Any waste sulfur stored at the site or waste sulfur generated from the operation of sulfur prilling activities shall be removed from the site in a manner acceptable to the Department.

Open Burning

13. Materials listed in Table 1 shall not be burnt in open fires.

tires	manure
plastics	rubber
treated lumber	tar paper
asphalt and asphalt products	railway ties
drywall	paint and paint products
demolition waste	fuel and lubricant containers
hazardous waste	used oil
biomedical waste	animal cadavers
domestic waste	hazardous substances
trash, garbage, or other waste from commercial, industrial or municipal operations	materials disposed of as part of the removal or decontamination of equipment, buildings or other structures

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

Underground Sulfur Storage Tanks

15. The underground sulfur storage tanks shall be maintained as per plans and specification previously supplied for the approval. When these tanks are drained for maintenance, a structural inspection of the tanks shall be conducted and all findings be reported in writing to the Director.

Spill Prevention and Containment

16. 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% 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% of the capacity of the largest container, or 100 % of the capacity of the largest container plus 10% 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 ten years, spill containment systems shall be inspected, by a means other than visual inspection, for their liquid containing integrity, and repairs shall be made when required.

17. 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 Service NL. All aboveground storage tanks shall be clearly and visibly labelled with their GAP registration numbers.

18. NSLP shall maintain an inventory of all petroleum and chemical storage tanks. This inventory shall include the following:

- site plan showing tank location,
- registration number (where applicable),
- identification number,
- material stored,
- capacity,
- annual throughput,
- tank material,
- tank type,
- tank diameter,
- tank height,

- tank colour,
- roof type,
- year of manufacture,
- date of installation,
- date of last inspection,
- failure history,
- maintenance history,
- effective secondary containment capacity, and
- date of next planned inspection.

An update of the complete storage tank inventory including any changes to it shall be submitted to the Director within three (3) months of the change having occurred.

Contingency Plan

19. NSLP shall continue to implement the Contingency Plan dated December 20, 2017, for their Sulfur Prilling Plant, including all revisions. This Plan describes the actions to be taken in the event of a spill of 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. NSLP 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 Director for review. Changes which are not considered significant include minor variations in equipment or personnel characteristics which do not affect implementation of the Plan.
20. Every time NSLP 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 spill, gas leak, 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.

Decommissioning and Restoration

21. NSLP shall submit a site Decommissioning and Restoration Plan to the Department by *July 30, 2020*. For guidance on the preparation of the Plan, refer to Appendix A. Wherever possible, the Plan shall promote progressive reclamation of disturbed areas.

Used Oil and Used Glycol

22. Used oil and used glycol shall be retained in separate approved or registered tanks or closed containers, and disposed of by a company licensed for handling and disposal of used oil and/or used glycol products.

Effluent

23. NSLP shall recycle all the process water used in the generation of sulfur prills at the plant. All the drain water from the prills storage piles and from the pads shall be reclaimed and used as process water.

Ambient Air

24. All necessary measures shall be taken so that any air pollution from the screening stations, sulfur/prills storage areas, prilling tower and ship loading station & associated conveyors shall meet the requirements of the *Air Pollution Control Regulations, 2004*.
25. All areas travelled by pay-loaders or other mechanical equipment used to transfer sulfur prills shall be periodically wetted with an effective wetting agent to minimize sulfur particulate emissions. Alternate methods or control technologies for sulfur particulate emissions may be approved upon written request to the Director.
26. Dust suppressants require prior approval from this Department for their use, except for calcium chloride or water. All dust suppressant equipment shall be maintained and in good working order. Water from dust suppressant activities shall be collected and recycled as process water.
27. In the event that any dusting or other air contaminant problems are not addressed to the satisfaction of the Department, the Department reserves the right to require additional air emission control measures. Such measures may include: additional dust suppressant provisions, the usage of enclosures and/or wind walls during loading and transfer operations, limitations on wind speeds under which operations may proceed, limitations on vertical drop heights and/or vehicle speeds during sulfur/prills transfer, and the usage of floating containment booms during loading operations.

Monitoring Alteration

28. Although a monitoring program is not part of this Approval, the Department may require a monitoring program when it is the judgement of the Director that:
- pollutants might be released to the surrounding environment without being detected; or
 - an adverse environmental effect may occur.

Reporting

29. All incidents of:

- *Contingency Plan* implementation; or
- non-conformance of any condition within this Approval; or
- spillage or leakage of a regulated substance; or
- verbal or written complaints of an environmental nature received from the public by NSLP and related to the Sulfur Prilling Plant, including complaints submitted anonymously;

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

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

30. Any spillage or leakage of gasoline or associated product shall be reported immediately through the Canadian Coast Guard at 1-(709)-772-2083.

Expiration

31. This Certificate of Approval expires *November 26, 2024*.

32. Should NSLP wish to continue to operate the Sulfur Prilling Plant beyond this expiry date, a written request shall be submitted to the Director for the renewal of this approval. Such request shall be made prior to *May 26, 2024*.

cc: Mr. Neil Codner
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