



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

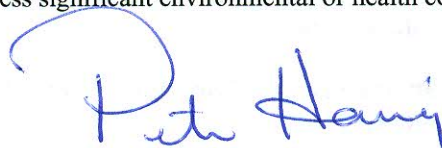
Issue Date: **February 28, 2019** Approval No. WMS06-09-015  
Expiration: **February 28, 2024** File No. 830.000.100  
Proponent: **RESLP - Terrapure**  
PO Box 16004, A1X 2E2  
St. John's, NL  
Attention: Jasna Krstic  
902-332-3328/709-834-7350  
jkrstic@terrapureenv.com  
Re: **Transfer Station and Transportation of Waste Dangerous  
Goods/Hazardous Waste ( province wide) and non-hazardous treatment  
of drilling muds**

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Approval is hereby given for the transportation and storage of waste dangerous goods/hazardous waste and treatment of non-hazardous drilling muds located at 315 & 349 Incinerator Road, St. John's, 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 condition in the regulation shall take precedence. Approval from the Department of Municipal Affairs and Environment (the Department) shall be obtained prior to any significant change in operation. 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 in the Certificate of Approval or to address significant environmental or health concerns.

  
For MINISTER

## General

1. The operation of this waste management system is limited to all equipment and operations for the collection, handling, transportation and storage of waste dangerous goods/hazardous waste (WDG/HW) and non-hazardous drilling mud processing, on or in properties owned, leased and/or operated by the Approval Holder.
2. Below is a list of specific terms and conditions for various activities and referenced appendices:
  - used oil, refer to Appendix A;
  - NORM storage, refer to Appendix B;
  - Transportation and Storage of PCB's, refer to Appendix C;
  - drilling muds treatment; refer to Appendix D.
3. Any inquiries concerning this approval shall be directed to the St. John's office of the Pollution Prevention Division, telephone: 709-729-1771.
4. Prior to any expansion or modification of the facility, a letter of application shall be forwarded to Department requesting an amendment to this approval.
5. The Department reserves the right to make this Certificate of Approval publicly available.
6. 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 facility are made fully aware of the terms and conditions which pertain to this approval.
7. 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.

## Definitions

8. In this Certificate of Approval:
  - **accredited** means the formal recognition of the competence of a laboratory to carry out specific functions;
  - **Activity:** (becquerel or Bq) solely indicates the number of nuclear disintegrations per second but is also encountered as derived units such as activity per mass or volume (Bq/g[solid], Bq/L[liquid] and Bq/Nm<sup>3</sup> [gas]);
  - **BTEX** means benzene, toluene, ethylbenzene, and/or xylene;
  - **Department** means the Department of Municipal Affairs and Environment and its successors;
  - **Director** means the Director of the Pollution Prevention Division of the Department;

- **leachable toxic waste (LTW)** means waste material which, upon laboratory analysis, is shown to contain levels of contaminants that exceed parameters listed in the Canadian Council of Ministers of the Environment (CCME) Canadian Soil Quality Guidelines (CSQG); and/or the leachate from the material exceeds criteria limits when the material is subjected to the leachate (TCLP) test (as described below);
- **leachable test** means the US EPA Toxicity Characteristic Leaching Procedure (TCLP) Test Method 1311 (as amended) is to be used to determine the leachate toxicity hazard;
- **licensed** means has a Certificate of Approval issued by the Minister to conduct an activity;
- **Minister** means the Minister of the Department;
- **NORM Contaminated** means waste that exceeds the public exposure levels but do not exceed the levels at which they are classified as radioactive;
- **PCB's** means polychlorinated biphenyls, which means the chlorobiphenyls that have the molecular formula  $C_{12}H_{10-n}Cl_n$  in which "n" is greater than 2;
- **PCB Storage Site** means a place or property that is used to store PCB wastes;
- **Radioactive** means exhibiting radioactivity; emitting or relating to the emission of ionizing radiation or particles such as alpha and beta particles, neutrons or gamma rays. (*radioactif, radioactive*);
- **Radiation means** energy travelling through space in the form of waves or particles. Ionizing radiation (e.g. alpha particles, beta particles, gamma rays, X-rays and neutrons) has the ability to remove electrons from the matter it encounters;
- **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 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;
- **waste dangerous goods/hazardous waste (WDG/HW)** means a product, substance or organism that is intended for 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) according to information that Canada has received from the United

States or in accordance with the Convention, is considered or defined as hazardous under the legislation of the country receiving it and is prohibited by that country from being imported or conveyed in transit.

- **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;

9. 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, 2004;*
- *Environmental Control Water and Sewage Regulations, 2003;*
- *Halocarbon Regulations, 2005;*
- *Storage and Handling of Gasoline and Associated Products Regulations, 2003;*
- *Used Oil Control Regulations;*
- *Heating Oil Storage Tank System Regulations, 2003;*
- *Leachable Toxic Waste, Testing and Disposal, 2003;*
- *NORM Waste Management 2017, GD-PPD-079.1;*
- *Canadian Environmental Protection Act and Regulations (CEPA);*
- *Transportation of Dangerous Goods Act and Regulations.*

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.

### **Application Submissions**

10. A request for renewal and consolidation of Certificate of Approvals for the operation of a waste management system including: the collection/transportation and storage of WDG/HW (including PCB's and NORM contaminated waste; collection and transportation and treatment of non-hazardous drilling muds received) received January, 2019.
11. RESLP Terrapure provided updated 2019 Emergency/Contingency Response Plans.

### **Emergency & OHS Preparedness**

12. 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.
13. All workers involved with NORM and WDG/HW shall have appropriate training dealing with these wastes.
14. All appropriate health and safety procedures shall be followed at the site in accordance with applicable legislation.

15. The treatment and monitoring system(s) shall be operated and maintained in accordance with the respective manufacturers' operating and maintenance specifications.
16. The operator(s) shall have petroleum, fire and spill response training.
17. In the event of an emergency and/or WDG/HW incident or spill, the operator of the vehicle shall notify Canadian Coast Guard immediately by calling:  

772-2083 or 1-800-563 - 9089 (24 hour basis).
18. In an emergency, the Canadian Transport Emergency Center (CANUTEC) shall be called at 613-996-6666 (24 hours) or \* 666 cellular (press \* 666, Canada only). In a non-emergency situation call the information line at 613-992-4624 (24 hours).
19. A copy of the holder's current contingency plan shall be kept in each vehicle used in the operation of this waste management system. Personnel shall be briefed on the contents of the plan and any associated emergency response equipment.

### **General WDG/HW Storage**

20. The storage buildings shall be maintained in a condition capable of retaining any spillage which may occur.
21. Each storage cell shall contain appropriate emergency response equipment.
22. Accessible safety and emergency equipment shall be maintained at the facility.
23. All WDG/HW must be stored in labelled containers or drums.
24. Waste containers at the site shall not be stacked more than two (2) drums in height.
25. A minimum distance of 50 centimetres shall be maintained between rows of containerized wastes. A row of waste shall not exceed 240 centimetres in width.
26. Containers of WDG/HW with incompatible chemical characteristics shall be segregated from one another and stored in separate storage cells.
27. All containers of WDG/HW shall be properly labelled, marked and inventoried. Upon completion of a lab pack, the outer container shall also be properly labelled and marked and an inventory of the contents attached to the container. The date of completion of the lab pack shall also be indicated on the inventory.
28. The facility shall be equipped with intrusion alarms and fire and gas detection systems in all storage, handling, and laboratory areas. Alarms shall be monitored and kept in good operating order at all times.

29. All wastes shall be shipped from the site within one (1) year from the date of receipt.
30. Contaminated fluids and wastewater generated by the cleaning of containers or equipment shall be recovered and disposed of in an approved manner

### **Transportation Requirements**

31. Receivers to which WDG/HW is transported for treatment prior to disposal both within Newfoundland & Labrador and Canada must be licensed by the Province having jurisdiction. A copy of the license must be submitted to the Department showing that the Receiver is in good standing with the Province of jurisdiction.
32. All motor vehicles used in this operation shall meet Service NL inspection requirements.
33. The *Transportation of Dangerous Goods 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 federal *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. This training is a requirement of the Certificate of Approval.
34. 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 WDG/HW.
35. The transportation of other forms of WDG/HW not described in the application for this Certificate of Approval is not permitted.
36. All WDG/HW shall be contained in labelled containers or drums.
37. Municipal and industrial landfills in this province are not permitted to accept WDG/HW materials. Non-hazardous wastes may be disposed of to a landfill with the approval of the Service NL and landfill owner/operator.
38. All handling and transport operations shall be conducted in a manner that prevents the release of contaminants into the environment. Measures such as secondary containment (for liquid waste) shall be taken to prevent leakage and spillage of WDG/HW.
39. The importation of WDG/HW to the Province of NL is not permitted.
40. All manifest/moving documents (bill of lading) shall be completed and remitted to

the Department either prior to shipment or immediately following each export.

41. Care shall be taken during tank pump out procedures to ensure no spillage takes place.
42. The company name and telephone number shall be clearly displayed on every waste collection vehicle.
43. Every vehicle used for the hauling, collection and transportation of WDG/HW shall be operated and marked/placarded in accordance with Federal *Transportation of Dangerous Goods Regulations*.
44. Personnel handling WDG/HW should be trained in the use of personal protective equipment, clean-up equipment and all applicable safety procedures. In addition, sufficient equipment including sorbents, and related clean-up materials shall be kept on hand in the event of a leak or a spill during storage, handling, or transportation.
45. Transportation of PCB materials shall fully comply with the *Transportation of Dangerous Goods Act* and the *Interprovincial Movement of Hazardous Waste Regulations* and *PCB Regulations* under the *Canadian Environmental Protection Act*.

### **Security and Signage**

46. Unauthorized access to the site shall be restricted.
47. Tank and line drain valves and gate access shall be secured in a locked position at the end of each business day.
48. The facility shall be fenced at the entrance and a lockable access gate shall be installed to prevent unauthorized access.
49. A durable sign shall be posted at the gate listing the company name, hours of operation and a contact name and number to be called in the event of an emergency situation. Other signage relating to access restrictions and fire/health/safety restrictions shall be prominently displayed.
50. Areas of the site shall be clearly marked to indicate the nature of the hazard.

### **Financial Insurance/Assurance**

51. 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.
52. A current surety bond of \$20,000 shall be on file with the Department, otherwise this approval shall be considered null and void.
53. Annual updates of the financial assurance documents shall be filed with the

Department.

54. The proponent shall provide the Department with three months advance notice if they intend to cancel coverage and/or change the insurer or bonding agent.

### **Laboratory Analysis & QA/QC**

55. 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)*.

### **Reporting**

56. An annual report shall be submitted to the Department (electronically to my attention) by January 31, of the following year and shall include:
- a summary of all drilling mud transactions (including solid waste, waste oil and wastewater) and laboratory results;
  - a summary of complete volumes of types of waste streams destined for recycling/treatment and final disposal.
57. All incidents of:
- *Contingency Plan* implementation;
  - non-conformance of any condition within this approval;
  - verbal/written complaints of an environmental nature from the public received by the proponent related to the temporary site;
  - spillage or leakage of a regulated substance; shall be immediately reported, within one working day, to a person or message manager or facsimile machine to Service NL by phoning or faxing.

### **Expiration**

58. This Certificate of Approval expires *February 28, 2024*.
59. Should the proponent wish to continue to operate 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 *December 28, 2023*.

cc: Fire Commissioner (email)  
Pleasantville Fire Station  
P.O. Box 8700  
St. John's, NL  
A1B 4J6

Robert Locke  
Manger of Operations and Environmental Protection  
Service NL  
[rlocke@gov.nl.ca](mailto:rlocke@gov.nl.ca)

## **Appendix A: Used Oil Collection and Handling**

1. Used oil collectors and transporters are prohibited from blending used oils with virgin oil to dilute meet the specification levels for used oil combustion.
2. Disposal of waste hydrocarbons shall be through a licensed used oil treatment / recycling facility.
3. The operator of a collection vehicle shall where possible visually inspect each tank/drum 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.
4. The mixing (blending) of otherwise uncontaminated products resulting from the flushing of product lines from a tanker, tank vessel, tank car or tanks at a bulk plant or similar facility is not considered contamination. Blending of different used oils may also occur along a collection route and during initial bulking after collection.
5. Records of the volume of used oil **transferred** for combustion or treatment and for shipment out of province shall be maintained and the held for a period of not less than three years. These records shall include the date of the transaction and the name of the receiver/collector and made available for review by the SNL.
6. Records of the volume of used oil **received** or **collected** within this province shall be maintained and the held for a period of not less than three years. These records shall include the date of the transaction, volume and the name of the receiver/collector and made available for review by the GSC.
7. A used oil collector may deliver used oil to:
  - an approved used oil storage facility;
  - an approved used oil re-refinery or treatment facility; or
  - an approved used oil combustion facility

## **APPENDIX B: NORM Storage**

1. The temporary storage of NORM contaminated material shall be in accordance with

the NORM Management Plan submitted by the proponent as part of their application and the *Canadian Guidelines for the Management of Naturally Occurring Radioactive Materials* (hereafter referred to as the *NORM Guidelines*) and *NORM Waste Management Guidance Document (GD-PPD-079.1 December 2017)*.

2. NORM waste (< than 70Bq/g) can be stored for up to 180 days onsite ( 6 months); for radioactive waste > 70 Bq/g) 90 days for storage onsite; from receipt at which time all materials must be shipped off site to an authorized facility for treatment/disposal.
3. Materials with higher radioactivity should be placed near the centre of the storage area.
4. The NORM storage area shall be fenced and properly identified with the wording as shown below:

**CAUTION Naturally Occurring Radioactive Material - Authorized Personnel Only.**

If the storage area contains any NORM waste material with a radioactivity greater than 70Bq/g the material is considered radioactive and signage shall contain the **radioactive trefoil symbol**.

5. NORM contaminated material (such as scale/sludge, PPE and waste water) shall be stored in appropriate, labelled, leak proof storage containers in the NORM storage trailer. A liner shall be required beneath the storage area where liquid NORM wastes ( unable to be stored in trailer) are being stored.
6. Access to the NORM storage area must be managed and work practices established to ensure that annual exposure to incidentally exposed workers does not exceed 1.0 mSv/yr.
7. Larger NORM contaminated equipment unable to be stored within the trailer shall be sealed in 6ml plastic or equivalent. For equipment with contamination limited to interior surfaces, open ends shall be capped or sealed. All materials shall be stored above ground on adequately designated storage racks or pallets within the NORM storage area. All equipment shall be protected from exposure to the elements either wrapped or sealed in heavy duty tarpaulins.
8. NORM contaminated material shall not be stored with any other type of material.
9. Only radiation survey meters and contamination meters approved by the *Canadian Nuclear Safety Commission* shall be used in NORM surveys. Survey equipment shall be calibrated in accordance with manufacturer's specifications.
10. Each container of NORM contaminated material shall be sampled and have radiochemical analysis performed when received.
11. Reasonable measures shall be taken to prevent radioactive material from becoming airborne.

12. The proponent shall conduct an initial review (as defined in the *NORM Guidelines*) of the NORM storage workplace to determine if the investigation threshold of 0.3 mSv/a has been exceeded.
13. If the initial review determines that there is a potential to exceed 0.3 mSv/a, a Radiation Dose Assessment (as defined in the *NORM Guidelines*) shall be completed. This assessment may include gamma dose-rate measurements, airborne radioactivity evaluation or radiochemical analysis. The results of the any Radiation Dose Assessments shall be maintained on site for a period of not less than 2 years and shall be made available to the Department upon request.
14. If the estimated annual effective dose is greater than 0.3 mSv/a, then dose management precautions shall be followed which may include use of protective clothing, engineering controls, and personal radiation dosimeters.
15. If the estimated annual effective dose is greater than 5 mSv/a, then a formal radiation protection program (as defined in Appendix G of the *NORM Guidelines*) shall be initiated. Radiation shielding shall be provided to site workers in accordance with the *NORM Guidelines*.
16. The NORM Management Plan shall be reviewed and updated on an annual basis.
17. The NORM storage area shall be inspected daily for evidence of loss of containment. These inspections shall be logged and maintained on site for a minimum of 2 years, and made available for review by inspectors of the Department and its agents at the SNL.
18. An accurate inventory of materials must be maintained including originating location, date, activity or radiation dose levels and package contents including other hazardous properties to the materials being stored. Monthly inspections shall be performed to identify leaking or corroded containers, which must be immediately repacked or sealed
  - Container/pipe identification (ID # and type of container)
  - Source of waste (originally generator and location)
  - Surface rate of container equipment
  - Type of waste (scale, sludge and / soil)
  - Final destination and disposal site
  - Date stored and date removed ( to final disposal)
  - Radionuclide present- radionuclide analysis (Ra228, Ra226. Pb210 etc)
  - Details on maintenance and inspection of containers documented.

### **Appendix C: Transportation and Storage of PCB's**

1. Transportation of PCB materials must fully comply with the *Transportation of Dangerous Goods Act* and the *Interprovincial Movement of Hazardous Waste*

*Regulations under the Canadian Environmental Protection Act.*

2. The proponent shall fully comply with *The Storage of PCB Wastes Regulations* under the *Environmental Protection Act* and *PCB Regulations under Canadian Environmental Protection Act (Federal Legislation)* as amended.
3. Collection and transport of PCB wastes to the Incinerator Road site shall take place immediately following an off-site cleanup or decommissioning project. A Certificate of Approval is required for the off-site storage of PCB wastes in accordance with *The Storage of PCB Wastes Regulations*.
4. The proponent shall accept the return of all PCB waste if the laboratory analysis shows concentrations of PCBs to be greater than 50 ppm; the limit for PCB designation as defined by *The Storage of PCB Wastes Regulations*.
5. PCB fluids, flushing solvents, mineral oil and other liquids contaminated greater than 50 ppm PCB shall be placed in drums of at least 16 gauge steel. Drum bungs shall be caulked with a PCB-resistant material. At least ten centimeters shall be left at the top of the container to allow for fluid expansion due to temperature changes.
6. PCB contaminated soil, small capacitors, and other solids shall be contained within bins or closed steel drums with gaskets made of a PCB-resistant material such as nitrile rubber or cork. Capacitors and any similar heavy equipment shall also be placed inside a polyethylene bag or sheeting and packed with absorbent material.
7. Transformers and capacitors must continue to display their existing serialized PCB warning labels and barrels must have a non-serialized label.
8. Large volumes (greater than 1000 litres) of fluids from non-PCB transformers must be analysed for PCB content and must meet the requirements of this Department before disposal.
9. Drums of PCB liquids are not to be stacked.
10. Drums of PCB solids are not to be stacked more than two drums high.
11. There must be a minimum distance of 50 centimeters between the rows of palletized drums.
12. A proposal to decontaminate a transformer and fill with an alternative fluid (a retro-filling proposal), with a view to returning to service, must be approved in advance by this Department.
13. PCB waste solids and liquids received at the transfer station shall:
  - (a) be accompanied by a lab test report which confirms that the concentration of PCB in the waste exceeds the 50 ppm regulatory limit or exceeds the Site Specific Target Level established at a PCB contaminated site, **or**
  - (b) be known to be hazardous and contain PCB levels that exceed the regulatory criteria as identified by product name, material safety data sheet or manufacturer's

## Appendix D: Drilling Mud Treatment

1. All four - 80,000 liter tanks (receiving waste drilling muds; centrifuge feed; waste water; and drilling oil collection) along with a 60 m<sup>3</sup> collection bin to store the solids and associated equipment designated for the spent drilling muds or effluent storage shall:
  - 1) have secondary containment
  - 2) comply with the Storage and Handling of Gasoline and Associated Products Regulations, 2003 be registered with the Service NL
2. For each batch of treated/centrifuged drilling muds/cuttings, the proponent shall have a composite sample and an adequate chemical analysis performed (TPH, BTEX, PAHs, radiochemical analysis and Metal Scan) to characterize the waste as per Laboratory Analysis & QA/QC section.
3. All waste material (soil, mud, cuttings) with analysis showing contaminants in excess of limits prescribed in the latest edition of the CCME Canadian Environmental Quality Guidelines and leachability criteria shall be reviewed by the department prior to shipment to a treatment facility.
4. Post-drilling mud solids from the process shall be sent to the solids collection bin. The solids shall be transferred by sealed-end dump trucks to approved facility for treatment.
5. All drilling mud solids from the site shall be stored separately on a designated pad located at UESI site, Sunnyside.
6. Drilling mud solids are permitted to be treated at approved facility on a continued trial basis and as per letter agreement between proponent and UESI.
7. The proponent shall be ultimately responsible for the removal of drilling mud material that can't be treated to acceptable criteria, from Sunnyside location for further treatment or disposal to an approved facility.
8. Post-drilling mud wastewater from the centrifuge separation process shall be sent to the wastewater collection tank, sampled and analyzed prior to transport to an approved facility for treatment. Quantities and received information shall be reported in an annual report.

product information sheet. Analysis for the presence of PCBs shall be undertaken if the proponent suspects transformer oil, coolants or various other used oil or waste may contain PCBs in a concentration which exceeds regulatory criteria.