

General

1. This approval is for the continued province-wide collection and transportation of used oil, waste gasoline, waste jet fuel, waste diesel, waste furnace oil, oily water, oiled rags, industrial waste liquids, wastewater, sewage, septic and sewage sludge, digester sludge, tank bottom sludge, de-icing fluids and emulsions; and tank, sump and catch basin cleaning materials. Specific terms and conditions for these activities are located in Appendix A.
2. This approval is also for the operation of an oil Trap Environmental Model EP40-SD electrocoagulation system located permanently at the proponent's facility on Logy Bay Road, St. John's, Newfoundland. Specific terms and conditions for this activity are located in Appendix B.
3. This approval is also for the continued treatment of non-hazardous waste drilling muds. Specific terms and conditions for this activity are located in Appendix C
4. This approval is also for the associated activity of transfer and interim storage of waste products from offshore vessels at Pier 18 West in St. John's Harbour. Specific terms and conditions for this activity are located in Appendix C.
5. Prior to any expansion or modification of the facility, a letter of application shall be forwarded to Department requesting an amendment to this approval.

Definitions

6. In this Certificate of Approval:
 - **adverse effect** means an effect that impairs or damages the environment and includes an adverse effect to the health of humans;
 - **BTEX** means benzene, toluene, ethylbenzene, and/or xylene;
 - **contaminant** means, unless otherwise defined in the regulations, a substance that causes or may cause an adverse effect;
 - **CCME** means Canadian Council of Ministers of the Environment;
 - **CEQG** means CCME Canadian Environmental Quality Guidelines;
 - **Department** means Department of Municipal Affairs and Environment;
 - **Director** means the Director of the Pollution Prevention Division of the Department;
 - **discharge location** means either a sanitary sewer, storm sewer, waterbody, groundwater re-injection, holding tank/pond, or settling pond;
 - **East Coast Sewage Disposal Ban** means that the Department does not approve the landfill disposal on the Avalon Peninsula defined as all areas east of and including Shoal Hr. and which is bounded in the south by Swift Current;
 - **EDMS** refers to the Pollution Prevention Division's Environmental Data Management System;
 - **ESI** means Envirosystems Incorporated NL Division;

- **FAL** means freshwater aquatic life;
- **oily water** means water contaminated with only TPH in excess of 15 ppm (or 100 ppm if discharging to sanitary sewer systems with a WWTP. It should be noted that WWTPs do not treat flows from storm sewers). Furthermore, oily water may contain TSS below or above acceptable levels, but not likely contain other contaminants of concern;
- **PCB** means polychlorinated biphenyl;
- **PCS** means petroleum contaminated soil
- **QA/QC** means Quality Assurance/Quality Control;
- **Regional Director** means the Director of the nearest Service NL office;
- **TDU** refers to thermal desorption unit as a means to treat waste drill mud and cuttings;
- **TPH** means total petroleum hydrocarbon including BTEX as measured by the Atlantic PIRI method;
- **USGPM** means US gallons per minute. It should be noted that 1 US gallon is approximately equal to 0.8326 imperial gallon or 3.785 litres;
- **used lubricating oil** means lubricating oil that as a result of its use, storage or handling, is altered so that it is no longer suitable for its intended purpose, but is suitable for refining or other permitted uses;
- **used oil** means a used lubricating oil or waste oil;
- **VDU** refers to vacuum distillation unit as a means to treat waste drill mud and cuttings;
- **waste oil** means an oil that as a result of contamination by any means or by its use, is altered so that it is no longer suitable for its intended purpose; (It should be noted that oil collected by ESI's unit will most likely be considered as waste oil and, therefore, considered used oil);
- **West Coast Sewage Disposal Ban** means that the Department does not approve the landfill disposal in the area bounded: to the north by the northern boundary of Gros Morne National Park; to the south by the southern boundary of Barachois Pond Provincial Park; to the west by Romaines River; and to the east by Halls Bay; and
- **WWTP** means wastewater treatment plant.

Application Submissions

7. A request for amendment of the Certificate of Approvals for the operation of a waste management system including continued province wise collection of oily waste, oily water treatment and collection and treatment of non-hazardous drilling muds received by email on June 26, 2020.
8. ESI provided an updated drawing of the site plan with the proposed VDU; a photo image outlining the footprint of the new process in relation to the current process; and a presentation detailing and comparing the proposed process (VDU) with the TDU process.

Emergency & OHS Preparedness

9. The proponent shall provide annual updates of their contingency plan for environmental and OHS emergencies with Service NL and the Department. An updated copy of the contingency plan shall be kept on site at all times.
10. The proponent shall ensure that this approval, or a copy, shall be kept on site at all times and that personnel directly involved in the operation of the remediation facility are made fully aware of the terms and conditions which pertain to this approval.
11. All responsible personnel who are directly involved with operation and maintenance of the processing system shall be provided copies of this approval.
12. For after-hours emergencies and spill report call: 1-800-563-9089 or (709) 772-2083.
13. All appropriate health and safety procedures shall be followed at the site in accordance with applicable legislation.
14. The treatment and monitoring system(s) shall be operated and maintained in accordance with the respective manufacturers' operating and maintenance specifications.
15. The operator(s) shall have petroleum fire and spill response training.

Further Assessment

16. The Minister may at any time, with reasonable notice, require the proponent to conduct or have conducted environmental studies, site assessments, sampling, testing, or investigations where, based upon reasonable and probable grounds, the Minister is of the opinion that this waste management system and other activities covered by this approval may have had, or has the potential to have, an adverse effect on the environment.

Service NL

17. Through a Memorandum-of-Understanding this Department has authorized Service NL to act on its behalf in inspecting and/or auditing this operation for compliance under this approval and all applicable provincial Acts and Regulations.

Legislation

18. The activities associated with this operation may involve, but not be limited to, the following provincial Acts and Regulations and any future amendments:
 - *Dangerous Goods Transportation Act*
 - *Fire Prevention Act,*
 - *Environmental Protection Act*

- *Air Pollution Control Regulations*
 - *Storage and Handling of Gasoline and Associated Products Regulations*
 - *Used Oil and Used Glycol Control Regulations*
 - *Water Resources Act*
 - *Environmental Control Water and Sewage Regulations, 2003.*
19. The activities associated with this operation may involve, but not be limited to, the following federal Acts and Regulations:
- *Canadian Environmental Protection Act, 1999 and Regulations*
 - *Interprovincial Movement of Hazardous Waste and Hazardous Recyclable Material Regulations*
 - *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations*
 - *Transportation of Dangerous Goods Act and Regulations*
 - *Fisheries Act*
 - *National Fire Code*

Financial Assurance

20. Valid environmental impairment liability insurance in the minimum amount of \$1,000,000 shall be maintained otherwise this approval shall be considered null and void.
21. A current surety bond of \$10,000 shall be on file with the Department, otherwise this approval shall be considered null and void.
22. Annual updates of the financial assurance documents shall be filed with the Department.
23. ESI shall provide the Department with three months advance notice if they intend to cancel coverage and/or change the insurer or bonding agent.

Spill Prevention

24. Areas in which chemicals are used or stored shall have impermeable floors and dikes or curbs and shall not have a floor drain system, nor shall it discharge to the environment. Areas inside the dikes or curbs 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, the diked area shall be able to retain no less than **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.** These diked areas shall be kept clear of material that may compromise the capacity of the dike system. Once a year, the dikes shall be visually inspected for their liquid containing integrity, and repairs shall be made when required. Once every ten years, the dikes shall be inspected, by a means other than visual inspection, for their liquid containing integrity, and repairs shall be made when required.

Oily Water & Used Oil Holding Tanks

25. Oily water and waste oil holding tanks shall be approved by Service NL as per the *Used Oil and Used Glycol Control Regulations*.

Laboratory Analysis & QA/QC

26. Unless otherwise stated herein, all liquid and solids analysis performed pursuant to this Approval shall be done by a contracted commercial or in-house laboratory as per the *Accredited and Certified Laboratory Policy (PD:PP2001-01.2)*.

Monitoring Alteration

27. The Director has the authority to alter the 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.

28. ESI may, at any time, request that the monitoring program or requirements of this Approval be altered by:

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

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

Reporting

30. Monthly reports containing the environmental compliance monitoring and sampling information required in this Approval shall be received by the Director in digital format within 30 calendar days of the reporting month. All related laboratory reports shall be submitted with the monthly report in XML format and Adobe Portable Document Format (PDF). Digital report submissions shall be uploaded through the Department's Environmental Data Management System web portal. Any questions may be addressed to the Pollution Prevention Division.

31. The annual report shall be submitted to the Department and Service NL by January 31, of the following year and shall include:

- a. A summary of pre- and post treatment analytical results for all waste streams received and processed at the facility over the course of the reported year; and
- b. A summary of complete volumes of waste streams received and the applicable recycling or final disposal destination. The report shall also include the current insurance and bonding documents as specified in the

Financial Assurance section and any updates to the *Contingency Plan* as discussed in the *Emergency & OHS Preparedness* section.

32. All incidents of:
- *Contingency Plan* implementation;
 - non-conformance of any condition within this approval;
 - spillage or leakage of a regulated substance;
 - whenever discharge criteria is, or is suspected to be, exceeded; or
 - verbal/written complaints of an environmental nature from the public received by ESI related to the temporary site

shall be immediately reported, within one working day, to a person or message manager or facsimile machine to Service NL by phoning or faxing.

Service NL (Mount Pearl)
P.O. Box 8700
A1B 4J6
Telephone (709) 729-3699
Facsimile: (709) 729-7400

Service NL (Clarenville)
P.O. Box 1148
Clarenville, NL
A0E 1J0
Telephone (709) 466-4060
Facsimile (709) 466-5674

Service NL (Gander)
P.O. Box 2222
A1V 2N9
Telephone (709) 256-1420
Facsimile: (709) 256-1438

Service NL (Corner Brook)
P.O. Box 2006
Corner Brook, NL
A2H 6J8
Telephone: (709) 637-2204
Facsimile: (709) 637-2681

Service NL (Happy Valley-Goose Bay)
P.O. Box 3014 - Stn "B"
Goose Bay, NL
A0P 1E0
Telephone: (709) 896-5428
Facsimile: (709) 896-4340

33. A written incident 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 respective Regional Director of Service NL. 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.

Expiration

34. This approval expires on March 31, 2023.
35. Should the proponent wish to continue to operate beyond this expiry date, a written request shall be submitted to the Department for the renewal of this approval. Such request shall be made at least *2 months prior to expiration*.

c.c. Rob Locke, Director
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Appendix A - Collection of Liquid & Associated Waste

General

1. This approval is for the continued province-wide collection and transportation of used oil, waste gasoline, waste jet fuel, waste diesel, waste furnace oil, oily water, oiled rags, industrial waste liquids, wastewater, sewage, septic and sewage sludge, digester sludge, tank bottom sludge, de-icing fluids and emulsions; drilling fluids and tank, sump and catch basin cleaning materials.

Landfilling of Liquid & Associated Wastes

2. Landfill disposal of water containing petroleum hydrocarbons is prohibited. Disposal of used oil, petroleum contaminated water or virgin/unused waste petroleum products, including petroleum contaminated snow and ice, at private, industrial or municipal landfills is prohibited unless otherwise approved by the Department.
3. All new and/or amended bans of liquid & associated wastes, as approved and described by the Minister of the Department, will apply to the operation of the waste management system described in this approval.
4. The liquid & associated wastes not subjected to any bans, the disposal at an approved landfill site is permitted with the approval of the owner/operator provided the following conditions are met:
 - the waste shall be placed in a trench of sufficient size to handle the volume to be disposed;
 - the waste shall be limed before backfilling with sufficient lime to suppress odour and other vectors; and
 - the waste is covered with at least 60cm of fill material.

Transportation of Dangerous Goods and Training

5. The characteristics of the waste product being collected will determine whether or not provisions of provincial and/or federal dangerous goods regulations apply. Safety standards, placards, labels, tanker truck inspections, etc. under the provisions of the *Transportation of Dangerous Goods Act* and Regulations are applied to all transport of waste and hazardous waste dangerous goods.
6. The *Canadian Environmental Protection Act* and *Interprovincial Movement of Hazardous Waste Regulations* have waste manifesting requirements and these forms may be obtained from the Department. Completed copies of the manifest shall be returned as indicated to the Waste Management Section of the Department.
7. The company name and phone number shall be printed on both doors and rear of all vehicles used in the collection and transportation of liquid and associated wastes. All lettering shall be at least 5 centimetres in height.

8. The *Dangerous Goods Transportation Act* and Regulations require that all personnel involved in the handling, offering for transport, and transport of dangerous goods participate in a training program which includes the essential training components as outlined in the *Transportation of Dangerous Goods Act* and Regulations. In addition to these essential components, the training program shall also include relevant waste management legislation, regulations, and guidelines and the major environmental and health and safety concerns for the wastes to be handled, offered for transport, or transported.

Used Oil

9. Within the province, used oil may be delivered to an approved used oil storage facility.
10. Hazardous, contaminated or any class of used oil shall be delivered to a facility in the province which is approved to store, transport, re-refine, re-use, treat, and/or dispose of hazardous, contaminated or the applicable class of used oil.
11. Where possible, the operator of a used oil collection vehicle shall visually inspect each container of used oil for visible contamination before the contents are transferred to the collection tank/truck to avoid contaminating the used oil that has been collected.
12. Used oil collectors and transporters are prohibited from blending used oils with virgin oil in an effort to meet the specification levels for used oil combustion.
13. Records of the volume of used oil **received or collected**, the date of the transaction, and the person/company from whom the used oil was obtained, shall be maintained and the records held for a period of not less than three years from the date of the transaction, and made available for review to officials of Service NL.
14. Records of the volume of used oil **transferred** for combustion or treatment and for shipment out of province, the date of the transaction, and the person/company that received the used oil shall be maintained and the records held for a period of not less than three years from the date of the transaction, and made available for review by officials of Service NL.
15. An annual summary of the records of used oil **received, collected and transferred** shall be provided to Service NL in electronic or hard copy form by January 31 of the following year.

Sewage & Septic wastes

16. All sewage & septic waste collected within the east and west coast sewage disposal ban areas shall be delivered to an approved treatment facility.
17. For sewage and septic wastes collected outside these areas the disposal at an approved landfill site is permitted with the approval of the owner/operator provided

the following conditions are met:

- waste shall be placed in a trench of sufficient size to handle the volume to be disposed;
 - waste shall be limed before backfilling with sufficient lime to suppress odour and other vectors; and
 - waste shall be covered with at least 60cm of fill material.
18. Discharge of untreated sewage and septic wastes into a municipal sewer system is not permitted.
19. Records of the volume of sewage and septic wastes received, the date of the transaction and the person from whom the waste was obtained shall be maintained, and the records held for a period of not less than three years from the date of the transaction, and the records must be made available for review by officials of the Department and Service NL.
20. A summary of the above information shall be provided to the Department and Service NL in electronic or hard copy form by January 31 of each year for the preceding calendar year.

Sludge and/or Solid Hazardous Waste

21. Until confirmed to be non-hazardous, all potentially hazardous waste shall be placed in corrosion resistant and leak proof containers and placed in storage on an impermeable surface. These containers shall be covered to prevent the infiltration of precipitation. Containers shall be inspected on a weekly basis and those leaking or showing signs of deterioration shall be replaced or repaired immediately.
22. Prior to landfill disposal, all solid wastes generated by the treatment system shall have an adequate chemical analysis performed to verify they do not contain hazardous constituents. Where concentrations of contaminants are within acceptable limits as per the latest edition of the CCME recommended *Canadian Soil Quality Guidelines*, as outlined in the latest edition of the CEQG for commercial and/or industrial land use, the waste is not considered hazardous and may be disposed of to a landfill with the approval of Service NL and landfill owner/operator.
23. For parameters not included in this document refer to the CCME September 1991 *Interim Canadian Environmental Quality Criteria for Contaminated Sites*. Where one or more contaminants are in excess of the CSQG, the wastes must be further tested using the US EPA Method 1311, TCLP or other procedure as determined by the Department.
24. Wastes failing the TCLP are considered hazardous and will not be approved for landfill disposal in this province and will require hazardous waste manifesting before shipment. For wastes meeting the TCLP criteria, a copy of the laboratory results shall be forwarded to Service NL with a request for landfill disposal.

25. Hazardous wastes are those which are corrosive, reactive, flammable, ignitable, carcinogenic, teratogenic, mutagenic, infectious, oxidizing, radioactive, explosive, poisonous/toxic (acute and chronic), bio-accumulative, persistent, TCLP defined leachable, or any waste which does not meet any of the above criteria but has other properties of concern which are significant enough to consider the material to be hazardous.
26. Municipal and industrial landfills in this province are not permitted to accept hazardous waste materials. Where there exists any doubt regarding the properties of a given waste, consultation with Service NL is required prior to disposal.
27. Non-hazardous wastes are approved for landfill disposal with the permission of the local Service NL office and the landfill site owner/operator.

Appendix B - Permanent Oily Water Treatment

General

1. This appendix applies to the operation of an Oil Trap Environmental EP40-SD electrocoagulation wastewater treatment system located permanently at the proponent's facility on Logy Bay Road, St. John's, Newfoundland.

Batch Discharge Monitoring

2. Treated wastewater shall be sampled and analyzed as per the **Laboratory Analysis & QA/QC** (Section 26). Each batch is monitored as per Table 1 and subject to discharge criteria in Table 2.

Non-TPH & TSS Contaminated Water

3. Treatment technologies for contaminants other than TPH and TSS shall require separate approval from the Department.
4. For those parameters regulated in a Schedule of the *Environmental Control Water and Sewage Regulations NLR 65/03*, the limits established in the regulations shall apply.

Treated Oily Water, TSS Mitigation & Disposal

5. Discharge to the City of St. John's municipal sewer requires permission from the City of St. John's.

Table 1

Location	EDMS Code	Parameters	Frequency
Waste Water Discharge	00510	TSS, pH, TPH (+BTEX), B, Cd, Cr, Cu, Fe, Pb, Hg, Ni, Zn, cyanide, phenols, phosphates (as P ₂ O ₅)	Per batch

Table 2

Effluent Discharge Criteria (EDC) (all units are mg/l unless otherwise noted)	
Parameter	Maximum Allowable or Range
Total Petroleum Hydrocarbons (TPH)	100
Total Suspended Solids (TSS)	350
Boron	5.0
Cadmium	0.05
Chromium (trivalent)	1.0
Copper	0.3
Iron	15
Lead	0.2
Mercury	0.005
Nickel	0.5
Zinc	0.5
pH	5.5-9.0 pH units
Cyanide	2.0
Phenols	0.5
Phosphates (as P ₂ O ₅)	10.0

Appendix C Collection and Treatment of Non-Hazardous Drilling Muds

1. The transfer of waste products from offshore service vessels at Pier 18 West shall be completed through the existing dolphin piping system.
2. Interim storage of non-hazardous waste products (waste drilling muds, used oil and oily water shall be in four (4) newly installed above-ground storage tanks for transfer to the approved facility located on Logy Bay Road.
3. Collected drill muds may be processed at the Logy Bay Rd. Facility. Separated oily water is discharged through the permanent oily water treatment system and subject to Appendix B. Used oil is treated and handled as per Appendix A. Non hazardous drilling muds are treated in a Thermal Desorption Unit (TDU) or a Vacuum Distillation Unit (VDU). Solids generated from the TDU are analysed as per Appendix C, Clause 4 prior to disposal to landfill. Disposal to landfill is permitted on a batch basis provided they meet CCME guidelines for industrial soil quality and/or pass the Toxicity Characteristic Leaching Procedure USEPA Method 1311. Solids generated from the VDU are sent to an approved soil remediation facility. Permission to direct the solids from the VDU elsewhere requires prior permission from the Department.
4. The compliance monitoring program for treated non-hazardous drilling muds will continue as follows:
 - 1) Sampling and analyses of treated solids for TPH shall be done on a monthly basis using a commercial accredited laboratory.
 - 2) Batch analyses of treated soils must be conducted using either the in- house TPH analyzer or an accredited facility. TPH results and date must be provided in a word or pdf document with the monthly report. Calibration and maintenance records of the in-house analyzer must be maintained on site and available to officials of the Department during site visits upon request.
 - 3) Laboratory analyses for leachable metals must continue on a quarterly basis to ensure criteria parameters remain satisfactory for landfill disposal.
 - 4) Results of the compliance monitoring program for treated non-hazardous drilling muds are subject to Reporting (Section 30). The EDMS Code for the TDU while in operation remains 00675.

