



APPROVAL TO OPERATE

I-10819

Pursuant to paragraph 5 (3) (a) of the *Air Quality Regulation - Clean Air Act*, and paragraph 8(1) of the *Water Quality Regulation - Clean Environment Act*, this Approval to Operate is hereby issued to:

J. D. IRVING, LIMITED
for the operation of the
Chipman Sawmill

Description of Source: **Sawmill**

Source Classification: **Air Quality Regulation Class 1B**
Fees for Industrial Approvals Class 4
Regulation - Clean Water Act

Parcel Identifier: **45079076, 45148558, 45079050, 45142023, 45110475,
45077575, 45131380, 45078425, 45077534, 45076007,
45077963, 45074655, 45075777, 45076528, 45080124,
45144409, 45076205, 45077005**

Mailing Address: **P.O. Box 5777
300 Union Street
Saint John, NB E2L 4M3**

Conditions of Approval: **See attached Schedule (s)"A" and "B" of this
Approval**

Supersedes Approval: **I-10257**

Valid From: **February 25, 2020**

Valid To: **March 31, 2024**

Recommended by: 

Issued by:  February 26, 2020
for the Minister of Environment and Local Government Date

SCHEDULE "A"

A. DESCRIPTION AND LOCATION OF SOURCE

J. D. IRVING, LIMITED operates a softwood sawmill in Chipman with an annual production capacity of approximately 230 million board feet of dimensional lumber. In general the site consists of a hotpond, sawmill, planer mills, a finger-jointing lumber line, chip silos, a biomass boiler, stand-by oil-fired boilers, and dry kilns.

The potential environmental impacts associated with the operation of the Facility can result from, but are not limited to: i) the release of exhaust gas and/or process gas to the environment from the operation; ii) the release of fugitive dust to the environment from the operation; iii) the improper management of petroleum products and/or chemicals used in the operation; iv) the improper management of solid wastes generated from the operation; and v) the release of nuisance emissions (odorous compounds and/or noise).

The operation of the J. D. IRVING, LIMITED Chipman Sawmill located off of Route 10, in the Village of Chipman, County of Queens and situated on the properties identified by the Parcel Identifier (PID) 45079076, 45148558, 45079050, 45142023, 45110475, 45077575, 45131380, 45078425, 45077534, 45076007, 45077963, 45074655, 45075777, 45076528, 45080124, 45144409, 45076205, and 45077005 are hereby approved **subject to the following**:

B. DEFINITIONS

1. **"Approval Holder"** means J. D. IRVING, LIMITED.
2. **"Department"** means the New Brunswick Department of Environment and Local Government.
3. **"Minister"** means the Minister of Environment and Local Government and includes any person designated to act on the Minister's behalf.
4. **"Director"** means the Director of the Impact Management Branch of the Department of Environment and Local Government and includes any person designated to act on the Director's behalf.
5. **"Inspector"** means an Inspector designated under the *Clean Air Act*, the *Clean Environment Act*, or the *Clean Water Act*.
6. **"Facility"** means the property, buildings, and equipment as identified in the Description of Source above, and all contiguous property in the title and/or in the control of the Approval Holder at that location.

7. **"after hours"** means the hours when the Department's offices are closed. These include statutory holidays, weekends, and the hours before 8:15 a.m. and after 4:30 p.m. from Monday to Friday.
8. **"normal business hours"** means the hours when the Department's offices are open. These include the period between 8:15 a.m. and 4:30 p.m. from Monday to Friday excluding statutory holidays.
9. **"environmental emergency"** means a situation where there has been or will be a release, discharge, or deposit of a contaminant or contaminants to the atmosphere, soil, surface water, and/or groundwater environments of such a magnitude or duration that it could cause significant harm to the environment or put the health of the public at risk.
10. **"used oil"** means oil that has become unsuitable for its original purpose because of the presence of impurities or the loss of its original properties.
11. **"self-generated used oil"** means used oil generated in the cause of operating one's own business.
12. **"Waste Derived Fuel"** means used oil that has been tested and has been determined to have: a flashpoint of 61 degrees Celsius or higher; an arsenic concentration less than 5 parts per million; a cadmium concentration less than 2 parts per million; a chromium concentration less than 10 parts per million; a lead concentration less than 100 parts per million; a zinc concentration less than 1500 parts per million; a polychlorinated biphenyls (PCBs) concentration less than 2 parts per million; and a total organic halogens (as chlorine) concentration less than 1000 parts per million.

C. TERMS AND CONDITIONS

GENERAL

13. This Facility has been classified as a **Class 1B** Facility, pursuant to the *Air Quality Regulation, New Brunswick Regulation 97-133* filed under the *Clean Air Act*. The Approval Holder shall pay the appropriate fee **on or before April 1 of each year**.
14. This Facility has been classified as a **Class 4** Facility, pursuant to the *Fees for Industrial Approvals Regulation 93-201* filed under the *Clean Water Act*. The Approval Holder shall pay the appropriate fee **on or before April 1 of each year**.
15. The Approval Holder shall operate the Facility in compliance with the *Air Quality Regulation 97-133* filed under the *Clean Air Act*, and/or the *Water Quality Regulation 82-126* filed under the *Clean Environment Act* of the Province of New Brunswick. Violation of this Approval or any term and/or condition stated herein constitutes a violation of the *Clean Air Act* or the *Clean Environment Act*, as the case may be.

16. The issuance of this Approval does not relieve the Approval Holder from compliance with other by-laws, federal or provincial acts or regulations, or any guidelines issued pursuant to regulations.
17. The terms and conditions of this Approval are severable. If any term and/or condition of this Approval is held invalid, is revoked or is modified, the remainder of the Approval shall not be affected.
18. **Prior to July 31, 2023**, the Approval Holder shall make application in writing for a renewal of this Approval on a form provided by the Minister.
19. An Inspector, at any reasonable time, has the authority to inspect the Facility and carry out such duties as defined in the *Clean Air Act*, the *Clean Environment Act* and/or the *Clean Water Act*.
20. The Approval Holder shall notify the Minister in writing of any plans to modify the operation of the Facility that would result in a significant change in the characteristics or increased rate of discharge or concentration of any air contaminant to the atmosphere **at least 240 days prior** to the modification.
21. In the event of facility closure, the Approval Holder shall notify the Minister in writing **at least one hundred and eighty (180) days prior** to the anticipated closure date.
22. The Approval Holder shall ensure that a copy of this Approval, including all attached Schedules, is posted in a prominent location in the office or working area of the Facility.

EMERGENCY REPORTING

23. Immediately following the discovery of an environmental emergency, a designate representing the Approval Holder shall notify the Department in the following manner:

During normal business hours, telephone the Department's applicable Regional Office **until personal contact is made** (i.e. no voice mail messages will be accepted) and provide all information known about the environmental emergency. The telephone number for the Regional Office is provided below:

Fredericton Regional Office (506) 444-5149

After hours, telephone the Canadian Coast Guard **until personal contact is made** and provide all information known about the environmental emergency. The telephone number for the **Canadian Coast Guard is 1-800-565-1633**.

24. Within 24 hours of the time of initial notification, a copy of a Preliminary Emergency Report shall be faxed, by a designate representing the Approval Holder, to the Department's applicable Regional Office *as well as* the Department's Central Office using the fax numbers provided below. The Preliminary Emergency Report shall clearly communicate all information available at the time about the environmental emergency.

Within five (5) days of the time of initial notification, a copy of a Detailed Emergency Report shall be faxed, by a designate representing the Approval Holder, to the Department's applicable Regional Office *as well as* the Department's Central Office using the fax numbers provided below. The Detailed Emergency Report shall include, as a minimum, the following: i) a description of the problem that occurred; ii) a description of the impact that occurred; iii) a description of what was done to minimize the impact; and iv) a description of what was done to prevent recurrence of the problem.

Fredericton Regional Office Fax No: (506) 453-2893
Central Office Fax No: (506) 453-2390

LIMITS

25. The Approval Holder shall ensure that emissions resulting from the operation of the Facility are controlled to prevent the exceedance of the maximum ground level concentrations outlined in the *Air Quality Regulation 97-133*, filed under the *Clean Air Act* of the Province of New Brunswick.
26. The Approval Holder shall ensure that odour, noise, fugitive particulate matter, and/or site run-off being released or discharged from the Facility do not cause adverse impacts to any off-site receptor. In the event impacts are suspected by the Department to be adversely impacting any off-site receptor, the Approval Holder may be required to investigate the degree of impact and/or develop, submit, and implement a Prevention and Control Plan in accordance with a timetable established by the Department. The plan shall be submitted in writing to the Department for review and approval prior to implementation.
27. The Approval Holder shall ensure that smoke emissions do not exceed density Number 1, except for a period totaling not more than four (4) minutes each half hour where smoke may exceed density Number 1 but may not exceed density Number 2 as determined by the *Smoke Density Chart of the Province of New Brunswick* for normal operation of the Facility. In the case of a new fire, smoke may exceed density Number 2 for a period of three (3) minutes in each quarter hour period, but may not exceed density Number 3.
28. The Approval Holder shall ensure that total emissions of Sulphur Dioxide (SO₂) from the operation of the Facility do not exceed **430** metric tonnes per calendar year.
29. The Approval Holder shall ensure total emissions of Nitrogen Oxides (NO_x) from the operation of the Boilers do not exceed **153** metric tonnes per calendar year.

30. The Approval Holder shall ensure that total emissions of Particulate Matter (PM) from the operation of the Boilers do not exceed **175** metric tonnes per calendar year.
31. The Approval Holder shall ensure that all site runoff is collected and any discharge to Salmon River, or any other watercourse, is less than 50 mg/l for suspended solids in a grab sample.

FACILITY MANAGEMENT

32. The use of petroleum products as a dust control agent is **not permitted**.
33. The Approval Holder is only permitted to use up to 15 litres per hour of self-generated used oil as a fuel at the Facility. The self-generated used oil is only to be used in a system that conforms with *CAN/CSA-B140.0-M87(R1991), General Requirements for Oil Burning Equipment* and/or *CAN/CSA-B140.4-1974(R1991), Oil-fired Warm Air Furnaces*. The burning of self-generated used oil greater than 15 litres per hour is **not permitted** at this facility. The burning of waste derived fuel is **permitted** at this Facility as described in Schedule B.
34. The Approval Holder shall ensure that all chemicals and hazardous waste stored at the Facility are located in a dedicated Chemical/Hazardous Waste Storage System. The system shall be set up to ensure that all chemicals/hazardous wastes are:
 - a) secured in sealed and chemically resistant containers;
 - b) away from high traffic areas and protected from vehicle impacts;
 - c) away from electrical panels;
 - d) in a containment area that has secondary containment adequate to contain 110 % of the nominal volume of the largest container in the containment area;
 - e) in a containment area that is designed to prevent contact between incompatible chemicals; and
 - f) in a containment area designed to prevent the release or discharge of chemicals to the environment as a result of a spill.
35. The Approval Holder shall ensure that waste wood materials are not permanently stored at the facility. Wood waste shall be disposed of in a method acceptable to the Department either by transport to another facility for use or to an approved landfill. The Approval Holder shall not stockpile wood waste for a period greater than 60 days.
36. The Approval Holder shall employ good housekeeping practices to ensure spillages of waste wood materials are cleaned up as soon as possible and handled in such a manner that fugitive emissions of wood materials do not leave the site of the facility.
37. The Approval Holder shall ensure that all solid waste generated at the Facility is disposed of in a manner and at a location which is acceptable to an Inspector. One acceptable method of disposal is at an approved landfill.

38. The Approval Holder shall maintain the large mesh fence located on the bank of Elliot Brook to ensure that fugitive particulate matter does not enter Elliot Brook.
39. The Approval Holder shall maintain a vegetated buffer zone for the purpose of reducing sediment runoff into the Salmon River, that is:
 - a) 15 metres wide; and
 - b) as wide as practical in areas where existing permanent structures limit the buffer zone.

No further encroachment into the buffer zone is permitted. No activity is to take place inside this buffer zone, including but not limited to: equipment storage, stockpiling of logs, lumber, or woodwaste, or piling of snow from snow clearance, or vehicle traffic.

40. The Approval Holder shall ensure that no effluent is discharged from the hot ponds and that no chemicals are used in the operation of the hot ponds.
41. The Approval Holder shall not do chemical sapstaining at this site.

TESTING AND MONITORING

42. The Approval Holder shall conduct performance tests on atmospheric emissions of contaminants from the Facility or on ambient air quality at such times and in such a manner as the Director may, in writing, require.
43. The Approval Holder shall ensure that all source testing is completed in conformance with the most recent version of the New Brunswick Department of Environment **Guidance Document for Source Testing**.
44. **Prior to November 30, 2021**, the Approval Holder shall conduct performance tests to characterize the contaminants and gases being emitted from all currently operating boiler stacks. As a minimum, testing shall be conducted to quantify emissions of the following parameters:
 - i) particulate matter (PM);
 - ii) carbon monoxide (CO);
 - iii) nitrogen oxides (NO_x);
 - iv) sulphur dioxide (SO₂);
 - v) carbon dioxide (CO₂); and
 - vi) oxygen (O₂).

A report on the results of the performance testing including the exhaust gas temperature in degrees Celsius, actual volumetric flow rate in m³/s (or ACFM), and quality-assured emissions testing data for all parameters shall be prepared in both hardcopy and electronic formats acceptable to the Director.

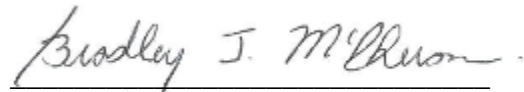
45. **Prior to May 31, 2022**, The Approval Holder shall complete an air quality dispersion modelling study immediately following any source testing activities required for a given year. The study shall determine the maximum 1 hour, 24 hour, and annual ground level concentrations in micrograms per cubic metre for the parameters specified in the source testing activities for that year and representing all point sources at the facility. The maximum concentrations shall be shown graphically as concentration contours in relation to the facility and off-site receptors within a five kilometre radius. The model to be used shall be a multisource model that is acceptable to the Department. The modelling shall use the previous 5 years hourly meteorological data from the nearest weather station.
46. The Approval Holder shall ensure that where source testing for Particulate Matter is required, Particle Size Distribution is also undertaken to determine the concentration in milligrams per cubic meter and emission rate in grams per second of Total Particulate Matter, PM₁₀ and PM_{2.5} released.
47. The Approval Holder shall monitor the TSS concentration of site runoff at such times and in such a manner as the Director may, in writing, require. The samples shall be taken at the inlet of the final discharge pipe where the runoff leaves the property, and shall be submitted to a laboratory approved by the Director for testing. Sampling is only required when there is discharge at this location.

REPORTING

48. In the event the Approval Holder receives a complaint from the public regarding unfavourable environmental impacts associated with the Facility, the Approval Holder is to report this complaint by facsimile to the Department's applicable Regional Office within one business day of receiving the complaint.
49. In the event of a small spill or leak of liquid materials, the Approval Holder shall act first to contain, and then to clean up the spilled or leaked material and mitigate any resulting impacts as soon as the spill or leak is detected. If the spill or leak results in an "environmental emergency" as defined in this Approval, the Approval Holder shall report the event in accordance with the Emergency Reporting section of this Approval. If the spill or leak is not an "environmental emergency", the Approval Holder shall report this event to the Department's applicable Regional Office by fax, within one business day, identifying the material spilled, the approximate amount of liquid spilled, the location of the spill and the method(s) used to clean up the liquid.
50. In the event the Approval Holder violates any Term and Condition of this Approval or the *Air Quality Regulation*, the Approval Holder is to immediately report this violation by facsimile to the Department's applicable Regional Office and the Central Office in Fredericton at **(506) 453-2390**. In the event the violation may cause the health or safety of the general public to be at risk and/or significant harm to the environment could or has resulted, the Approval Holder shall follow the Emergency Reporting procedures contained in this Approval.

51. **By February 15 of each year**, the Approval Holder shall submit a Final Report on the source testing to the Director for review and approval as required under Testing and Monitoring.
52. **By February 15 of each year**, the Approval Holder shall submit an Annual Environmental Report to the Director. The report shall include, as a minimum, the following information for the previous calendar year:
- i) the name of the fuel suppliers;
 - ii) the types of fuel used;
 - iii) the annual consumption of fuel oil and woodwaste in tonnes;
 - iv) the average sulphur content of each type of fuel oil used; and
 - v) a summary report of all small spill and/or leak events at the Facility during the previous year, including the date, location, approximate volume, and method of cleanup for each spill and/or leak.

Prepared by:



Bradley J. McPherson P. Eng.
Approvals Engineer

SCHEDULE "B"

WASTE OIL SPECIFICATIONS FOR USE AS FUEL

1. **TERMS AND CONDITIONS - FACILITY MANAGEMENT**

The burning of waste derived fuel as a heating fuel in the operation of the sawmill is only permitted if the fuel is received from an approved facility who can demonstrate that the limits specified below can be met, as per the *Used Oil Regulation - Clean Environment Act*. The Approval Holder shall retain copies of test reports, on-site, for a period no less than 2 years.

Allowable Concentrations of Substances in Used Oil:

Parameter	Maximum	Minimum
PCB's	2 mg/kg	-
Total Organic Halogen (as chlorine)	1000 mg/kg	-
Arsenic	5 mg/kg	-
Cadmium	2 mg/kg	-
Chromium	10 mg/kg	-
Lead	100 mg/kg	-
Zinc	1500 mg/kg	-
Flash Point		61 °C
Sulphur	1 %	-