

WAC 173-303-807 Trial burns for dangerous waste incinerator final facility permits. When an owner or operator of a dangerous waste incineration unit becomes subject to dangerous waste permit requirements after October 12, 2005, or when an owner or operator of an existing dangerous waste incineration unit demonstrates compliance with the air emission standards and limitations in 40 C.F.R. part 63, subpart EEE (that is, by conducting a comprehensive performance test and submitting a Notification of Compliance under 63.1207(j) and 63.1210(d) documenting compliance with all applicable requirements of part 63, subpart EEE), the requirements of this section do not apply, except those provisions the department determines are necessary to ensure compliance with WAC 173-303-670 (6)(a) and (c) if you elect to comply with 40 C.F.R. 270.235 (a)(1)(i), which is incorporated by reference at WAC 173-303-841, to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the department may apply the provisions of this section on a case-by-case basis, for purposes of information collection in accordance with WAC 173-303-800(11) and 173-303-815 (2)(b)(ii). 40 C.F.R. part 63 subpart EEE is incorporated by reference at WAC 173-400-075 (5)(a). Note that if you are subject to Part 63 you must get an air permit from ecology or the local air authority.

(1) Purpose and applicability. For purposes of determining operational readiness and establishing conditions in final facility permits for dangerous waste incinerators, the department may approve trial burns. Trial burns may not exceed seven hundred twenty hours operating time, except that the department may extend the duration of this operational period once, up to seven hundred twenty additional hours, at the request of the owner/operator of the incinerator when good cause is shown. The permit may be modified to reflect the extension according to WAC 173-303-830(4). The procedures for requesting and approving trial burns are described in:

(a) Subsection (11) of this section for existing incinerators with interim status permits; and

(b) Subsection (13) of this section for new incinerators and for incinerators with final facility permits in which the owner/operator wishes to burn new wastes not currently included in the permit.

(2) Trial burn plan. The trial burn must be conducted in accordance with a trial burn plan prepared by the applicant and approved by the department. The trial burn plan will then become a condition of the permit and will include the following information:

(a) An analysis of each waste or mixture of waste to be burned which includes:

(i) Heating value of the waste in the form and composition in which it will be burned;

(ii) Viscosity (if applicable), or description of physical form of the waste, and specific gravity of the waste;

(iii) An analysis identifying any dangerous organic constituents listed in WAC 173-303-9905, and any other dangerous constituents which, although not listed, caused the waste to be regulated as a dangerous waste, which are reasonably expected to be present in the waste to be burned. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified or referenced in WAC 173-303-110 (3)(a), or their equivalent as approved by the department;

(iv) An approximate quantification of the dangerous constituents identified in the waste, within the precision produced by the analytical methods specified or referenced in WAC 173-303-110 (3)(a); and

(v) A quantification of those dangerous constituents in the waste which may be designated as principal organic dangerous constituents (PODC) based on data submitted from other trial or operational burns which demonstrate compliance with the performance standard in WAC 173-303-670(4);

(b) A detailed engineering description of the incinerator for which the trial burn permit is sought including:

(i) Manufacturer's name and model number of incinerator (if available);

(ii) Type of incinerator;

(iii) Linear dimensions of the incinerator unit including the cross sectional area of the combustion chamber;

(iv) Description of the auxiliary fuel system (type/feed);

(v) Capacity of the prime air mover;

(vi) Description of automatic waste feed cutoff system(s);

(vii) Stack gas monitoring and pollution control equipment;

(viii) Nozzle and burner design;

(ix) Construction materials; and

(x) Location and description of temperature, pressure, and flow indicating and control devices;

(c) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis;

(d) A detailed test schedule for each waste for which the trial burn is planned including date(s), duration, quantity of waste to be burned, and other factors relevant to the department's decision under subsection (5) of this section;

(e) A detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, air feed rate, use of auxiliary fuel, and other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator;

(f) A description of, and planned operating conditions for, any emission control equipment which will be used;

(g) Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction;

(h) A detailed test protocol to sample and analyze the following for designation under WAC 173-303-070:

(i) Any incinerator ash residue collected in the incinerator; and

(ii) Any residues collected in the air pollution control devices;

and

(i) Such other information as the department reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this section.

(3) Additional information required. The department, in reviewing the trial burn plan, will evaluate the adequacy of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this section.

(4) Trial PODCs. Based on the waste analysis data in the trial burn plan, the department will specify as trial principal organic dangerous constituents (trial PODCs) those constituents for which destruction and removal efficiencies must be calculated during the trial burn. These trial PODCs will be specified by the department based on its estimate of the difficulty of incineration of the constituents identified in the waste analysis, the concentration or mass in the waste feed, and the dangerous waste constituent or constituents iden-

tified in WAC 173-303-9905, or identified as causing the waste to be regulated as a dangerous waste.

(5) Approval of the plan. The department will approve a trial burn plan if it finds that:

(a) The trial burn is likely to determine whether the incinerator performance standard required by WAC 173-303-670(4) can be met;

(b) The trial burn itself will not present an imminent hazard to public health or the environment;

(c) The trial burn will help the department to determine operating requirements to be specified under WAC 173-303-670(6); and

(d) The information sought in (a), (b), and (c) of this subsection cannot reasonably be developed through other means.

(6) The department must send a notice to all persons on the facility mailing list as set forth in WAC 173-303-840 (3)(e)(i)(D) and to the appropriate units of state and local government as set forth in WAC 173-303-840 (3)(e)(i)(E) announcing the scheduled beginning and completion dates for the trial burn. The applicant may not begin the trial burn until after the department has issued such notice.

(a) This notice must be mailed within a reasonable time period before the scheduled trial burn. An additional notice is not required if the trial burn is delayed due to circumstances beyond the control of the facility or the department.

(b) This notice must contain:

(i) The name and telephone number of the applicant's contact person;

(ii) The name and telephone number of the department's contact office;

(iii) The location where the approved trial burn plan and any supporting documents can be reviewed and copied; and

(iv) An expected time period for beginning and completion of the trial burn.

(7) Trial burns. During each approved trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations:

(a) A quantitative analysis of the trial PODCs in the waste feed to the incinerator;

(b) A quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial PODCs, O₂, hydrogen chloride (HCl [HCl]), carbon monoxide (CO) and dangerous combustion by-products, including the total mass emission rate of by-products as a percent of the total mass feed rate of PODCs fed to the incinerator;

(c) A quantitative analysis of the scrubber water (if any), ash residues, and other residues, for the purpose of estimating the fate of the trial PODCs and whether they are designated according to WAC 173-303-070;

(d) A total mass balance of the trial PODCs in the waste;

(e) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in WAC 173-303-670 (4)(a);

(f) If the HCl emission rate exceeds 1.8 kilograms of HCl per hour (4 pounds per hour), a computation of HCl removal efficiency in accordance with WAC 173-303-670 (4)(c)(i);

(g) A computation of particulate emissions, in accordance with WAC 173-303-670 (4)(c)(ii);

(h) An identification of sources of fugitive emissions and their means of control;

(i) A measurement of average, maximum, and minimum temperatures, and combustion gas velocity;

(j) A continuous measurement of carbon monoxide in the exhaust gas;

(k) An identification of any existing air emission standards where a state or local air pollution control authority has established emission standards and such standards are applicable to the incinerator; and

(l) Such other information as the department may specify as necessary to ensure that the trial burn will determine compliance with the performance standard of WAC 173-303-670(4), and to establish the operating conditions required by WAC 173-303-670(6).

(8) Certification. The applicant must submit to the department a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and must submit the results of all determinations required by subsection (7) of this section. This submission must be made within thirty days of the completion of the trial burn, or later if approved by the department.

(9) Submission of data. All data collected during any trial burn must be submitted to the department following the completion of the trial burn.

(10) Signatures required. All submissions required under this section must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application under WAC 173-303-810(12).

(11) Based on the results of the trial burn, the department will set the operating requirements in the final permit according to WAC 173-303-670(6). The permit modification will proceed according to WAC 173-303-830(4).

(12) Existing incinerators with interim status permits.

(a) The owner/operator of an existing incinerator currently operating under an interim status permit may, when required by the department (or when he chooses) to apply for a final facility permit, request the department to approve of a trial burn. The trial burn may be requested for the purposes of determining feasibility of compliance with the performance standards of WAC 173-303-670(4) and the operating conditions of WAC 173-303-670(6). If a trial burn is requested, the owner/operator must prepare and submit a trial burn plan and, upon approval by the department, perform a trial burn in accordance with subsections (2) through (10) of this section.

(b) If the department approves the trial burn, it will issue a notice of interim status modification granting such approval and specifying the conditions applicable to the trial burn. The notice of modification will be a condition of the interim status permit. Note: The national emission standards for hazardous air pollutants may require review for a notice of construction. Owners and operators should consult chapter 173-400 WAC or local air pollution control agency regulations for applicability.

(c) If the trial burn is approved before submitting a final facility permit application, the owner/operator must complete the trial burn and submit the information described in subsection (7) of this section, with Part B of the permit application. If completion of this process conflicts with the date set for submission of Part B of the final facility permit application, the owner/operator must contact the department to extend the date for submitting the Part B or the trial burn results. If the applicant submits a trial burn plan with Part B of the final facility permit application, the department will specify

in the notice of interim status modification issued under (b) of this subsection, a time period for conducting the trial burn and submitting the results. Trial burn results must be submitted prior to the issuance of the permit.

(13) New incinerators and new wastes.

(a)(i) The owner/operator of a new incinerator may submit with Part B of a final facility permit application a request for approval of a trial burn. This request must include a statement of why the trial burn is desirable, and a trial burn plan prepared in accordance with subsection (2) of this section.

(ii) The department will proceed to issue a final facility permit in accordance with WAC 173-303-806. The permit will include the trial burn plan, and will establish operating conditions for the trial burn including but not limited to those described in WAC 173-303-670(6). The time period for conducting the trial burn and submitting the results will also be specified in the permit.

(iii) After the trial burn has been completed and the results submitted to the department, the final facility permit will be modified in accordance with WAC 173-303-830(4) to establish the final operating requirements and performance standards for the incinerator.

(b) The owner/operator of an incinerator with a final facility permit who wishes to burn new wastes not currently included in his permit may request approval of a trial burn for the new wastes. The request and approval will be handled in the same way as described in (a) of this subsection, except that in lieu of issuing an entirely new final facility permit the department will modify the existing final facility permit in accordance with WAC 173-303-830.

(14) For the purpose of determining feasibility of compliance with the performance standards of WAC 173-303-670(4) and of determining adequate operating conditions under WAC 173-303-670(6), the applicant for a permit for an existing dangerous waste incinerator must prepare and submit a trial burn plan and perform a trial burn in accordance with WAC 173-303-806 (4)(f) and subsections (2) through (5) and (7) through (10) of this section or, instead, submit other information as specified in WAC 173-303-806 (4)(f)(iii). The department must announce its intention to approve the trial burn plan in accordance with the timing and distribution requirements of subsection (6) of this section. The contents of the notice must include: The name and telephone number of a contact person at the facility; the name and telephone number of a contact office at the department; the location where the trial burn plan and any supporting documents can be reviewed and copied; and a schedule of the activities that are required prior to permit issuance, including the anticipated time schedule for department approval of the plan and the time period during which the trial burn would be conducted. Applicants submitting information under WAC 173-303-806 (4)(f)(i) are exempt from compliance with WAC 173-303-670 (4) and (6) and, therefore, are exempt from the requirement to conduct a trial burn. Applicants who submit trial burn plans and receive approval before submission of a permit application must complete the trial burn and submit the results, specified in subsection (7) of this section, with Part B of the permit application. If completion of this process conflicts with the date set for submission of the Part B application, the applicant must contact the department to establish a later date for submission of the Part B application or the trial burn results. Trial burn results must be submitted prior to issuance of the permit. When the applicant submits a trial burn plan with Part B of the permit application, the department will specify a

time period prior to permit issuance in which the trial burn must be conducted and the results submitted.

[Statutory Authority: Chapters 70.105 and 70.105D RCW. WSR 09-14-105 (Order 07-12), § 173-303-807, filed 6/30/09, effective 7/31/09. Statutory Authority: Chapters 70.105, 70.105D, and 15.54 RCW and RCW 70.105.007. WSR 04-24-065 (Order 03-10), § 173-303-807, filed 11/30/04, effective 1/1/05; WSR 00-11-040 (Order 99-01), § 173-303-807, filed 5/10/00, effective 6/10/00. Statutory Authority: Chapters 70.105 and 70.105D RCW. WSR 98-03-018 (Order 97-03), § 173-303-807, filed 1/12/98, effective 2/12/98; WSR 95-22-008 (Order 94-30), § 173-303-807, filed 10/19/95, effective 11/19/95; WSR 94-01-060 (Order 92-33), § 173-303-807, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapters 70.105 and 70.105D RCW, 40 C.F.R. Part 271.3 and RCRA § 3006 (42 U.S.C. 3251). WSR 91-07-005 (Order 90-42), § 173-303-807, filed 3/7/91, effective 4/7/91. Statutory Authority: Chapter 70.105 RCW. WSR 84-09-088 (Order DE 83-36), § 173-303-807, filed 4/18/84.]