Environmental Protection Act  
Loi sur la protection de l’environnement

[ONTARIO REGULATION 79/15](https://www.ontario.ca/laws/regulation/R15079)

ALTERNATIVE LOW-CARBON FUELS

**Consolidation Period:** From November 30, 2016 to the [e-Laws currency date](http://www.e-laws.gov.on.ca/navigation?file=currencyDates&lang=en).

Last amendment: [392/16](https://www.ontario.ca/laws/regulation/R16392).

Legislative History: [392/16](https://www.ontario.ca/laws/regulation/R16392).

This Regulation is made in English only.

CONTENTS

|  |  |
| --- | --- |
| [1.](#BK0" \o "Section 1.) | Interpretation |
| [2.](#BK1" \o "Section 2.) | Designation |
| [3.](#BK2" \o "Section 3.) | Exemption from s. 27 of Act |
| [4.](#BK3" \o "Section 4.) | Approval, conditions |
| [5.](#BK4" \o "Section 5.) | Demonstration project |
| [6.](#BK5" \o "Section 6.) | Non-demonstration project, notice requirements |
| [7.](#BK6" \o "Section 7.) | Non-demonstration project, consultation |
| [8.](#BK7" \o "Section 8.) | Non-demonstration project, consultation report |
| [9.](#BK8" \o "Section 9.) | Sampling and analysis, coal or coke |
| [10.](#BK9" \o "Section 10.) | Sampling and analysis, alternative low-carbon fuel |
| [11.](#BK10" \o "Section 11.) | Carbon dioxide emission intensity report |
| [12.](#BK11" \o "Section 12.) | Storage, handling and maintenance standards |
| [13.](#BK12" \o "Section 13.) | Identification of deficiencies |
| [14.](#BK13" \o "Section 14.) | Record of fuel |
| [15.](#BK14" \o "Section 15.) | Quarterly reporting |
| [Schedule 1](#BK16" \o "Section Schedule 1) |  |

Interpretation

**1.**(1)  In this Regulation,

“ALCF application” means an application for approval under Part II.1 of the Act that is made in respect of the combustion of alternative low-carbon fuel at an alternative low-carbon fuel site and that includes a written request for this Regulation to apply;

“alternative low-carbon fuel” means a fuel that has a carbon dioxide emission intensity that is less than the carbon dioxide emission intensity of the coal or coke in the place of which the fuel is combusted and that meets one of the following two descriptions:

1. The fuel,

i. is not derived from or composed of any material set out in Schedule 1,

ii. is wholly derived from or composed of materials that are biomass or municipal waste or a combination of both, and

iii. unless the fuel is wholly derived from or composed of materials that are solid biomass, has a high heat value of at least 10,000 megajoules per tonne.

2. The fuel is wholly derived from or composed of organic matter, not including peat or peat derivatives, derived from a plant or micro-organism and grown or harvested for the purpose of being used as a fuel;

“alternative low-carbon fuel facility” means a facility,

(a) that is designed to combust coal or coke for the primary purpose of manufacturing clinker, lime, iron, steel or metallurgical coke, and

(b) at which alternative low-carbon fuel is combusted in the place of coal or coke;

“alternative low-carbon fuel site” means a site at which an alternative low-carbon fuel facility is located;

“biological carbon content” means, in respect of a fuel, the carbon content of the portion of the fuel, expressed in kilograms of carbon per tonne of fuel, that is composed of or derived from one or more of,

(a) biomass,

(b) organic matter that is not biomass but that is,

(i) available on a renewable basis,

(ii) derived from a plant, animal or micro-organism, and

(iii) municipal waste, or

(c) organic matter, not including peat or peat derivatives, that is derived from a plant or micro-organism and is grown or harvested for the purpose of being used as fuel;

“biomass” means organic matter, other than source separated organics, that is derived from a plant or animal, is available on a renewable basis and meets one of the following descriptions:

1. It is waste from harvesting or processing agricultural products or waste from processing forestry products, including spent pulping liquor.

2. It is pulp and paper biosolids within the meaning of Ontario Regulation 267/03 (General) made under the Nutrient Management Act, 2002.

3. It is sewage biosolids within the meaning of Ontario Regulation 267/03.

4. It is hauled sewage.

5. It is waste from the operation of a sewage works subject to the Ontario Water Resources Act.

6. It is woodwaste.

7. It is agricultural waste;

“blue box waste” has the same meaning as in Ontario Regulation 101/94(Recycling and Composting of Municipal Waste) made under the Act;

“board area” means, when used in relation to a Local Services Board, the geographical area within which the Local Services Board may exercise its jurisdiction;

“business day” means a day that is not a Saturday or a holiday within the meaning of section 87 of the Legislation Act, 2006;

“carbon dioxide emission intensity” means, in respect of a fuel, the carbon dioxide emissions attributable to the fuel, determined in accordance with this Regulation, expressed in kilograms of carbon dioxide emissions per megajoule;

“clinker” means the product of a Portland cement kiln from which finished cement is manufactured by milling and grinding;

“coke” means metallurgical coke produced by a coke oven or petroleum coke;

“combustion” includes thermal distillation in a coke oven;

“demonstration project” means a project that,

(a) involves the combustion of alternative low-carbon fuel for the purpose of manufacturing clinker, lime, iron, steel or metallurgical coke at an alternative low-carbon fuel site, and

(b) is carried out for the primary purpose of assisting in the design or assessing the merits of or substantiating and showing the merits of a technology for the combustion described in clause (a);

“Director” means,

(a) the Director appointed under section 5 of the Act in respect of the section of this Regulation in which the reference appears, or

(b) if no Director described in clause (a) has been appointed, any Director appointed under section 5 of the Act in respect of Part II.1 of the Act;

*“*high heat value” means, in respect of a fuel, the amount of heat energy released by the combustion of the fuel, including the latent heat of vaporization of water embedded in the fuel, expressed in megajoules per tonne;

“iron” means liquid iron produced by a blast furnace;

“leaf and yard waste” has the same meaning as in Ontario Regulation 101/94(Recycling and Composting of Municipal Waste) made under the Act;

“licensed engineering practitioner” means a person who holds a licence, limited licence or temporary licence under the Professional Engineers Act;

“Local Services Board” has the same meaning as in the Northern Services Boards Act*;*

*“metallurgical coke” means coke produced, in whole or in part, from coal in a coke oven;*

“municipal hazardous or special waste” has the same meaning as in Ontario Regulation 387/16 (Municipal Hazardous or Special Waste) made under the Waste Diversion Transition Act, 2016;

“NAICS” means the North American Industry Classification System maintained for Canada by Statistics Canada, as amended or revised from time to time;

“non-biological carbon content” means, in respect of a fuel, the carbon content, expressed in kilograms of carbon per tonne of fuel, of the portion of the fuel that is not composed of or derived from any material mentioned in the definition of “biological carbon content”;

“planning board” means a planning board established under section 9 or 10 of the Planning Act;

“prescribed chemical analysis method” means a chemical analysis method set out in,

(a) the guideline entitled “Guideline for Greenhouse Gas Emissions Reporting”, published by the Ministry and available from the Ministry, or

(b) a publication published by,

(i) ASTM International,

(ii) American National Standards Institute,

(iii) American Petroleum Institute,

(iv) Canadian General Standards Board,

(v) CSA Group,

(vi) Gas Processors Association,

(vii) International Organization for Standardization, or

(viii) Measurement Canada;

“proponent”means a person proposing to engage in the combustion of alternative low-carbon fuel at an alternative low-carbon fuel site;

*“source separated organics” means organic waste that has been separated at the source from other waste under a program operated by or for a municipality;*

“spill” has the same meaning as in section 91 of the Act;

“steel” means molten steel produced by an electric arc furnace or basic oxygen furnace but does not include molten steel produced by an electric arc furnace at a foundry that primarily engages in pouring molten steel into moulds to manufacture finished steel casting products;

“total carbon content” means, in respect of a fuel, the biological carbon content and the non-biological carbon content of the fuel, expressed in kilograms of carbon per tonne;

“used tires” has the same meaning as in Ontario Regulation 390/16 (Used Tires) made under the Waste Diversion Transition Act, 2016;

*“waste” has the same meaning as in Part V of the Act;*

“waste electrical and electronic equipment” has the same meaning as in Ontario Regulation 389/16 (Waste Electrical and Electronic Equipment) made under the Waste Diversion Transition Act, 2016. O. Reg. 392/16, s. 1.

(2)  In this Regulation, the following words and expressions have the same meanings as in Regulation 347 of the Revised Regulations of Ontario, 1990 (General — Waste Management) made under the Act:

1. Agricultural waste.

2. Anaerobic digestion output.

3. Asbestos waste.

4. Composting.

5. Hauled sewage.

6. Hazardous waste.

7. Ignitable waste.

8. Industrial waste.

9. Liquid waste.

10. Municipal waste.

11. Site.

12. Woodwaste.

(3)  For the purposes of this Regulation, two properties are adjacent to each other if the boundary of one property touches or, were it not for an intervening highway, road allowance, railway line, railway allowance or utility corridor, would touch the boundary of the other property.

(4)  For the purposes of this Regulation, if only organic matter described in paragraph 2 of the definition of “alternative low-carbon fuel” in subsection (1) is mixed with biomass, the resulting mixture is deemed to be wholly derived from or composed of materials that are biomass.

(5)  In this Regulation, any reference to an alternative low-carbon fuel site or an alternative low-carbon fuel facility includes a proposed site or facility.

Designation

**2.**Alternative low-carbon fuel that meets the description set out in paragraph 1 of the definition of “alternative low-carbon fuel” in subsection 1 (1) is designated as a waste.

Exemption from s. 27 of Act

**3.**(1)  Section 27 of the Act does not apply to the use, operation, establishment, alteration, enlargement or extension of an alternative low-carbon fuel site if the following conditions are satisfied:

1. An ALCF application was made and an environmental compliance approval is in effect, including a statement by the Director that this section applies in respect of the site.

2. The use, operation, establishment, alteration, enlargement or extension is carried out in relation to one or more of the following activities at the site respecting fuel described in paragraph 1 of the definition of “alternative low-carbon fuel” in subsection 1 (1):

i. Collection of the fuel.

ii. Storage of the fuel, if the following conditions are met:

A. None of the fuel is stored for more than 18 months.

B. The maximum amount of the fuel stored is the amount that is reasonably capable of being combusted at the site during a period of six months.

C. The fuel stored is to be combusted at the site.

iii. Drying of the fuel using the heat generated from the process of manufacturing clinker, lime, iron, steel or metallurgical coke.

iv. Removal of incidental amounts of non-combustible materials from the fuel.

v. Size reduction of the fuel.

vi. Blending of the fuel with coal, coke or any other fuel.

vii. Combustion of the fuel.

(2)  If, under subsection (1), section 27 of the Act does not apply to the use, operation, establishment, alteration, enlargement or extension of an alternative low-carbon fuel site in relation to an activity set out in paragraph 2 of subsection (1), sections 40 and 41 of the Act do not apply in respect of the alternative low-carbon fuel in respect of which the activity is engaged.

Approval, conditions

**4.**The Director shall not issue an environmental compliance approval in respect of an ALCF application unless the following conditions are satisfied:

1. The application includes a carbon dioxide emission intensity report in respect of the alternative low-carbon fuel proposed to be combusted at the site, prepared in accordance with section 11, that includes a statement that the carbon dioxide emission intensity of the alternative low-carbon fuel is less than the carbon dioxide emission intensity of the coal or coke in the place of which the alternative low-carbon fuel is proposed to be combusted.

2*. If the application is in respect of a demonstration project,*

*i. the application includes* written notice to the Director that specifically mentions that the application is in respect of a demonstration project*, and*

*ii. the* Director is satisfied that the following criteria will be met:

A. 100 tonnes or less of alternative low-carbon fuel described in paragraph 1 of the definition of “alternative low-carbon fuel” in subsection 1 (1), other than fuel that is wholly derived from or composed of one or both of woodwaste or agricultural waste, will be combusted on any day for the purposes of the demonstration project.

B. The demonstration project will not be engaged in,

1. at any time after three years from the day that alternative low-carbon fuel is first combusted for the purposes of the demonstration project,

2. for more than a total of 90 days in any 12-month period, and

3. for more than 30 consecutive days.

3. If the application is not in respect of a demonstration project, the application includes a statement by the proponent confirming that the proponent has complied with the notice and consultation requirements in this Regulation and that a copy of the consultation report prepared in accordance with section 8 is available on the proponent’s website and will be provided to a person who requests it.

Demonstration project

**5.**(1)  The Director shall not issue an environmental compliance approval in respect of an ALCF application in respect of a demonstration project unless the approval contains terms or conditions,

(a) prohibiting the combustion of more than a specified amount, which amount shall not exceed 100 tonnes, of fuel described in paragraph 1 of the definition of “alternative low-carbon fuel” in subsection 1 (1), other than fuel that is wholly derived from or composed of one or both of woodwaste or agricultural waste, on any day for the purposes of the demonstration project;

(b) prohibiting the engagement in the demonstration project,

(i) at any time after a specified period, which period shall end not later than three years from the day that alternative low-carbon fuel is first combusted for the purposes of the demonstration project,

(ii) for more than a total of 90 days in any 12-month period, and

(iii) for more than 30 consecutive days; and

(c) requiring the holder of the environmental compliance approval to promptly provide notice in writing to the Director and the district manager of the Ministry for the district in which the alternative low-carbon fuel site is located of,

(i) the date on which alternative low-carbon fuel is first received for the purposes of the demonstration project at the site where the project is being engaged in, and

(ii) the date on which alternative low-carbon fuel is first combusted at the site for the purposes of the demonstration project.

(2)  Despite clause (1) (a), if the only alternative low-carbon fuel proposed to be combusted as part of a demonstration project is fuel described in paragraph 2 of the definition of “alternative low-carbon fuel” in subsection 1 (1), the environmental compliance approval is not required to include a prohibition described in clause (1) (a).

(3)  The Director may alter a term or condition referred to in clause (1) (a) or subclause (1) (b) (i) if the alteration does not authorize,

(a) the combustion of more than 100 tonnes of alternative low-carbon fuel described in paragraph 1 of the definition of “alternative low-carbon fuel” in subsection 1 (1), other than fuel that is wholly derived from or composed of one or both of woodwaste or agricultural waste, on any day for the purposes of the demonstration project; or

(b) engaging in the demonstration project at any time after three years from the day that alternative low-carbon fuel is first combusted for the purposes of the demonstration project.

(4)  For the purposes of this section, if there is more than one demonstration project at the same alternative low-carbon fuel site at which a fuel described in paragraph 1 of the definition of “alternative low-carbon fuel” in subsection 1 (1) is combusted, all of the demonstration projects are deemed to be a single demonstration project.

(5)  If an environmental compliance approval for the use, operation, establishment, alteration, extension or enlargement of a municipal waste pilot project within the meaning of subsection 5.0.1 (1) of Regulation 347 of the Revised Regulations of Ontario, 1990 (General — Waste Management) made under the Act is in effect in respect of the alternative low-carbon fuel site, the Director shall include a term or condition to prohibit the sum of the following from exceeding 100 tonnes on any day:

1. The total amount of alternative low-carbon fuel described in paragraph 1 of the definition of “alternative low-carbon fuel” in subsection 1 (1), other than fuel that is wholly derived from or composed of one or both of woodwaste or agricultural waste, combusted for the purpose of a demonstration project at the site.

2. The total amount of municipal waste processed or disposed of for the purpose of the municipal waste pilot project at the site.

Non-demonstration project, notice requirements

**6.**(1)  Before submitting an ALCF application that is not in respect of a demonstration project, the proponent shall,

(a) prepare and distribute a notice of intention to apply in accordance with this section;

(b) prepare and distribute a notice of consultation in respect of each public meeting required to be held under section 7 in respect of the application, in accordance with this section; and

(c) prepare and distribute a notice of completion of the consultation report in accordance with this section.

(2)  Before distributing a notice of intention to apply, the proponent shall contact the Director to request assistance in identifying aboriginal communities that have or may have constitutionally protected aboriginal or treaty rights that may be adversely impacted by the proposed combustion of alternative low-carbon fuel at the site or otherwise may be interested in any negative environmental effects of the proposed combustion of alternative low-carbon fuel at the site.

(3)  When contacted by a proponent under subsection (2), the Director shall,

(a) give the proponent a list of bodies that, in the opinion of the Director, may assist in identifying aboriginal communities described in subsection (2); or

(b) identify the aboriginal communities that, in the opinion of the Director, are aboriginal communities described in subsection (2).

(4)  If the Director provides a list of bodies under clause (3) (a) to a proponent, the proponent shall contact each of the bodies and request identification of the aboriginal communities described in subsection (2).

(5)  A notice of consultation prepared and distributed before the first public meeting in respect of the alternative low-carbon fuel site may be combined with the notice of intention to apply in respect of the site.

(6)  A notice described in Column 1 of the Table to this section shall be given to the persons set out opposite the notice in Column 2 of the Table and shall contain the information set out opposite the notice in Column 3 of the Table.

(7)  In addition to the requirements set out in subsection (6), each notice mentioned in this section shall be distributed in accordance with the following rules:

1. The notice shall be posted on the proponent’s website.

2. If the site is located in a municipality, the notice shall be published,

i. on at least two separate days in a newspaper with general circulation in the local municipality and upper-tier municipality in which the site is located, or

ii. if no newspaper described in subparagraph i exists, in some other way that, in the proponent’s opinion, will promptly bring the notice to the attention of the public in the local municipality and upper-tier municipality in which the site is located.

3. If the site is located in unorganized territory, the notice shall be published,

i. on at least two separate days in a newspaper with general circulation within 25 kilometres of the site, or

ii. if no newspaper mentioned in subparagraph i exists, in some other way that, in the proponent’s opinion, will promptly bring the notice to the attention of the public within 25 kilometres of the site.

4. If it is reasonable to do so, the notice shall be published on at least two days in a newspaper printed by each aboriginal community identified by the Director under clause (3) (b) or by the bodies to whom requests were made under subsection (4), if such a newspaper exists and the publisher of the newspaper permits the publication.

(8)  In complying with subsections (6) and (7) in respect of a notice of consultation, the notice shall be given, posted and published at least 10 business days before a public meeting is held.

TablE  
Notice requirements

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Column 1  Notice | Column 2  Persons to whom notice must be given | Column 3  Information to be included in notice |
| 1. | Notice of intention to apply | 1. Every owner or occupant of a property adjacent to the site.  2. The clerk of the local municipality and upper-tier municipality in which the site is located.  3. The secretary of each Local Services Board of a board area in which the site is located.  4. The secretary-treasurer of a planning board that has jurisdiction in an area in which the site is located.  5. Every aboriginal community that is identified by the Director under clause (3) (b) or by bodies to whom requests were made under subsection (4).  6. The district manager of the Ministry for the district in which the site is located | 1. The name and address of the proponent.  2. The name and phone number, and email address if any, of a person who may be contacted on behalf of the proponent.  3. A statement that the notice is prepared in accordance with this section in contemplation of an ALCF application.  4. A description of the fuel proposed to be combusted as alternative low-carbon fuel at the site, including a description of the material it is derived from or composed of.  5. The address of the site and a map showing its location.  6. A description of the activities mentioned in subsection 9 (1) of the Act or subsection 53 (1) of the Ontario Water Resources Act relating to the proposed combustion of the alternative low-carbon fuel for which an approval under Part II.1 of the Act is required.  7. The proponent’s website on which notices under this Regulation will be made available. |
| 2. | Notice of consultation | 1. The persons listed in Column 2 of Item 1.  2. Any person who has requested notice of any public meetings in respect of the site. | 1. Information about the location and time of the public meeting to be held for the purpose of conducting consultations in respect of the proposed combustion of alternative low-carbon fuel.  2. If the notice is not combined with the notice of intention to apply, the information set out in Column 3 of Item 1. |
| 3. | Notice of completion of the consultation report | The persons mentioned in Column 2 of Item 2. | 1. The information set out in paragraphs 1, 2, 3 and 5 of Column 3 of Item 1.  2. The proponent’s website on which the written consultation report has been made available. |

Non-demonstration project, consultation

**7.**(1)  Before submitting an ALCF application that is not in respect of a demonstration project, the proponent shall hold at least two public meetings in accordance with this section,

(a) if the alternative low-carbon fuel site is located in a municipality, in the municipality in which the alternative low-carbon fuel site is located; and

(b) if the alternative low-carbon fuel site is located in unorganized territory,

(i) within 25 kilometres of the site, or

(ii) in the local municipality that is closest to the site, if there is no appropriate place to hold a public meeting within 25 kilometres of the site.

(2)  The second public meeting held in accordance with subsection (1) shall not be held less than 10 business days following the first public meeting.

(3)  The proponent shall provide the following information at the public meetings:

1. An explanation of what the fuel proposed to be combusted consists of or what it is derived from, including an explanation of how the fuel meets the criteria set out in either paragraph 1 or 2 of the definition of “alternative low-carbon fuel” in subsection 1 (1).

2. An explanation of how the carbon dioxide emission intensity of the fuel proposed to be combusted is consistent with the definition of “alternative low-carbon fuel” in subsection 1 (1).

3. The information described in paragraph 6 of Column 3 of Item 1 of the Table to section 6.

4. An estimate of the amount of coal or coke, in the place of which alternative low-carbon fuel would be combusted at the site, expressed as a percentage of coal or coke usage by weight and by energy content.

5. Information about the potential effects that the activities described in paragraph 6 of Column 3 of Item 1 of the Table to section 6 may have on the environment and any measures proposed by the proponent for controlling or minimizing those effects.

6. A description of the means by which the proponent proposes to monitor any potential effects mentioned in paragraph 5 and determine the effectiveness of measures for controlling or minimizing those effects.

7. At the second public meeting, a summary of comments made at the first public meeting and by any person who requested notice of any public meetings in respect of the site and a description of how the proponent has considered those comments.

Non-demonstration project, consultation report

**8.**(1)  Before submitting an ALCF application that is not in respect of a demonstration project, the proponent shall prepare and make available to the public on the proponent’s website a copy of a written consultation report containing the information set out in subsection (2) and shall provide a copy of it to a person who requests it.

(2)  The consultation report shall contain the following information:

1. A description of the consultations carried out.

2. Summaries of the information provided at the public meetings by the proponent, copies of all written comments submitted and records of oral comments made, either at public meetings or by other means.

3. A summary of discussions that the proponent had with aboriginal communities, copies of all written comments submitted and records of oral comments made by aboriginal communities, either at public meetings or by other means.

4. A description of what the proponent did to respond to concerns expressed in the course of the consultations.

5. Copies of notices, reports and other materials prepared for and used in the public meetings.

Sampling and analysis, coal or coke

**9.**(1)  The carbon dioxide emission intensity of coal or coke, rounded to three significant digits, shall be determined according to the following formula:

Carbon dioxide emission intensity = CCtotal × 3.67/HHV

where,

CCtotal = the total carbon content of the coal or coke,

HHV = the high heat value of the coal or coke.

(2)  For the purposes of subsection (1) and subject to subsection (4), the total carbon content and high heat value of coal or coke combusted at an alternative low-carbon fuel site shall be determined using the weighted average by mass of the total carbon content of samples, taken and analyzed in accordance with a prescribed chemical analysis method, of the coal or coke in the place of which alternative low-carbon fuel is proposed to be combusted.

(3)  The samples mentioned in subsection (2) shall,

(a) only include samples taken and analyzed during the most recent six-month period during which the facility was operating before the determination is made;

(b) include at least one sample taken and analyzed during each month of the six-month period mentioned in clause (a);

(c) not include any samples taken more than 36 months before the determination is made; and

(d) be representative of the coal or coke in the place of which alternative low-carbon fuel is proposed to be combusted.

(4)  For the purposes of subsection (1), if the manufacture of clinker, lime, iron, steel or metallurgical coke did not commence at an alternative low-carbon fuel facility on a day before the day on which the carbon dioxide emission intensity of the coal or coke is determined,

(a) the total carbon content and high heat value of coal or coke may be determined by analyzing at least one sample that is representative of the coal or coke, in the place of which alternative low-carbon fuel is proposed to be combusted; or

(b) the carbon dioxide emission intensity of the coal or coke is,

(i) if there is only one type of coal or coke described in Column 1 of the Table to this section in the place of which alternative low-carbon fuel is proposed to be combusted, the number set out opposite the type in Column 2 of the Table, or

(ii) if there is more than one type of coal or coke described in Column 1 of the Table to this section in the place of which alternative low-carbon fuel is proposed to be combusted, the weighted average by energy input of all of the relevant carbon dioxide emission intensities set out in Column 2 of the Table.

TABLE

|  |  |  |
| --- | --- | --- |
| Item | Column 1  Type of coal or coke | Column 2  Carbon dioxide emission intensity |
| 1. | Canadian bituminous coal | 0.0855 |
| 2. | United States bituminous coal | 0.0815 |
| 3. | Sub-bituminous coal | 0.0903 |
| 4. | Anthracite coal | 0.0863 |
| 5. | Petroleum coke | 0.0826 |

Sampling and analysis, alternative low-carbon fuel

**10.**(1)  The carbon dioxide emission intensity of a fuel proposed to be combusted as an alternative low-carbon fuel, rounded to three significant digits, shall be determined according to the following formula:

Carbon dioxide emission intensity = CCnon-bio × 3.67/HHV

where,

CCnon-bio = the non-biological carbon content of the fuel,

HHV = the high heat value of the fuel.

(2)  The total carbon content and high heat value of a fuel proposed to be combusted as an alternative low-carbon fuel shall be determined using samples of the fuel taken and analyzed in accordance with the following rules:

1. Only samples taken within 36 months before the determination is made shall be used.

2. One of the following methods shall be applied:

i. Analysis in accordance with a prescribed chemical analysis method of at least one sample of the fuel.

ii. Analysis in accordance with a prescribed chemical analysis method of at least one sample of each of the individual materials that the fuel is composed of or derived from, using a weighted average of the carbon content and high heat value of the individual materials.

3. The number of samples analyzed must provide results that are sufficiently representative of the fuel or individual materials and must allow for adequate characterization of the fuel or individual materials.

(3)  If the amount of biological carbon content of a fuel is unknown, it shall be determined in accordance with the test methods set out in ASTM D-6866-12, “Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis”, published by ASTM International, as amended from time to time.

Carbon dioxide emission intensity report

**11.**(1)  For the purposes of paragraph 1 of section 4, the proponent shall ensure that a written carbon dioxide emission intensity report is prepared by a licensed engineering practitioner, consisting of the following:

1. The name and address of the proponent.

2. The address of the alternative low-carbon fuel site and a map showing its location.

3. The primary NAICS code of the alternative low-carbon fuel facility and, if applicable, any secondary NAICS codesof the facility.

4. A description of the products, production processes and the types and quantity of the coal or coke and alternative low-carbon fuel proposed to be combusted at the site, including a description of the material the fuel is derived from or composed of.

5. The carbon dioxide emission intensity of the coal or coke in the place of which alternative low-carbon fuel is proposed to be combusted and of the alternative low-carbon fuel.

6. The calculation methods, analytical methods, sampling dates and analysis results used to determine the carbon dioxide emission intensity of the coal or coke and of the alternative low-carbon fuel.

7. A statement by the licensed engineering practitioner who prepared the report, providing that,

i. the carbon dioxide emission intensities of the coal or coke and of the alternative low-carbon fuel have been determined in accordance with this Regulation, and

ii. the carbon dioxide emission intensity of the alternative low-carbon fuel proposed to be combusted is less than the carbon dioxide emission intensity of the coal or coke in the place of which the alternative low-carbon fuel is proposed to be combusted.

8. A statement signed and dated by the proponent or a person who is authorized by the proponent to make the statement, certifying that the information given to the licensed engineering practitioner to prepare the report is complete and accurate.

(2)  A statement made under paragraph 7 or 8 of subsection (1) shall not be made on a day that is more than three years before the day on which the ALCF application is submitted to the Director.

Storage, handling and maintenance standards

**12.**The holder of an environmental compliance approval issued as a result of an ALCF application shall ensure that the following rules are complied with in respect of alternative low-carbon fuel described in paragraph 1 of the definition of “alternative low-carbon fuel” in subsection 1 (1) at the alternative low-carbon fuel site that is the subject of the approval:

1. The fuel shall be stored,

i. indoors, or

ii. outdoors in a manner that prevents the discharge into the natural environment of both the fuel and any contaminant relating to the fuel.

2. The fuel shall be stored, handled and maintained so as to prevent,

i. leaks or spills of the fuel and contaminants relating to the fuel, and

ii. damage to or deterioration of any container in which the fuel is stored.

3. The fuel shall be stored in a safe and secure manner that minimizes the impact of dust, odour, noise, vectors, vermin and litter on the general public and on the natural environment.

4. Access by the general public to fuel handling facilities, fuel storage facilities and fuel storage areas at the site shall be controlled by gates, fencing, attendants or other security measures.

Identification of deficiencies

**13.**(1)  The holder of an environmental compliance approval issued as a result of an ALCF application shall ensure that the following rules are complied with in respect of alternative low-carbon fuel described in paragraph 1 of the definition of “alternative low-carbon fuel” in subsection 1 (1) at the alternative low-carbon fuel site that is the subject of the approval:

1. On each day that the site is in operation, a visual inspection shall be conducted of the fuel handling facilities, fuel storage facilities and fuel storage areas to determine whether the fuel is stored, handled and maintained in accordance with section 12.

2. Any deficiencies in the fuel handling facilities, fuel storage facilities or fuel storage areas identified during a visual inspection mentioned in paragraph 1 or at any other time shall be remedied forthwith.

3. Immediately after the completion of each visual inspection mentioned in paragraph 1, an inspection record shall be prepared setting out,

i. the name and position of the person who performed the inspection,

ii. the date of the inspection,

iii. the amount, type and location of fuel stored at the site at the time of the inspection, and

iv. a description of any deficiencies identified and recommendations regarding steps that should be taken to remedy the deficiencies.

4. If a deficiency is identified at a time other than during a visual inspection mentioned in paragraph 1, a record shall be prepared immediately setting out the name and position of the person who identified the deficiency, the date on which it was identified, a description of the deficiency and recommendations regarding steps that should be taken to remedy the deficiency.

5. After a deficiency mentioned in paragraph 2 has been remedied, a record shall be prepared setting out the day on which the deficiency was remedied and a description of the remedial actions taken.

(2)  The holder of an environmental compliance approval mentioned in subsection (1) shall retain,

(a) a record mentioned in paragraph 3 or 4 of subsection (1) for two years following the day on which the inspection was conducted or the deficiency was identified, as the case may be; and

(b) a record mentioned in paragraph 5 of subsection (1) for two years following the day on which the deficiency referred to in the record was remedied.

Record of fuel

**14.**(1)  The holder of an environmental compliance approval issued as a result of an ALCF application in respect of an alternative low-carbon fuel site at which alternative low-carbon fuel described in paragraph 1 of the definition of “alternative low-carbon fuel” in subsection 1 (1) is combusted shall ensure that a record is prepared each time the fuel is received at the site, setting out the following information:

1. The type and amount of the fuel.

2. The name and address of the person who had possession of the fuel before it was transported to the site.

3. If the vehicle used for transporting the fuel to the site is marked with a number appearing on an environmental compliance approval authorizing the transportation or a registration number appearing on a confirmation of registration under Part II.2 of the Act in respect of the transportation, the number marked on the vehicle.

4. If the vehicle is not marked with a number mentioned in paragraph 3, the name of the person transporting the fuel.

(2)  The holder of an environmental compliance approval mentioned in subsection (1) shall ensure that a record is prepared each time alternative low-carbon fuel described in paragraph 1 of the definition of “alternative low-carbon fuel” in subsection 1 (1) is refused for receipt at the site, setting out the amount of fuel refused and the reason for the refusal.

(3)  The holder of an environmental compliance approval mentioned in subsection (1) shall retain the records mentioned in subsections (1) and (2) for two years following the day on which the fuel described in the record was received at the site.

Quarterly reporting

**15.**(1)  This section applies to the holder of an environmental compliance approval issued as a result of an ALCF application that is not in respect of a demonstration project who is required under section 48 of Ontario Regulation 194/05 (Industry Emissions — Nitrogen Oxides and Sulphur Dioxide) made under the Act to ensure that emissions of nitrogen oxides or sulphur dioxide are monitored at the alternative low-carbon fuel facility during a year.

(2)  The holder of an environmental compliance approval mentioned in subsection (1) shall ensure that a report is prepared for each quarter in a year mentioned in subsection (1), setting out the following information:

1. The name and address of the holder.

2. The address of the alternative low-carbon fuel site, if it is different than the address of the holder.

3. A description of the monitoring system or method used under section 48 of Ontario Regulation 194/05 and the location of the monitoring system, if any.

4. The total emissions from the facility of nitrogen oxides and sulphur dioxide for each month in the quarter, measured in tonnes.

5. The hourly concentrations at the facility of nitrogen oxides and sulphur dioxide in the quarter in parts per million.

6. The name and phone number, and email address if any, of a person who may be contacted on behalf of the holder.

(3)  The holder shall include in the report mentioned in subsection (2) the report prepared for the same quarter as required in section 6.6 in the document entitled “Protocols and Performance Specifications for Continuous Monitoring of Gaseous Emissions from Thermal Power Generation – Report EPS 1/PG/7”, published by Environment Canada, dated September 1993.

(4)  The holder shall make the report mentioned in subsection (2) available to the public on the holder’s website within 30 days after the day on which a quarter ends and shall ensure that the information and supporting documentation on which the report is based are retained for a period of five years after the day on which the report is made available to the public on the holder’s website.

16.  Omitted (provides for coming into force of provisions of this Regulation).

Schedule 1

1. Hazardous waste, except for liquid biomass that is ignitable waste only.

2. Any material described in clauses (p) to (u) of the definition of “hazardous waste” in subsection 1 (1) of Regulation 347 of the Revised Regulations of Ontario, 1990 (General — Waste Management) made under the Act.

3. Waste that is both liquid waste and industrial waste, except for waste that is liquid biomass that has a high heat value of at least 10,000 megajoules per tonne.

4. Residue from the incineration of waste.

5. Asbestos waste.

6. Biomedical waste as defined in the Ministry publication entitled “Guideline C-4: The Management of Biomedical Waste in Ontario” dated November 2009, as amended from time to time and available from the Ministry.

7. Sharps waste as defined in the Ministry publication entitled “Guideline C-4: The Management of Biomedical Waste in Ontario” dated November 2009, as amended from time to time and available from the Ministry.

8. Treated biomedical waste as defined in the Ministry publication entitled “Guideline C-4: The Management of Biomedical Waste in Ontario” dated November 2009, as amended from time to time and available from the Ministry.

9. Dead animals and waste resulting from the rendering of animals or animal by-products.

10. Pesticides and empty pesticide containers, as those terms are defined in section 61 of Regulation 347 of the Revised Regulations of Ontario, 1990.

11. A drug within the meaning of section 2 of the Food and Drugs Act (Canada).

12. Organic waste from food processing, distribution and preparation operations, such as food packing, food preserving, wine making, cheese making, restaurants and grocery stores, including organic waste from the treatment of wastewater from facilities where food or feed is processed or prepared.

13. Organic waste material from a greenhouse, nursery, garden centre or flower shop.

14. Source separated organics, except for residues generated by the processing of the waste.

15. Compost produced by composting.

16. Anaerobic digestion output.

17. Soil.

18. Non-combustible material, other than incidental amounts.

19. Used tires, shredded and chipped tires and crumb rubber recovered from used, chipped or shredded tires, except for tire fluff.

20. Source separated wastes that have been collected pursuant to a waste reduction work plan required under Ontario Regulation 102/94 (Waste Audits and Waste Reduction Work Plans) made under the Act.

21. Waste set out in the Schedule to Ontario Regulation 103/94 ‎(Industrial, Commercial and Institutional Source Separation Programs) made under the Act where the waste is generated by a person required to implement a source separation program for that waste by that regulation, except for woodwaste and residues generated by the processing of this waste for the purpose of reuse or recycling.

22. Blue box waste and waste set out in Schedule 2 to Ontario Regulation 101/94 (Recycling and Composting of Municipal Waste) made under the Act that is generated from residential sources of waste, except for the residues generated by the processing of the waste for the recovery of materials.

23. Leaf and yard waste collected or accepted by a leaf and yard waste system to which section 13 of Ontario Regulation 101/94 applies, except for residues generated by the composting of the waste at a leaf and yard waste composting site as defined in Part V of that regulation.

24. Municipal hazardous or special waste in respect of which a person or a class of persons has been designated as a steward under a rule continued under clause 9 (2) (b) of the Waste Diversion Transition Act, 2016 or made under clause 33 (1) (a) of that Act or under a regulation made under subsection 73 (3) of that Act, except for residues generated by the processing of the waste under a waste diversion program operated under that Act.

25. Waste electrical and electronic equipment in respect of which a person or a class of persons has been designated as a steward under a rule continued under clause 9 (2) (b) of the Waste Diversion Transition Act, 2016 or made under clause 33 (1) (a) of that Act or under a regulation made under subsection 73 (3) of that Act, except for residues generated by the processing of the waste for the purpose of reuse or recycling under a waste diversion program operated under that Act.

O. Reg. 392/16, s. 2.

[Back to top](#Top)