

This document contains section 22a-174-32 of the Connecticut regulations for abatement of air pollution, which was most recently amended effective 08 July 2015 by revisions to subsection (b)(3). This document was prepared by the State of Connecticut Department of Energy & Environmental Protection and is provided for the convenience of the reader. This is not the official version of the regulations. Official legal publications may be obtained from the Commission on Official Legal Publications, 111 Phoenix Ave., Enfield, CT 06082 (telephone: (860) 741-3027, or <http://www.jud.ct.gov/colp/default.htm>). In the event there is inconsistency between this document and the regulations as published in the Connecticut Law Journal, the Connecticut Law Journal publication will serve as the official version.

Section 22a-174-32. Reasonably Available Control Technology (RACT) for volatile organic compounds.

(a) Definitions. For the purposes of this section:

- (1) "Aerospace manufacturing and rework operations" means the production or repair of aerospace vehicles or components thereof under any of the following Standard Industrial Classification Codes: 3720, 3721, 3724, 3728, 3760, 3761, 3764, 3769, 4512, 4581, or 9711.
- (2) "Aerospace vehicle or component" means any fabricated part, processed part, assembly of parts, or completed unit of any aircraft including, but not limited to, airplanes, helicopters, missiles, rockets, and space vehicles.
- (3) "Antique aerospace vehicle or component" means an aircraft or component thereof which is at least thirty years of age and is no longer routinely used in the original commercial or military service capacity.
- (4) "CTG" or "control techniques guideline" means a document published by the Administrator in accordance with sections 108, and 183(a) and (b) of the Clean Air Act (42 U.S.C. section 7401, et seq.) describing techniques for controlling volatile organic compound (VOC) emissions.
- (5) "Space vehicle" means a man-made vehicle, either manned or unmanned, designed for operation beyond the atmosphere of the Earth, including but not limited to, models, prototypes, molds, tooling, hardware, and any auxiliary equipment associated with the testing, transportation and storage of such vehicle.
- (6) "System to capture and control" means a system to capture, convey and control VOC emissions released by VOC-emitting equipment, including any device that destroys, recovers, or otherwise removes VOC emissions and permanently reduces VOC emissions into the atmosphere.
- (7) "Uncontrolled VOC emissions" means VOC emissions prior to the application of a system to capture and

control such VOC emissions.

- (8) "Volatile organic compound" or "VOC" has the same meaning as in section 22a-174-1 of the Regulations of Connecticut State Agencies.
- (9) "VOC-emitting equipment" means any equipment, building, or activity that results in the emission of volatile organic compounds through a stack or as fugitive emissions.
- (10) "Wood furniture" means any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particle board that is manufactured under any of the following Standard Industrial Classification Codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.
- (11) "Wood furniture component" means any part that is used in the manufacture of wood furniture, including but not limited to, drawer slides, cabinet doors, seat cushions, and laminated tops.
- (12) "Wood furniture manufacturing operations" means the finishing, cleaning and wash off operations associated with the production of wood furniture, or wood furniture components.

(b) Applicability.

- (1) Subject to the limitations set forth in subdivision (4) of this subsection, the provisions of this section shall apply to:
 - (A) except as provided in subparagraphs (C) and (D) of this subdivision, the owner or operator of a premises with potential VOC emissions of fifty (50) tons or more per calendar year in a serious nonattainment area for ozone;
 - (B) except as provided in subparagraphs (C) and (D) of this subdivision, the owner or operator of a premises with potential VOC emissions of twenty-five (25) tons or more per calendar year in a severe nonattainment area for ozone;
 - (C) the owner or operator of wood furniture manufacturing operations with potential VOC

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- emissions of twenty-five (25) tons or more per calendar year; or
- (D) the owner or operator of aerospace manufacturing and rework operations with potential VOC emissions of twenty-five (25) tons or more per calendar year.
- (2) When calculating potential emissions for the purposes of this section, any limitation on the capacity of a source to emit VOCs, including air pollution control equipment, or any restriction which limits maximum rated capacity shall be treated as part of the design of the source, only if such limitation or restriction or the effect that such limitation or restriction would have on VOC emissions is federally enforceable.
- (3) When calculating potential emissions to determine the applicability of this section, the owner or operator of a premises shall include potential emissions of volatile organic compounds from all sources located at such premises excluding those sources which are:
- (A) subject to regulation under 40 CFR 61 and 63;
 - (B) required to use Best Available Control Technology or Lowest Achievable Emission Rate for VOCs pursuant to a federally enforceable order or permit which contains specific VOC emission limitations;
 - (C) subject to regulation under 40 CFR 264, Subparts AA or BB, or 40 CFR 265, Subparts AA or BB;
 - (D) fuel burning equipment; or
 - (E) subject to Reasonably Available Control Technology required pursuant to:
 - (i) any one of the following subsections of section 22a-174-20 of the Regulations of Connecticut State Agencies: (a), (b), (l) through (y), or (ff) through (jj),
 - (ii) section 22a-174-30a of the Regulations of Connecticut State Agencies, or

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- (iii) an order or permit requiring the implementation of Reasonably Available Control Technology issued by the commissioner prior to November 15, 1992 and approved by the Administrator prior to May 31, 1995.
 - (4) Except for subparagraph (B) of subdivision (d)(2) and subsections (f) and (g) of this section, no other provisions of this section shall apply to the owner or operator of VOC emitting equipment which is identified in, or subject to any requirement set forth in, subparagraphs (A) through (E) of subdivision (3) of this subsection.
- (c) **Individual permits, general permits or orders to limit VOC emissions.**
- (1) The commissioner may issue an individual permit, general permit or order in lieu of requiring one of the Reasonably Available Control Technology methods required by subdivision (e)(1) of this section when the owner or operator of a premises demonstrates to the commissioner's satisfaction that actual emissions of VOCs from such premises did not exceed, in every calendar year after December 31, 1995:
 - (A) except as provided in subparagraph (C) of this subdivision, fifty (50) tons per calendar year in a serious nonattainment area for ozone;
 - (B) except as provided in subparagraph (C) of this subdivision, twenty-five (25) tons per calendar year in a severe nonattainment area for ozone; or
 - (C) twenty-five (25) tons per calendar year at a premises which conducts wood furniture manufacturing operations or aerospace manufacturing and rework operations.
 - (2) An owner or operator of a premises who seeks to demonstrate that actual emissions do not exceed the levels specified in subdivision (1) of this subsection shall, at a minimum, submit to the commissioner written documentation of the actual

emissions from such premises for every calendar year, or portion thereof, from December 31, 1995 through the calendar year in which such information is submitted. The commissioner may require the submittal of documentation of actual emissions from another period of time in order to determine representative actual emissions. Such owner or operator shall also submit a report which includes the information specified in subparagraphs (B) through (E), inclusive, of subdivision (d)(2) of this section.

- (3) If the commissioner issues an individual permit, general permit or order pursuant to this subsection, such permit or order shall require that the emissions of VOCs from a premises not exceed the VOC emissions levels set forth in subdivision (1) of this subsection or a level established by the Administrator in a final CTG. The commissioner shall submit such individual permit, general permit or order to the Administrator for approval in accordance with the provisions of 42 U.S.C. 7401-7671, et seq. The commissioner shall require a permittee or any person subject to an order of the commissioner under this subdivision to make and keep records, as may be necessary, to demonstrate compliance with the emission limitations set forth in subdivision (1) of this subsection.
- (4) Nothing herein shall require the commissioner to issue an individual permit, general permit or order under this subsection.

(d) Compliance plans.

- (1) In order to demonstrate compliance with the provisions of this section, the owner or operator of a premises subject to this section shall submit to the commissioner in writing a compliance plan for review and written approval or denial. Such compliance plan shall be submitted no later than:
 - (A) May 1, 1994 for premises subject to this section on or before April 19, 1994;
 - (B) May 1, 1995 for premises subject to this section from April 20, 1994 through the effective date of this section; or

- (C) six months after becoming subject to the provisions of this section.
- (2) A compliance plan submitted in accordance with subdivision (1) of this subsection, shall include:
- (A) a description of the Reasonably Available Control Technology method that the owner or operator shall perform pursuant to subdivision (e)(1) of this section;
 - (B) a description of each and every piece of VOC-emitting equipment at such premises;
 - (C) the maximum rated capacity of each piece of VOC-emitting equipment;
 - (D) the total amount of potential emissions of VOCs, expressed in tons per year; and
 - (E) a certification, signed by the person who prepared the compliance plan, the owner of the premises, and the operator of the premises, each of whom shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate and complete, and each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this compliance plan and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the General Statutes, under Section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

- (3) The owner or operator of a premises who proposes to

install a system to capture and control VOCs pursuant to subparagraph (A) of subdivision (e)(1) of this section shall also include in the compliance plan the following:

- (A) a description of such system to capture and control; and
 - (B) a schedule for installing such system.
- (4) The owner or operator of a premises reducing VOC use and VOC emissions pursuant to subparagraph (B) of subdivision (e)(1) of this section shall also include in the compliance plan the following:
- (A) with respect to each coating used at a premises during the preceding calendar year, the following information:
 - (i) the name and address of the coating manufacturer,
 - (ii) the coating name and identification number,
 - (iii) the coating density, in pounds per gallon,
 - (iv) the percent VOC content by weight,
 - (v) the water and exempt percent VOC content by weight,
 - (vi) the solids content by volume and by weight in pounds,
 - (vii) the amount of each coating used, in gallons,
 - (viii) the total amount of diluent used for each coating, in pounds and in gallons, and
 - (ix) the coating viscosity in pounds VOC per pounds solid, or in kilograms VOC per kilogram solid;
 - (B) a calculation of the weighted arithmetic mean of the VOC content of all coatings used at the premises during the preceding calendar year, expressed in terms of pounds of VOCs per gallon

of solids; and

- (C) to demonstrate compliance with subparagraph (B) of subdivision (e)(1) of this section, the owner or operator shall submit the following information with respect to each coating planned for use:
 - (i) the name and address of the coating manufacturer,
 - (ii) the coating name and identification number,
 - (iii) the coating density, in pounds per gallon,
 - (iv) the percent VOC content by weight,
 - (v) the percent water and percent exempt VOC content by weight,
 - (vi) the solids content by volume and by weight in pounds,
 - (vii) the total amount of diluent proposed to be used for each coating, in pounds and in gallons, and
 - (viii) the coating viscosity in pounds VOC per pounds solid;
- (5) The owner or operator of a premises using alternative emission reductions or emission reduction credits pursuant to subparagraph (C) of subdivision (e)(1) of this section shall also include in the compliance plan the following:
 - (A) the information required pursuant to section 22a-174-20(cc) of the Regulations of Connecticut State Agencies; or
 - (B) a proposed plan to purchase emission reduction credits.
- (6) The owner or operator of a premises using the alternative compliance plan method pursuant to subparagraph (D) of subdivision (e)(1) of this section shall submit such alternative compliance plan for the commissioner's review and written

approval or denial. The alternative compliance plan, in addition to meeting the requirements of subdivision (2) of this subsection and the applicable provisions set forth in subdivisions (3) through (5), inclusive, of this subsection, shall also include the following:

- (A) an examination of the technological and economic feasibility of additional VOC control devices or equipment on all sources of VOCs, including those sources identified in subdivision (b)(3) of this section;
 - (B) an examination of the feasibility of changing to low VOC-emitting processes including establishing a leak detection program;
 - (C) the proposed amount of VOC reduction from all subject VOC-emitting equipment at the premises;
 - (D) an examination of the feasibility of obtaining emission reduction credits pursuant to section 22a-174-20(cc) of the Regulations of Connecticut State Agencies, or of the feasibility of using alternative emission reductions to achieve equivalent levels of control as required by subparagraphs (A) or (B) of subdivision (e)(1) of this section;
 - (E) a description of any research that will be conducted by the owner or operator to further reduce VOC emissions beyond the level of emissions proposed; and
 - (F) any other information the commissioner may require.
- (7) In lieu of submitting a compliance plan in accordance with the provisions of this subsection and in lieu of installing one of the Reasonably Available Control Technology methods pursuant to subdivision (e)(1) of this section, the commissioner may allow the owner or operator of a premises to meet the requirements of this section by permit or order, provided such permit or order implements the recommended CTG or emissions limitations of a final CTG for any source category identified in the Federal Register on April 28, 1992 (57 Fed. Reg.

18077, App. E), and such permit or order is submitted by the commissioner to the Administrator for approval in accordance with the provisions of 42 U.S.C. 7401-7671, et seq.

- (8) Notwithstanding the provisions of subdivision (7) of this subsection, nothing herein shall require the commissioner to issue such permit or order.

(e) Reasonably Available Control Technology methods.

- (1) One year after becoming subject to the provisions of this section, the owner or operator of a premises subject to the requirements of this section shall perform at least one of the following Reasonably Available Control Technology methods:
- (A) install and operate pursuant to subdivision (2) of this subsection a system to capture and control VOCs;
 - (B) implement a program of reformulation or process change pursuant to subdivision (3) of this subsection to reduce VOC use and VOC emissions;
 - (C) use alternative emission reductions or emission reduction credits, pursuant to subdivision (4) of this subsection, in accordance with a permit or order issued by the commissioner; or
 - (D) implement an alternative compliance plan pursuant to subdivision (5) of this subsection, in accordance with a permit or order issued by the commissioner.
- (2) When the owner or operator of a premises installs and operates a system to capture and control VOC emissions, then:
- (A) such system shall reduce VOC emissions to the atmosphere from any VOC emitting equipment which is subject to the provisions of this section by at least eighty-five percent (85%) of uncontrolled emissions;
 - (B) such system, if designed to destroy VOCs by incineration, shall oxidize into carbon dioxide and water at least ninety-five percent (95%) of

the non-methane VOCs, measured as total combustible carbon, which enter the incinerator each hour; and

- (C) such system, if designed to recover or otherwise remove VOCs, shall be operated so that the VOC mass emission rate leaving the outlet does not exceed ten percent (10%), in the aggregate, of the VOC mass emission rate entering such system.
- (3) When the owner or operator of a premises reformulates or changes a process or processes to reduce actual VOC use and VOC emissions, such reformulation or change shall achieve, for each coating or VOC-emitting equipment used and on each day that VOCs are emitted, an eighty percent (80%) reduction in VOC emissions from the weighted arithmetic mean during calendar year 1990 or another year the commissioner deems as more representative of the actual operating conditions or actual emissions calculated pursuant to subparagraph (B) of subdivision (d)(4) of this section.
- (4) The owner or operator of a premises subject to a final CTG shall comply with the requirements of such final CTG, in accordance with subdivision (d)(7), where such final CTG achieves a greater reduction in VOCs than the requirements of subdivisions (2) or (3) of this subsection.
- (5) When an owner or operator of a premises uses either alternative emission reductions pursuant to section 22a-174-20(cc) of the Regulations of Connecticut State Agencies or emission reduction credits, equivalent emission reductions to those required by subparagraph (B) of subdivision (2) of this subsection shall be achieved. In addition, any such use or purchase of emission reduction credits shall be consistent with the United States Environmental Protection Agency's "Economic Incentive Program Rules; Final Rule," of April 7, 1994 (59 Fed. Reg. 16690), and the United States Environmental Protection Agency's "Emission Trading Policy Statement" of December 4, 1986 (51 Fed. Reg. 43814). The commissioner may only allow the use of either alternative emission reductions pursuant to section 22a-174-20(cc) of the Regulations of Connecticut State Agencies or emission reduction credits through

the issuance of a permit or order. The commissioner shall submit such permit or order to the Administrator for approval in accordance with the provisions of 42 U.S.C. 7401-7671, et seq. Nothing herein shall require the commissioner to issue such permit or order.

- (6) The commissioner may issue a permit or order to the owner or operator of a premises requiring the implementation of an alternative compliance plan when it is demonstrated, to the commissioner's satisfaction, through the information submitted pursuant to subdivision (d)(2) and (d)(6) of this section, that compliance with subparagraphs(1)(A) through(1)(C) of this subsection, inclusive, is not technologically or economically feasible. Such permit or order shall specify that the implementation of the approved alternative compliance plan shall be Reasonably Available Control Technology for such premises. Such owner or operator shall implement the alternative compliance plan by the date specified in the permit or order, which date shall be no later than ninety days after issuance of such permit or order. In issuing such a permit or order the commissioner may consider the VOC emissions and the VOC emission reductions made at the premises after 1986. The commissioner shall submit such permit or order to the Administrator for approval in accordance with the provisions of 42 U.S.C. 7401-7671, et seq.
- (7) Notwithstanding the provisions of subdivision (6) of this subsection, nothing herein shall require the commissioner to issue such permit or order.

(f) Test Methods.

- (1) Upon written notification that the commissioner shall require emissions testing to demonstrate compliance with this section or any permit or order issued hereunder, the owner or operator of a premises shall conduct such testing in accordance with such notification and section 22a-174-5 of the Regulations of Connecticut State Agencies.
- (2) Where an owner or operator uses a system to capture and control VOC emissions pursuant to subparagraph (A) of subdivision (e)(1) of this section,

compliance with this section shall be demonstrated by using the sampling and analytical procedures set forth in 40 CFR Part 60, Appendix A or 40 CFR Part 52.741, Appendix B.

- (3) Where an owner or operator uses any Reasonably Available Control Technology methods pursuant to subparagraphs (B) through (D) inclusive of subdivision (e)(1) of this section, the commissioner may require compliance with this section be demonstrated by:
 - (A) using sampling and analytical procedures set forth in 40 CFR Part 60, Appendix A;
 - (B) using a mass balance procedure based on known quantities of materials purchased, stored in inventory, and/or reclaimed using good engineering practice, as approved by the commissioner; or
 - (C) using other methods or procedures approved by the Administrator.

(g) Record keeping.

- (1) After December 31, 1996, the owner or operator of a premises shall maintain for at least five years at such premises, and make available at such premises for the commissioner's inspection upon demand, the following:
 - (A) purchase records for all materials which are used or stored at such premises which contain VOCs;
 - (B) for any VOC emissions resulting from coating operations, records of the name of each coating, the coating density expressed in pounds per gallon or pounds per unit, the percent VOC content by weight of each coating, the percent solids content by weight, the water and exempt VOC content of each coating by weight, the amount of each coating used in gallons, the total amount of diluent used for each coating in pounds and in gallons, and the coating viscosity in pounds VOC per pounds solid or in kilograms VOC per kilogram solids; and

- (C) the results of any VOC emissions testing performed pursuant to subsection (f) of this section.

- (2) The owner or operator of a premises shall make, keep and maintain for at least five years at such premises any other records required to kept by an individual permit, general permit or order.