Caution:
This consultation draft is intended to facilitate dialogue concerning its contents. Should the decision be made to proceed with the proposal, the comments received during consultation will be considered during the final preparation of the regulation. The content, structure, form and wording of the consultation draft are subject to change as a result of the consultation process and as a result of review, editing and correction by the Office of Legislative Counsel.

A CONSULTATION DRAFT

ONTARIO REGULATION

to be made under the

ENVIRONMENTAL PROTECTION ACT

Amending O. Reg. 524/98

(ENVIRONMENTAL COMPLIANCE APPROVALS - EXEMPTIONS FROM SECTION 9 OF THE ACT)

1. (1) Section 0.1 of Ontario Regulation 524/98 is amended by adding the following definitions:

"combustor" means a device in which combustible material is oxidized, resulting in release of heat and products of combustion;

"cooling tower" means a structure or device used to transfer heat to the air through evaporative cooling, and includes an evaporative condenser;

"drift eliminator" means a baffle or other device in a cooling tower that is used to remove entrained water droplets from cooling tower exhaust;

"evaporative cooling" means cooling that results from evaporation that takes place when air and water are brought into direct contact with each other;

"exhaust stack", in respect of a standby power system, means the part of the system from which contaminants captured from the use of the system are discharged into the air;

"HVAC system" means, subject to subsection (2), any apparatus or mechanism, and any related fuel tanks, piping, ducts, vents, equipment or other thing, that is used,

(a) to produce heat or to supply that heat, or to provide cooling or ventilation, to the interior of a building or structure for the comfort of the occupants, for the maintenance of the building or structure, or for the provision of a suitable temperature for materials, plant or animal life, or

(b) to heat water for domestic purposes;

“private school” has the same meaning as in subsection 1 (1) of the *Education Act*;

“school” has the same meaning as in subsection 1 (1) of the *Education Act*;

“standby power system” means any apparatus, mechanism, equipment or other thing, and any related exhaust stacks, fuel tanks and piping, that includes one or more generation units and that is intended to be used only for the provision of electrical power during power outages or involuntary power reductions;

(2) Section 0.1 of the Regulation is amended by adding the following subsection:

(2) The definition of “HVAC system” in subsection (1) does not include a ground source heat pump as defined in Ontario Regulation 98/12 (Ground Source Heat Pumps).

2. (1) Paragraph 4 of subsection 1 (1) of the Regulation is revoked and the following substituted:

4. A masonry fireplace constructed on site and used to provide comfort heating in a building.

4.1 Wood fuel burning equipment used to provide comfort heating in a building if,

i. the equipment is rated for a maximum thermal output of 50 kilowatts or less, and

ii. the wood fuel used is manufactured fire logs or untreated wood, which may include wood briquettes, wood chips, wood pellets or firewood.

(2) Paragraph 6 of subsection 1 (1) of the Regulation is revoked and the following substituted:

6. Any equipment, apparatus, mechanism or thing, other than a cooling tower, that is used for the transfer of outdoor air into a building or structure.

(2) Subsection 1 (1) of the Regulation is amended by adding the following paragraphs:

24. Any equipment, apparatus, mechanism or thing that is used at a school or a private school.

25. An HVAC system that meets the following criteria:

i. If the HVAC system includes one or more combustion units,

A. each combustion unit uses only natural gas, propane or both natural gas and propane as fuel, and

B. the thermal input rating of each combustion unit is not greater than 10.5 million kilojoules per hour.

ii. If the HVAC system includes a cooling tower, drift loss from the cooling tower is controlled by drift eliminators.

26. A standby power system that meets the criteria set out in subsection (6.3).

(3) Subsection 1 (3) of the Regulation is amended by striking out "Paragraph 4" at the beginning and substituting "Paragraph 4.1".

(4) Section 1 of the Regulation is amended by adding the following subsections:

(6.1) Paragraph 24 does not apply to the following equipment, apparatus, mechanism or thing even if it is used in a school or private school:

1. Fuel burning equipment that is not fuel burning equipment described in paragraph 3 of subsection (1).

2. A masonry fireplace that is not a masonry fireplace described in paragraph 4 of subsection (1).

3. Wood fuel burning equipment that is not wood fuel burning equipment described in paragraph 4.1 of subsection (1).

4. An HVAC system that is not an HVAC system described in paragraph 25 of subsection (1).

5. Any equipment, apparatus, mechanism or thing that is used in the generation of electricity, if the equipment, apparatus, mechanism or thing is not a standby power system described in paragraph 26 of subsection (1).

6. Any equipment, apparatus, mechanism or thing that is used in the remediation of the natural environment at the school or private school.

(6.2) Paragraph 25 does not apply to the following:

1. An HVAC system that provides heat, cooling or ventilation to an industrial or manufacturing process.

2. An HVAC system that derives its heat, cooling or ventilation from an industrial or manufacturing process.

3. An HVAC system that is used in the generation of electricity.

(6.3) For the purposes of paragraph 26 of subsection 1 (1), the following criteria must be met:

1. The exhaust stacks that are part of the standby power system and that discharge contaminants, other than noise, from the system into the air are oriented vertically.

2. The standby power system uses only one or more of the following as fuel:

    i. Biodiesel.

    ii. Diesel.

    iii. Natural Gas.

    iv. Propane.

3. Each generation unit that is part of the standby power system and that uses diesel or biodiesel as fuel,

    i. has been specified by the manufacturer of the unit to, at a minimum, conform to the Tier 1 Emission Standards set out in Table 1 of 40 CFR 89.112 (United States), or

    ii. is equipped with pollution control equipment specified by the manufacturer of the equipment to limit the discharge of contaminants so that the unit, at a minimum, conforms to the Tier 1 Emission Standards set out in Table 1 of 40 CFR 89.112 (United States).

4. Each generation unit that is part of the standby power system and that uses propane or natural gas as fuel,

    i. has been designed by the manufacturer of the unit to discharge a maximum of 9.2 grams of nitrogen oxides per kilowatt hour, or

    ii. is equipped with pollution control equipment specified by the manufacturer of the equipment to limit the discharge of nitrogen oxides to a maximum of 9.2 grams per kilowatt hour.

3. The Regulation is amended by adding the following sections:

Condition, masonry fireplace

2. The owner or operator of a masonry fireplace mentioned in paragraph 4 of subsection 1 (1) must ensure that the only fuel used in the masonry fireplace, wood fuel burning equipment or wood fuel combustor is manufactured fire logs or untreated wood, which may include wood pellets, wood chips, wood briquettes and firewood.

Condition, HVAC system

3. The owner or operator of an HVAC system referred to in subparagraph 25 ii of subsection 1 (1) must ensure that each drift eliminator controlling the drift loss from the tower is installed, used, operated and maintained in a manner that satisfies the recommendations of the manufacturer of the drift eliminator.

Condition, standby power system

4. (1) The owner or operator of a standby power system referred to in paragraph 26 of subsection 1 (1) must ensure that the following conditions are met:

1. The system is used and operated only for the provision of electrical power during power outages or involuntary power reductions or for testing or performing maintenance on the system.

2. The system is used and operated for the purpose of testing or performing maintenance for a maximum of 60 hours in any 12-month period.

3. The system is used and operated for the purpose of testing or performing maintenance only between the hours of 7 a.m. and 11 p.m.

4. If the Ministry issues a smog advisory that identifies an area in which the system is located, the system is not used or operated for the purpose of testing or performing maintenance until a termination notice with respect to the advisory has been issued for that area.

5. The exhaust stacks that discharge contaminants, other than noise, are free of impediments that would prevent the flow of emissions.

6. Testing and maintenance of the system is conducted in a manner that satisfies the recommendations of the manufacturer of the system and generally accepted standards.

7. If the distance between the exhaust stack of a generation unit that is part of the standby power system and the property boundary of a noise receptor is less than 50 metres, and the unit is located outside a building or structure and has a sound pressure level, as specified by the manufacturer of the unit, that is greater than 75 decibels (A-weighted) at a distance of seven metres from the unit, measures shall be taken to provide sufficient sound attenuation to reduce the sound from the unit to a maximum sound pressure level of 75 decibels (A-weighted) at a distance of seven metres from the unit.

8. If the distance between the exhaust stack of a generation unit that is part of the standby power system and the property boundary of a noise receptor is less than 50 metres, and the unit is located inside a building or structure and has a sound pressure level, as specified by the manufacturer of the unit, that is greater than 75 decibels (A-weighted) at a distance of seven metres from the unit,

    i. sound attenuation measures shall be installed in the cooling air intake and exhaust openings in the room where the unit is housed, and the measures must be capable of providing sufficient sound attenuation to reduce the sound from the openings by not less than the insertion loss level set out in Column 2 of Table 1 to this section for the octave band centre frequency set out in Column 1 of that Table opposite the level,

ii. the unit's engine combustion exhaust muffler shall be capable of providing sufficient sound attenuation to reduce the sound from the exhaust stack by not less than the insertion loss level set out in Column 2 of Table 2 to this section for the octave band centre frequency set out in Column 1 of that Table opposite the level, and

iii. all external doors to the room housing the unit shall be set in a door jamb fitted with dual solid neoprene gaskets along the perimeter, shall be capable of providing a minimum sound transmission class rating of 35, measured in accordance with the standards referenced in Sentence 5.9.1.1. (1) of Ontario Regulation 350/06 (Building Code) made under the *Building Code Act, 1992*, and shall be composed of,

A. solid slab wood of a minimum thickness of 50 millimetres, or

B. steel skin with a glass fibre insulated core.

(2) For the purposes of paragraphs 7 and 8 of subsection (1),

(a) a noise receptor does not include any building or campground that is located on the property on which the standby power system is or will be situated; and

(b) the distance between an exhaust stack of a generation unit that is part of a standby power system and the property boundary of a noise receptor shall be measured from the point that is located at the centre of the stack at the point of discharge to the point that is located on the property boundary of the noise receptor and is closest to the point from which the measurement is made.

TABLE 1
SOUND REDUCTION FROM COOLING AIR INTAKE AND EXHAUST OPENINGS

Item	Column 1 Octave band centre frequency (Hertz)	Column 2 Insertion loss (decibels)
1.	125	10
2.	250	12
3.	500	14
4.	1000	15
5.	2000	15
6.	4000	15

TABLE 2
SOUND REDUCTION FROM ENGINE COMBUSTION EXHAUST STACKS

Item	Column 1 Octave band centre frequency (Hertz)	Column 2 Insertion loss (decibels)
1.	125	23
2.	250	29
3.	500	30
4.	1000	28
5.	2000	22
6.	4000	21

[Commencement]

4. [Commencement]