AMENDATORY SECTION (Amending WSR 23-01-102, filed 12/19/22, effective 1/19/23)

WAC 173-400-025 Adoption by reference. (1) Adoption by reference date: ((~~August 24, 2022~~)) February 12, 2025.

(2) Federal rules mentioned in this rule are adopted as they exist on the date in subsection (1) of this section. Adoption by reference means the federal rule applies as if it was copied into this rule.

AMENDATORY SECTION (Amending WSR 18-17-111, filed 8/16/18, effective 9/16/18)

WAC 173-400-040 General standards for maximum emissions. (1) **General requirements.**

(a) All sources and emissions units are required to meet the emission standards of this chapter. Where an emission standard listed in another chapter is applicable to a specific emissions unit, such standard takes precedence over a general emission standard listed in this chapter.

(b) When two or more emissions units are connected to a common stack and the operator elects not to provide the means or facilities to sample emissions from the individual emissions units, and the relative contributions of the individual emissions units to the common discharge are not readily distinguishable, then the emissions of the common stack must meet the most restrictive standard of any of the connected emissions units.

(c) All emissions units are required to use reasonably available control technology (RACT) which may be determined for some sources or source categories to be more stringent than the applicable emission limitations of any chapter of Title 173 WAC. Where current controls are determined to be less than RACT, the permitting authority shall, as provided in RCW ((~~70.94.154~~)) 70A.15.2230, define RACT for each source or source category and issue a rule or regulatory order requiring the installation of RACT.

(2) **Visible emissions.** No person shall cause or allow the emission for more than three minutes, in any one hour, of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds ((~~twenty~~)) 20 percent opacity as determined by ecology method 9A. The following are exceptions to this standard:

(a) Soot blowing or grate cleaning alternate visible emission standard.

(i) This provision is in effect until the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the SIP. The opacity emission standard in subsection (2) of this section shall apply except when the emissions occur due to soot blowing/grate cleaning and the operator can demonstrate that the emissions will not exceed ((~~twenty~~)) 20 percent opacity for more than ((~~fifteen~~)) 15 minutes in any eight consecutive hours. The intent of this provision is to allow the soot blowing and grate cleaning necessary to the operation of boiler facilities. This practice, except for testing and trou-

ble shooting, is to be scheduled for the same approximate times each day and the permitting authority must be advised of the schedule.

(ii) This provision takes effect on the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the SIP. For emissions that occur due to soot blowing or grate cleaning of a hog fuel or wood-fired boiler: Visible emissions (as determined by ecology method 9A) shall not exceed ((~~twenty~~)) 20 percent opacity; except that opacity shall not exceed ((~~forty~~)) 40 percent for up to a ((~~fifteen~~)) 15 minute period in any eight consecutive hours. For this provision to apply, the owner or operator must:

(A) Schedule the soot blowing and/or grate cleaning for the same approximate time(s) each day;

(B) Notify the permitting authority in writing of the schedule before using the ((~~forty~~)) 40 percent standard; and

(C) Maintain contemporaneous records sufficient to demonstrate compliance. Records must include the date, start time, and stop time of each episode, and the results of opacity readings conducted during this time.

(b) When the owner or operator of a source supplies valid data to show that the presence of uncombined water is the only reason for the opacity to exceed ((~~twenty~~)) 20 percent or an alternative opacity standard established in this section.

(c) When two or more emission units are connected to a common stack, the permitting authority may allow or require the use of an alternate time period if it is more representative of normal operations.

(d) When an alternative opacity limit has been established per RCW ((~~70.94.331~~)) 70A.15.3000 (2)(c), WAC 173-400-081(4) or 173-400-082.

(e) Alternative visible emission standard for a hog fuel or wood-fired boiler in operation before January 24, 2018. This provision takes effect on the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the SIP. For emissions that occur due to planned startup or shutdown of a hog fuel or wood-fired boiler with dry particulate matter controls, an owner or operator may use the alternative standard in this subsection when all of the following requirements are met.

Note: This subsection does not apply to a combustion unit with wet particulate matter controls.

(i) A planned startup or shutdown means that the owner or operator notifies the permitting authority:

(A) At least ((~~twenty-four~~)) 24 hours prior to the planned boiler startup or shutdown; or

(B) Within two hours after restarting the boiler for a startup within ((~~twenty-four~~)) 24 hours after the end of an unplanned shutdown (i.e., malfunction or upset).

Note: A shutdown due to a malfunction is part of the malfunction.

(ii) Startup begins when fuel is ignited in the boiler fire box.

(iii) Startup ends:

(A) When the boiler starts supplying useful thermal energy; or

(B) Four hours after the boiler starts supplying useful thermal energy if the facility follows the work practices in (e)(vi)(B) of this subsection.

(iv) Shutdown begins when the boiler no longer supplies useful thermal energy, or when no fuel is being fed to the boiler or process heater, whichever is earlier.

(v) Shutdown ends when the boiler or process heater no longer supplies useful thermal energy and no fuel is being combusted in the boiler.

(vi) The facility complies with one of the following requirements:

(A) Visible emissions during startup or shutdown shall not exceed ((~~forty~~)) 40 percent opacity for more than three minutes in any hour, as determined by ecology method 9A; or

(B) During startup or shutdown, the owner or operator shall:

(I) Operate all continuous monitoring systems;

(II) In the boiler, use only clean fuel identified in 5.b. in Table 3 in 40 C.F.R. Part 63, Subpart DDDDD;

(III) Engage all applicable control devices so as to comply with the ((~~twenty~~)) 20 percent opacity standard within four hours of the start of supplying useful thermal energy;

(IV) Engage and operate particulate matter control within one hour of first feeding fuels that are not clean fuels; and

(V) Develop and implement a written startup and shutdown plan. The plan must minimize the startup period according to the manufacturer's recommended procedure. In the absence of manufacturer's recommendation, the owner or operator shall use the recommended startup procedure for a unit of a similar design. The plan must be maintained onsite and available upon request for public inspection.

(vii) The facility maintains records sufficient to demonstrate compliance with (e)(i) through (v) of this subsection. The records must include the following:

(A) The date and time of notification of the permitting authority;

(B) The date and time when startup and shutdown began;

(C) The date and time when startup and shutdown ended;

(D) The compliance option in (e)(vi) of this subsection that was chosen (either (A) or (B)) and documentation of how the conditions of that option were met.

(f) Furnace refractory alternative visible emission standard. This provision takes effect on the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the SIP. For emissions that occur during curing of furnace refractory in a lime kiln or boiler, visible emissions (as determined by ecology method 9A) shall not exceed ((~~forty~~)) 40 percent opacity for more than three minutes in any hour, except when (b) of this subsection applies. For this provision to apply, the owner or operator must meet all of the following requirements:

(i) The total duration of refractory curing shall not exceed ((~~thirty-six~~)) 36 hours; and

(ii) Use only clean fuel identified in 5.b. in Table 3 in 40 C.F.R. Part 63, Subpart DDDDD; and

(iii) The owner or operator provides a copy of the manufacturer's instructions on curing refractory to the permitting authority; and

(iv) The manufacturer's instructions on curing refractory must be followed, including all instructions on temperature increase rates and holding temperatures and time; and

(v) The emission controls must be engaged as soon as possible during the curing process; and

(vi) The permitting authority must be notified at least one working day prior to the start of the refractory curing process.

(g) Visible emissions reader certification testing. Visible emissions from the "smoke generator" used during testing and certifying

visible emission readers are exempt from the ((~~twenty~~)) 20 percent opacity limit. Testing must follow testing and certification requirements in 40 C.F.R. Part 60, Appendix A, Test Method 9 (in effect on the date in WAC 173-400-025) and Source Test Methods 9A and 9B in *Source Test Manual - Procedures for Compliance Testing*, state of Washington, department of ecology, as of ((~~September 20, 2004~~)) February 12, 2025, on file at ecology.

(h) Military training exercises. Visible emissions during military obscurant training exercises are exempt from the ((~~twenty~~)) 20 percent opacity limit when the following requirements are met:

(i) No visible emissions shall cross the boundary of the military training site/reservation.

(ii) The operation shall have in place methods, which have been reviewed and approved by the permitting authority, to detect changes in weather that would cause the obscurant to cross the site boundary either during the course of the exercise or prior to the start of the exercise. The approved methods shall include provisions that result in cancellation of the training exercise, cease the use of obscurants during the exercise until weather conditions would allow such training to occur without causing obscurant to leave the site boundary of the military site/reservation.

(i) Firefighter training. Visible emissions from fixed and mobile firefighter training facilities occurring during the training of firefighters are exempt from the ((~~twenty~~)) 20 percent opacity limit. Compliance with chapter 173-425 WAC is required.

(3) **Fallout.** No person shall cause or allow the emission of particulate matter from any source to be deposited beyond the property under direct control of the owner or operator of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.

(4) **Fugitive emissions.** The owner or operator of any emissions unit engaging in materials handling, construction, demolition or other operation which is a source of fugitive emission:

(a) If located in an attainment area and not impacting any nonattainment area, shall take reasonable precautions to prevent the release of air contaminants from the operation.

(b) If the emissions unit has been identified as a significant contributor to the nonattainment status of a designated nonattainment area, the owner or operator shall be required to use reasonable and available control methods, which shall include any necessary changes in technology, process, or other control strategies to control emissions of the air contaminants for which nonattainment has been designated.

(5) **Odors.** Any person who shall cause or allow the generation of any odor from any source or activity which may unreasonably interfere with any other property owner's use and enjoyment of her or his property must use recognized good practice and procedures to reduce these odors to a reasonable minimum.

(6) **Emissions detrimental to persons or property.** No person shall cause or allow the emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.

(7) **Sulfur dioxide.** No person shall cause or allow the emission of a gas containing sulfur dioxide from any emissions unit in excess of ((~~one thousand~~)) 1,000 ppm of sulfur dioxide on a dry basis, corrected to seven percent oxygen for combustion sources, and based on the average of any period of ((~~sixty~~)) 60 consecutive minutes.

(8) **Concealment and masking.** No person shall cause or allow the installation or use of any means which conceals or masks an emission of an air contaminant which would otherwise violate any provisions of this chapter.

(9) **Fugitive dust.**

(a) The owner or operator of a source or activity that generates fugitive dust must take reasonable precautions to prevent that fugitive dust from becoming airborne and must maintain and operate the source to minimize emissions.

(b) The owner or operator of any existing source or activity that generates fugitive dust that has been identified as a significant contributor to a PM-10 or PM-2.5 nonattainment area is required to use reasonably available control technology to control emissions. Significance will be determined by the criteria found in WAC 173-400-113(4).

AMENDATORY SECTION (Amending WSR 23-01-102, filed 12/19/22, effective 1/19/23)

WAC 173-400-050 Emission standards for combustion and incineration units. (1) Combustion and incineration emissions units must meet all requirements of WAC 173-400-040 and, in addition, no person shall cause or allow emissions of particulate matter in excess of 0.23 gram per dry cubic meter at standard conditions (0.1 grain/dscf), except, for an emissions unit combusting waste wood for the production of steam. No person shall allow the emission of particulate matter in excess of 0.46 gram per dry cubic meter at standard conditions (0.2 grain/dscf), as measured by 40 C.F.R. Part 60, Appendix A, Test Method 5 (in effect on the date in WAC 173-400-025) ((~~or approved procedures in *Source Test Manual - Procedures for Compliance Testing*, state of Washington, department of ecology, as of September 20, 2004, on file at ecology.~~

~~(2) For any incinerator, no person shall cause or allow emissions in excess of one hundred ppm of total carbonyls as measured by Source Test Method 14 procedures in *Source Test Manual - Procedures for Compliance Testing*, state of Washington, department of ecology, as of September 20, 2004, on file at ecology. An applicable EPA reference method or other procedures to collect and analyze for the same compounds collected in the ecology method may be used if approved by the permitting authority prior to its use.~~

~~(a)~~)).

(2) **Incinerators** not subject to the requirements of chapter 173-434 WAC or WAC 173-400-050 (4) or (5), or requirements in WAC 173-400-075 (40 C.F.R. Part 63, Subpart EEE in effect on the date in WAC 173-400-025) and WAC 173-400-115 (40 C.F.R. Part 60, Subparts E, Ea, Eb, Ec, AAAA, and CCCC (in effect on the date in WAC 173-400-025)) shall be operated only during daylight hours unless written permission to operate at other times is received from the permitting authority.

((~~(b) Total carbonyls means the concentration of organic compounds containing the =C=O radical as collected by Source Test Method 14 procedures in *Source Test Manual - Procedures for Compliance Testing*, state of Washington, department of ecology, as of September 20, 2004, on file at ecology.~~))

(3) Measured concentrations for combustion and incineration units shall be adjusted for volumes corrected to seven percent oxygen, ex-

cept when the permitting authority determines that an alternate oxygen correction factor is more representative of normal operations such as the correction factor included in an applicable NSPS or NESHAP, actual operating characteristics, or the manufacturer's specifications for the emission unit.

(4) **Commercial and industrial solid waste incineration units** constructed on or before November 30, 1999. A commercial and industrial solid waste incineration unit that commenced construction on or before November 30, 1999, that meets the applicability requirements in 40 C.F.R. 62.14510, must comply with the requirements in 40 C.F.R. Part 62, Subpart GGG (in effect on the date in WAC 173-400-025).

((~~Note: Subsection (2) of this section (a state-only provision) does not apply to a unit subject to this subsection because this subsection is a federal requirement.~~))

(a) Definitions.

(i) "Commercial and industrial solid waste incineration (CISWI) unit" means any combustion device that combusts commercial and industrial waste, as defined in this subsection. The boundaries of a CISWI unit are defined as, but not limited to, the commercial or industrial solid waste fuel feed system, grate system, flue gas system, and bottom ash. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the commercial and industrial solid waste hopper (if applicable) and extends through two areas:

(A) The combustion unit flue gas system, which ends immediately after the last combustion chamber.

(B) The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system.

(ii) "Commercial and industrial solid waste" means solid waste combusted in an enclosed device using controlled flame combustion without energy recovery that is a distinct operating unit of any commercial or industrial facility (including field erected, modular, and custom built incineration units operating with starved or excess air), or solid waste combusted in an air curtain incinerator without energy recovery that is a distinct operating unit of any commercial or industrial facility.

(b) Applicability. This section applies to incineration units that meet all three criteria:

(i) The incineration unit meets the definition of CISWI unit in this subsection.

(ii) The incineration unit commenced construction on or before November 30, 1999.

(iii) The incineration unit is not exempt under (c) of this subsection.

(c) The following types of incineration units are exempt from this subsection:

(i) *Pathological waste incineration units.* Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste as defined in 40 C.F.R. 60.2265 (in effect on the date in WAC 173-400-025) are not subject to this section if you meet the two requirements specified in (c)(i)(A) and (B) of this subsection.

(A) Notify the permitting authority that the unit meets these criteria.

(B) Keep records on a calendar quarter basis of the weight of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit.

(ii) *Agricultural waste incineration units.* Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of agricultural wastes as defined in 40 C.F.R. 60.2265 (in effect on the date in WAC 173-400-025) are not subject to this section if you meet the two requirements specified in (c)(ii)(A) and (B) of this subsection.

(A) Notify the permitting authority that the unit meets these criteria.

(B) Keep records on a calendar quarter basis of the weight of agricultural waste burned, and the weight of all other fuels and wastes burned in the unit.

(iii) *Municipal waste combustion units.* Incineration units that meet either of the two criteria specified in (c)(iii)(A) and (B) of this subsection.

(A) Units are regulated under 40 C.F.R. Part 60, Subpart Ea or Subpart Eb (in effect on the date in WAC 173-400-025); Spokane County Air Pollution Control Authority Regulation 1, Section 6.17 (in effect on February 13, 1999); 40 C.F.R. Part 60, Subpart AAAA (in effect on the date in WAC 173-400-025); or WAC 173-400-050(5).

(B) Units burn greater than 30 percent municipal solid waste or refuse-derived fuel, as defined in 40 C.F.R. Part 60 (in effect on the date in WAC 173-400-025), Subparts Ea, Eb, and AAAA, and WAC 173-400-050(5), and that have the capacity to burn less than 35 tons (32 megagrams) per day of municipal solid waste or refuse-derived fuel, if you meet the two requirements in (c)(iii)(B)(I) and (II) of this subsection.

(I) Notify the permitting authority that the unit meets these criteria.

(II) Keep records on a calendar quarter basis of the weight of municipal solid waste burned, and the weight of all other fuels and wastes burned in the unit.

(iv) *Medical waste incineration units.* Incineration units regulated under 40 C.F.R. Part 60, Subpart Ec (Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996) (in effect on the date in WAC 173-400-025);

(v) *Small power production facilities.* Units that meet the three requirements specified in (c)(v)(A) through (C) of this subsection.

(A) The unit qualifies as a small power-production facility under section 3 (17)(C) of the Federal Power Act (16 U.S.C. 796 (17)(C)).

(B) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity.

(C) You notify the permitting authority that the unit meets all of these criteria.

(vi) *Cogeneration facilities.* Units that meet the three requirements specified in (c)(vi)(A) through (C) of this subsection.

(A) The unit qualifies as a cogeneration facility under section 3 (18)(B) of the Federal Power Act (16 U.S.C. 796 (18)(B)).

(B) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes.

(C) You notify the permitting authority that the unit meets all of these criteria.

(vii) *Hazardous waste combustion units.* Units that meet either of the two criteria specified in (c)(vii)(A) or (B) of this subsection.

(A) Units for which you are required to get a permit under section 3005 of the Solid Waste Disposal Act.

(B) Units regulated under 40 C.F.R. Part 63, Subpart EEE (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors) (in effect on the date in WAC 173-400-025).

(viii) *Materials recovery units.* Units that combust waste for the primary purpose of recovering metals, such as primary and secondary smelters;

(ix) *Air curtain incinerators.* Air curtain incinerators that burn only the materials listed in (c)(ix)(A) through (C) of this subsection are only required to meet the requirements under "Air Curtain Incinerators" in 40 C.F.R. 60.2245 through 60.2260 (in effect on the date in WAC 173-400-025).

(A) 100 percent wood waste, as defined in 40 C.F.R. 60.2265.

(B) 100 percent clean lumber.

(C) 100 percent mixture of only wood waste, clean lumber, and/or yard waste, as these terms are defined in 40 C.F.R. 60.2265.

(x) *Cyclonic barrel burners.* See 40 C.F.R. 60.2265 (in effect on the date in WAC 173-400-025).

(xi) *Rack, part, and drum reclamation units.* See 40 C.F.R. 60.2265 (in effect on the date in WAC 173-400-025).

(xii) *Cement kilns.* Kilns regulated under 40 C.F.R. Part 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry) (in effect on the date in WAC 173-400-025).

(xiii) *Sewage sludge incinerators.* Incineration units regulated under 40 C.F.R. Part 60, Subpart O (Standards of Performance for Sewage Treatment Plants) (in effect on the date in WAC 173-400-025).

(xiv) *Chemical recovery units.* Combustion units burning materials to recover chemical constituents or to produce chemical compounds where there is an existing commercial market for such recovered chemical constituents or compounds. The seven types of units described in (c)(xiv)(A) through (G) of this subsection are considered chemical recovery units.

(A) Units burning only pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery process and reused in the pulping process.

(B) Units burning only spent sulfuric acid used to produce virgin sulfuric acid.

(C) Units burning only wood or coal feedstock for the production of charcoal.

(D) Units burning only manufacturing by-product streams/residues containing catalyst metals which are reclaimed and reused as catalysts or used to produce commercial grade catalysts.

(E) Units burning only coke to produce purified carbon monoxide that is used as an intermediate in the production of other chemical compounds.

(F) Units burning only hydrocarbon liquids or solids to produce hydrogen, carbon monoxide, synthesis gas, or other gases for use in other manufacturing processes.

(G) Units burning only photographic film to recover silver.

(xv) *Laboratory analysis units.* Units that burn samples of materials for the purpose of chemical or physical analysis.

(d) Exceptions.

(i) Physical or operational changes to a CISWI unit made primarily to comply with this section do not qualify as a "modification" or "reconstruction" (as defined in 40 C.F.R. 60.2815) (in effect on the date in WAC 173-400-025).

(ii) Changes to a CISWI unit made on or after June 1, 2001, that meet the definition of "modification" or "reconstruction" as defined in 40 C.F.R. 60.2815 (in effect on the date in WAC 173-400-025) mean the CISWI unit is considered a new unit and subject to WAC 173-400-115, which adopts 40 C.F.R. Part 60, Subpart CCCC (in effect on the date in WAC 173-400-025).

(e) A CISWI unit must comply with 40 C.F.R. 60.2575 through 60.2875 (in effect on the date in WAC 173-400-025). The federal rule contains these major components:

• Increments of progress towards compliance in 60.2575 through 60.2630;

• Waste management plan requirements in 60.2620 through 60.2630;

• Operator training and qualification requirements in 60.2635 through 60.2665;

• Emission limitations and operating limits in 60.2670 through 60.2685;

• Performance testing requirements in 60.2690 through 60.2725;

• Initial compliance requirements in 60.2700 through 60.2725;

• Continuous compliance requirements in 60.2710 through 60.2725;

• Monitoring requirements in 60.2730 through 60.2735;

• Recordkeeping and reporting requirements in 60.2740 through 60.2800;

• Title V operating permits requirements in 60.2805;

• Air curtain incinerator requirements in 60.2810 through 60.2870;

• Definitions in 60.2875; and

• Tables in 60.2875. In Table 1, the final control plan must be submitted before June 1, 2004, and final compliance must be achieved by June 1, 2005.

(i) Exception to adopting the federal rule. For purposes of this section, "administrator" includes the permitting authority.

(ii) Exception to adopting the federal rule. For purposes of this section, "you" means the owner or operator.

(iii) Exception to adopting the federal rule. For purposes of this section, each reference to "the effective date of state plan approval" means July 1, 2002.

(iv) Exception to adopting the federal rule. The Title V operating permit requirements in 40 C.F.R. 60.2805(a) are not adopted. Each CISWI unit, regardless of whether it is a major or nonmajor unit, is subject to the air operating permit regulation, chapter 173-401 WAC, beginning on July 1, 2002. See WAC 173-401-500 for the permit application requirements and deadlines.

(v) Exception to adopting the federal rule. The following compliance dates apply:

(A) The final control plan (Increment 1) must be submitted no later than July 1, 2003. (See Increment 1 in Table 1.)

(B) Final compliance (Increment 2) must be achieved no later than July 1, 2005. (See Increment 2 in Table 1.)

(5) **Small municipal waste combustion units** constructed on or before August 30, 1999. A small municipal waste combustion unit constructed on or before August 30, 1999, that meets the applicability requirements in 40 C.F.R. 62.14510, must comply with the requirements

in 40 C.F.R. Part 62, Subpart JJJ (in effect on the date in WAC 173-400-025).

(a) Definition. "Municipal waste combustion unit" means any setting or equipment that combusts, liquid, or gasified municipal solid waste including, but not limited to, field-erected combustion units (with or without heat recovery), modular combustion units (starved air- or excess-air), boilers (for example, steam generating units), furnaces (whether suspension-fired, grate-fired, mass-fired, air-curtain incinerators, or fluidized bed-fired), and pyrolysis/combustion units. Two criteria further define municipal waste combustion units:

(i) Municipal waste combustion units do not include the following units:

(A) Pyrolysis or combustion units located at a plastics or rubber recycling unit as specified under the exemptions in this subsection (5)(c)(viii) and (ix).

(B) Cement kilns that combust municipal solid waste as specified under the exemptions in this subsection (5)(c)(x).

(C) Internal combustion engines, gas turbines, or other combustion devices that combust landfill gases collected by landfill gas collection systems.

(ii) The boundaries of a municipal waste combustion unit are defined as follows. The municipal waste combustion unit includes, but is not limited to, the municipal solid waste fuel feed system, grate system, flue gas system, bottom ash system, and the combustion unit water system. The municipal waste combustion unit does not include air pollution control equipment, the stack, water treatment equipment, or the turbine-generator set. The municipal waste combustion unit boundary starts at the municipal solid waste pit or hopper and extends through three areas:

(A) The combustion unit flue gas system, which ends immediately after the heat recovery equipment or, if there is no heat recovery equipment, immediately after the combustion chamber.

(B) The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system.

(C) The combustion unit water system, which starts at the feed water pump and ends at the piping that exits the steam drum or superheater.

(b) Applicability. This section applies to a municipal waste combustion unit that meets these three criteria:

(i) The municipal waste combustion unit has the capacity to combust at least 35 tons per day of municipal solid waste but no more than 250 tons per day of municipal solid waste or refuse-derived fuel.

(ii) The municipal waste combustion unit commenced construction on or before August 30, 1999.

(iii) The municipal waste combustion unit is not exempt under (c) of this section.

(c) Exempted units. The following municipal waste combustion units are exempt from the requirements of this section:

(i) *Small municipal waste combustion units that combust less than 11 tons per day.* Units are exempt from this section if four requirements are met:

(A) The municipal waste combustion unit is subject to a federally enforceable order or order of approval limiting the amount of municipal solid waste combusted to less than 11 tons per day.

(B) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(C) The owner or operator of the unit sends a copy of the federally enforceable order or order of approval to the permitting authority.

(D) The owner or operator of the unit keeps daily records of the amount of municipal solid waste combusted.

(ii) *Small power production units.* Units are exempt from this section if four requirements are met:

(A) The unit qualifies as a small power production facility under section 3 (17)(C) of the Federal Power Act (16 U.S.C. 796 (17)(C)).

(B) The unit combusts homogeneous waste (excluding refuse-derived fuel) to produce electricity.

(C) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(D) The owner or operator submits documentation to the permitting authority that the unit qualifies for the exemption.

(iii) *Cogeneration units.* Units are exempt from this section if four requirements are met:

(A) The unit qualifies as a small power production facility under section 3 (18)(C) of the Federal Power Act (16 U.S.C. 796 (18)(C)).

(B) The unit combusts homogeneous waste (excluding refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes.

(C) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(D) The owner or operator submits documentation to the permitting authority that the unit qualifies for the exemption.

(iv) *Municipal waste combustion units that combust only tires.* Units are exempt from this section if three requirements are met:

(A) The municipal waste combustion unit combusts a single-item waste stream of tires and no other municipal waste (the unit can cofire coal, fuel oil, natural gas, or other nonmunicipal solid waste).

(B) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(C) The owner or operator submits documentation to the permitting authority that the unit qualifies for the exemption.

(v) *Hazardous waste combustion units.* Units are exempt from this section if the units have received a permit under section 3005 of the Solid Waste Disposal Act.

(vi) *Materials recovery units.* Units are exempt from this section if the units combust waste mainly to recover metals. Primary and secondary smelters may qualify for the exemption.

(vii) *Cofired units.* Units are exempt from this section if four requirements are met:

(A) The unit has a federally enforceable order or order of approval limiting municipal solid waste combustion to no more than 30 percent of total fuel input by weight.

(B) The owner or operator notifies the permitting authority that the unit qualifies for the exemption.

(C) The owner or operator submits a copy of the federally enforceable order or order of approval to the permitting authority.

(D) The owner or operator records the weights, each quarter, of municipal solid waste and of all other fuels combusted.

(viii) *Plastics/rubber recycling units.* Units are exempt from this section if four requirements are met:

(A) The pyrolysis/combustion unit is an integrated part of a plastics/rubber recycling unit as defined in 40 C.F.R. 60.1940 (in effect on the date in WAC 173-400-025).

(B) The owner or operator of the unit records the weight, each quarter, of plastics, rubber, and rubber tires processed.

(C) The owner or operator of the unit records the weight, each quarter, of feed stocks produced and marketed from chemical plants and petroleum refineries.

(D) The owner or operator of the unit keeps the name and address of the purchaser of the feed stocks.

(ix) *Units that combust fuels made from products of plastics/rubber recycling plants.* Units are exempt from this section if two requirements are met:

(A) The unit combusts gasoline, diesel fuel, jet fuel, fuel oils, residual oil, refinery gas, petroleum coke, liquefied petroleum gas, propane, or butane produced by chemical plants or petroleum refineries that use feed stocks produced by plastics/rubber recycling units.

(B) The unit does not combust any other municipal solid waste.

(x) *Cement kilns.* Cement kilns that combust municipal solid waste are exempt.

(xi) *Air curtain incinerators.* If an air curtain incinerator as defined under 40 C.F.R. 60.1910 combusts 100 percent yard waste, then those units must only meet the requirements under 40 C.F.R. 60.1910 through 60.1930 (in effect on the date in WAC 173-400-025).

(d) Exceptions.

(i) Physical or operational changes to an existing municipal waste combustion unit made primarily to comply with this section do not qualify as a modification or reconstruction, as those terms are defined in 40 C.F.R. 60.1940 (in effect on the date in WAC 173-400-025).

(ii) Changes to an existing municipal waste combustion unit made on or after June 6, 2001, that meet the definition of modification or reconstruction, as those terms are defined in 40 C.F.R. 60.1940 (in effect on the date in WAC 173-400-025), mean the unit is considered a new unit and subject to WAC 173-400-115, which adopts 40 C.F.R. Part 60, Subpart AAAA (in effect on the date in WAC 173-400-025).

(e) Municipal waste combustion units are divided into two subcategories based on the aggregate capacity of the municipal waste combustion plant as follows:

(i) Class I units. Class I units are small municipal waste combustion units that are located at municipal waste combustion plants with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste. See the definition of "municipal waste combustion plant capacity" in 40 C.F.R. 60.1940 (in effect on the date in WAC 173-400-025) for the specification of which units are included in the aggregate capacity calculation.

(ii) Class II units. Class II units are small municipal waste combustion units that are located at municipal waste combustion plants with an aggregate plant combustion capacity less than or equal to 250 tons per day of municipal solid waste. See the definition of "municipal waste combustion plant capacity" in 40 C.F.R. 60.1940 (in effect on the date in WAC 173-400-025) for the specification of which units are included in the aggregate capacity calculation.

(f) Compliance option 1.

(i) A municipal solid waste combustion unit may choose to reduce, by the final compliance date of June 1, 2005, the maximum combustion capacity of the unit to less than 35 tons per day of municipal solid

waste. The owner or operator must submit a final control plan and the notifications of achievement of increments of progress as specified in 40 C.F.R. 60.1610 (in effect on the date in WAC 173-400-025).

(ii) The final control plan must, at a minimum, include two items:

(A) A description of the physical changes that will be made to accomplish the reduction.

(B) Calculations of the current maximum combustion capacity and the planned maximum combustion capacity after the reduction. Use the equations specified in 40 C.F.R. 60.1935 (d) and (e) (in effect on the date in WAC 173-400-025) to calculate the combustion capacity of a municipal waste combustion unit.

(iii) An order or order of approval containing a restriction or a change in the method of operation does not qualify as a reduction in capacity. Use the equations specified in 40 C.F.R. 60.1935 (d) and (e) (in effect on the date in WAC 173-400-025) to calculate the combustion capacity of a municipal waste combustion unit.

(g) Compliance option 2. The municipal waste combustion unit must comply with 40 C.F.R. 60.1585 through 60.1905, and 60.1935 (in effect on the date in WAC 173-400-025).

(i) The rule contains these major components:

(A) Increments of progress towards compliance in 60.1585 through 60.1640;

(B) Good combustion practices - Operator training in 60.1645 through 60.1670;

(C) Good combustion practices - Operator certification in 60.1675 through 60.1685;

(D) Good combustion practices - Operating requirements in 60.1690 through 60.1695;

(E) Emission limits in 60.1700 through 60.1710;

(F) Continuous emission monitoring in 60.1715 through 60.1770;

(G) Stack testing in 60.1775 through 60.1800;

(H) Other monitoring requirements in 60.1805 through 60.1825;

(I) Recordkeeping reporting in 60.1830 through 60.1855;

(J) Reporting in 60.1860 through 60.1905;

(K) Equations in 60.1935;

(L) Tables 2 through 8.

(ii) Exception to adopting the federal rule. For purposes of this section, each reference to the following is amended in the following manner:

(A) "State plan" in the federal rule means WAC 173-400-050(5).

(B) "You" in the federal rule means the owner or operator.

(C) "Administrator" includes the permitting authority.

(D) "The effective date of the state plan approval" in the federal rule means December 6, 2002.

(h) Compliance schedule.

(i) Small municipal waste combustion units must achieve final compliance or cease operation not later than December 1, 2005.

(ii) Small municipal waste combustion units must achieve compliance by May 6, 2005, for all Class II units, and by November 6, 2005, for all Class I units.

(iii) Class I units must comply with these additional requirements:

(A) The owner or operator must submit the dioxins/furans stack test results for at least one test conducted during or after 1990. The stack test must have been conducted according to the procedures speci-

fied under 40 C.F.R. 60.1790 (in effect on the date in WAC 173-400-025).

(B) Class I units that commenced construction after June 26, 1987, must comply with the dioxins/furans and mercury limits specified in Tables 2 and 3 in 40 C.F.R. Part 60, Subpart BBBB (in effect on the date in WAC 173-400-025) by the later of two dates:

(I) December 6, 2003; or

(II) One year following the issuance of an order of approval (revised construction approval or operation permit) if an order or order of approval or operation modification is required.

(i) Air operating permit. Applicability to chapter 173-401 WAC, the air operating permit regulation, begins on July 1, 2002. See WAC 173-401-500 for the permit application requirements and deadlines.

(6) **Hazardous/medical/infectious waste incinerators** constructed on or before December 1, 2008. Hospital/medical/infectious waste incinerators constructed on or before December 1, 2008, must comply with the requirements in 40 C.F.R. Part 62, Subpart HHH (in effect on the date in WAC 173-400-025).

AMENDATORY SECTION (Amending WSR 18-22-006, filed 10/25/18, effective 11/25/18)

WAC 173-400-060 Emission standards for general process units. General process units are required to meet all applicable provisions of WAC 173-400-040 and, no person shall cause or allow the emission of particulate material from any general process operation in excess of 0.23 grams per dry cubic meter at standard conditions (0.1 grain/dscf) of exhaust gas. Test methods from 40 C.F.R. Parts 51, 60, 61, and 63 (in effect on the date in WAC 173-400-025) ((~~and any other approved test procedures in ecology's "*Source Test Manual - Procedures For Compliance Testing*" as of September 20, 2004,~~)) must be used to determine compliance.

AMENDATORY SECTION (Amending WSR 18-22-006, filed 10/25/18, effective 11/25/18)

WAC 173-400-105 Records, monitoring, and reporting. The owner or operator of a source must upon notification by ecology, maintain records on the type and quantity of emissions from the source and other information deemed necessary to determine whether the source is in compliance with applicable emission limitations and control measures.

(1) **Emission inventory.** The owner and operator of an air contaminant source must submit an inventory of emissions from the source each year. The inventory must include stack and fugitive emissions of particulate matter, PM-10, PM-2.5, sulfur dioxide, oxides of nitrogen, carbon monoxide, total reduced sulfur compounds (TRS), fluorides, lead, VOCs, ammonia, and other contaminants. Sources must provide registration information in a manner prescribed by the permitting authority for the submittal of these inventories. When the permitting authority requests emission inventory information for a calendar year, the owner or operator must submit the emissions inventory no later

than April 15th after the end of the calendar year for which the emissions inventory was requested. If April 15th falls on a weekend, then the deadline to file shall be the next business day. The owner and operator must maintain records of information necessary to substantiate any reported emissions, consistent with the averaging times for the applicable standards. The owner or operator may base emission estimates used in the inventory on the most recent published EPA emission factors for a source category, or other information available to the owner and operator, whichever is the better estimate.

(2) **Monitoring.** Ecology must conduct a continuous surveillance program to monitor the quality of the ambient atmosphere as to concentrations and movements of air contaminants. As a part of this program, the director of ecology or an authorized representative may require any source under the jurisdiction of ecology to conduct stack and/or ambient air monitoring and to report the results to ecology.

(3) **Investigation of conditions.** Upon presentation of appropriate credentials, for the purpose of investigating conditions specific to the control, recovery, or release of air contaminants into the atmosphere, personnel from ecology or an authority must have the power to enter at reasonable times upon any private or public property, excepting nonmultiple unit private dwellings housing one or two families.

(4) **Source testing.** To demonstrate compliance, the permitting authority may conduct or require that the owner or operator of a source conduct a test using approved test methods from 40 C.F.R. Parts 51, 60, 61, 62, 63, 75 and 1065, as applicable (in effect on the date in WAC 173-400-025) or procedures contained in "*Source Test Manual - Procedures for Compliance Testing*," state of Washington, department of ecology, as of ((~~September 20, 2004~~)) February 12, 2025, on file at ecology. The permitting authority may require the operator of a source to provide the necessary platform and sampling ports for ecology personnel or others to perform a test of an emissions unit. The source owner or operator must allow the permitting authority to obtain a sample from any emissions unit. The permitting authority shall give the operator of the source an opportunity to observe the sampling and to obtain a sample at the same time.

(5) **Continuous monitoring and recording.** Owners and operators of the following categories of sources must install, calibrate, maintain and operate equipment for continuously monitoring and recording those emissions specified.

(a) Fossil fuel-fired steam generators.

(i) Opacity, except where:

(A) Steam generator capacity is less than ((~~two hundred fifty million~~)) 250,000,000 BTU per hour heat input; or

(B) Only gaseous fuel is burned.

(ii) Sulfur dioxide, except where steam generator capacity is less than ((~~two hundred fifty million~~)) 250,000,000 BTU per hour heat input or if sulfur dioxide control equipment is not required.

(iii) Percent oxygen or carbon dioxide where such measurements are necessary for the conversion of sulfur dioxide continuous emission monitoring data.

(iv) General exception. These requirements do not apply to a fossil fuel-fired steam generator with an annual average capacity factor of less than ((~~thirty~~)) 30 percent, as reported to the Federal Power Commission for calendar year 1974, or as otherwise demonstrated to ecology or the authority by the owner(s) or operator(s).

(b) **Sulfuric acid plants.** Sulfur dioxide where production capacity is more than ((~~three hundred~~)) 300 tons per day, expressed as ((~~one~~

~~hundred~~)) 100 percent acid, except for those facilities where conversion to sulfuric acid is used primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

(c) Fluid bed catalytic cracking units catalyst regenerators at petroleum refineries. Opacity where fresh feed capacity is more than ((~~twenty thousand~~)) 20,000 barrels per day.

(d) Wood residue fuel-fired steam generators.

(i) Opacity, except where steam generator capacity is less than ((~~one hundred million0~~)) 100,000,000 BTU per hour heat input.

(ii) Continuous monitoring equipment. The requirements of (e) of this subsection do not apply to wood residue fuel-fired steam generators, but continuous monitoring equipment required by (d) of this subsection must be subject to approval by ecology.

(e) Owners and operators of those sources required to install continuous monitoring equipment under this subsection must demonstrate to ecology or the authority, compliance with the equipment and performance specifications and observe the reporting requirements contained in 40 C.F.R. Part 51, Appendix P, Sections 3, 4 and 5 (in effect on the date in WAC 173-400-025).

(f) Special considerations. If for reason of physical plant limitations or extreme economic situations, ecology determines that continuous monitoring is not a reasonable requirement, the permitting authority will establish alternative monitoring and reporting procedures on an individual basis. These will generally take the form of stack tests conducted at a frequency sufficient to establish the emission levels over time and to monitor deviations in these levels.

(g) Exemptions. This subsection (5) does not apply to any emission unit which is:

(i) Required to continuously monitor emissions due to a standard or requirement contained in 40 C.F.R. Parts 60, 61, 62, 63, or 75 (all in effect on the date in WAC 173-400-025) or a permitting authority's adoption by reference of the federal standards. Emission units and sources subject to those standards must comply with the data collection requirements that apply to those standards.

(ii) Not subject to an applicable emission standard.

(6) No person shall make any false material statement, representation or certification in any form, notice or report required under chapter ((~~70.94~~)) 70A.15 or ((~~70.120~~)) 70A.25 RCW, or any ordinance, resolution, regulation, permit or order in force pursuant thereto.

(7) Continuous emission monitoring system operating requirements. All continuous emission monitoring systems (CEMS) required by 40 C.F.R. Parts 60, 61, 62, 63, or 75 (all in effect on the date in WAC 173-400-025), or a permitting authority's adoption of those federal standards must meet the continuous emission monitoring systems (CEMS) performance specifications and data recovery requirements imposed by those standards. All CEMS required under an order, PSD permit, or regulation issued by a permitting authority and not subject to CEMS performance specifications and data recovery requirements imposed by 40 C.F.R. Parts 60, 61, 62, 63, or 75 must follow the continuous emission monitoring rule of the permitting authority, or if the permitting authority does not have a continuous emission monitoring rule, must meet the following requirements:

(a) The owner or operator must recover valid hourly monitoring data for at least ((~~ninety-five~~)) 95 percent of the hours that the equipment (required to be monitored) is operated during each calendar month except for periods of monitoring system downtime, provided that the owner or operator demonstrated that the downtime was not a result

of inadequate design, operation, or maintenance, or any other reasonably preventable condition, and the source conducts any necessary repairs to the monitoring system in a timely manner.

Note: This means that a continuous emissions monitor (CEM) must provide valid data for all but ((~~thirty-six~~)) 36 hours for each month (((~~ninety-five~~)) 95 percent standard).

(b) The owner or operator must install a continuous emission monitoring system that meets the performance specification in 40 C.F.R. Part 60, Appendix B in effect at the time of its installation, and must operate this monitoring system in accordance with the quality assurance procedures in Appendix F of 40 C.F.R. Part 60 (in effect on the date in WAC 173-400-025), and EPA's "Recommended Quality Assurance Procedures for Opacity Continuous Monitoring Systems" (EPA) 340/1-86-010.

(c) An owner or operator must reduce monitoring data commencing on the clock hour and containing at least ((~~forty-five~~)) 45 minutes of monitoring data to one hour averages. An owner or operator must reduce monitoring data for opacity six minute block averages unless otherwise specified in the order of approval or permit. An owner or operator must include all monitoring data in these averages except for data collected during calibration drift tests and cylinder gas audits, and for data collected subsequent to a failed quality assurance test or audit. After a failed quality assurance test or audit, a source must collect no valid data until the monitoring system passes a quality assurance test or audit.

(d) An owner or operator must maintain continuous operation of all continuous monitoring systems except for instances of system breakdowns, repairs, calibration checks, and zero and span adjustments required under (a) of this subsection.

(i) Continuous monitoring systems for measuring opacity shall complete a minimum of one cycle of sampling and analyzing for each successive ((~~ten~~)) 10 second period and one cycle of data recording for each successive six minute period.

(ii) Continuous monitoring systems for measuring emissions other than opacity must complete a minimum of one cycle of sampling, analyzing, and recording for each successive ((~~fifteen~~)) 15 minute period.

(e) The owner or operator must retain all monitoring data averages for at least five years, including copies of all reports submitted to the permitting authority and records of all repairs, adjustments, and maintenance performed on the monitoring system.

(f) The owner or operator must submit a monthly report (or other frequency as directed by terms of an order, air operating permit or regulation) to the permitting authority within ((~~thirty~~)) 30 days after the end of the month (or other specified reporting period) in which the owner or operator recorded the data. The owner or operator may combine the report required by this section with any excess emission report required by WAC 173-400-108. This report must include:

(i) The number of hours that the monitored emission unit operated each month and the number of valid hours of monitoring data that the monitoring system recovered each month;

(ii) The date, time period, and cause of each failure to meet the data recovery requirements of (a) of this subsection and any actions taken to ensure adequate collection of such data;

(iii) The date, time period, and cause of each failure to recover valid hourly monitoring data for at least ((~~ninety~~)) 90 percent of the hours that the equipment (required to be monitored) was operated each day;

Note: A continuous emissions monitor (CEM) must provide valid data for all but two hours per day (((~~ninety~~)) 90 percent standard).

(iv) The results of all cylinder gas audits conducted during the month; and

(v) A certification of truth, accuracy, and completeness signed by an authorized representative of the owner or operator.

(8) No person shall render inaccurate any monitoring device or method required under chapter ((~~70.94~~)) 70A.15 or ((~~70.120~~)) 70A.25 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.