

Proposed Regulatory Revisions to Include GHGs in Title V and NSR PSD Permitting Programs

Section 1. Section 22a-174-1 of the Regulations of Connecticut State Agencies is amended as follows:

Except as may otherwise be provided, as used in Section 22a-174-1 to 22a-174-200, inclusive, of the Regulations of Connecticut State Agencies, the following definitions apply. Unless otherwise indicated, references to the Code of Federal Regulations mean the Code of Federal Regulations in effect as of March 15, 2002:

- (1) “Act” means the Federal Clean Air Act, 42 USC Sections 7401 to 7671q and Public Law 101-549.
- (2) “Actual emissions” has the same meaning as in 40 CFR 51.165(a)(1)(xii)(A) to (E), inclusive.
- (3) “Administrator” means the Administrator of the United States Environmental Protection Agency.
- (4) “Affected state or states” means the Commonwealth of Massachusetts, the States of New York, Rhode Island and any other state located within fifty (50) miles of a Connecticut Title V source.
- (5) “Air pollutant” means dust, fumes, mist, smoke, other particulate matter, vapor, gas, aerosol, odorous substances, or any combination thereof, but does not include: Carbon dioxide, except in accordance with regulations adopted pursuant to sections 22a-174d, 22a-174j, or 22a-200b of the Connecticut General Statutes; the noble gases (helium, neon, argon, krypton, xenon or radon); uncombined water vapor or water droplets; molecular hydrogen expressed as H₂; or molecular oxygen expressed as O₂ or nitrogen.
- (6) “Air pollution” means the presence in the ambient air of one or more air pollutants or any combination thereof in such quantities and of such characteristics and duration as to be, or likely to be, injurious to public welfare or the environment, to the health of human, plant or animal life, or to property, or as unreasonably to interfere with the enjoyment of life and property.
- (7) “Air pollution control equipment” means any equipment which is designed to reduce emissions of air pollutants from a stationary source.
- (8) “Allowable emissions” means “allowable emissions” as defined in 40 CFR 51.165(a)(1)(xi).
- (9) “Ambient air” means that portion of the atmosphere, external to buildings, to which the general public has access.
- (10) “AAQS” or “Ambient air quality standard” means any standard which establishes the largest allowable concentration of a specific pollutant in the ambient air of a region or subregion as established by the United States Environmental Protection Agency or by the commissioner and which is listed in section 22a-174-24 of the Regulations of Connecticut State Agencies.

(11) “Architectural coating” means a coating used for residential or commercial buildings and their appurtenances, or industrial buildings, or other outdoor structures.

(12) “ASTM” means the American Society for Testing and Materials.

(13) “Attainment” means that the quality of the ambient air, as determined by the Administrator, meets the Ambient Air Quality Standards for a given air pollutant.

(14) “Attainment area” means a geographic area which has been designated by the Administrator as attainment pursuant to 40 CFR 81 in accordance with the provisions of 42 USC 7407.

(15) “Baseline concentration” means “baseline concentration” as defined in 40 CFR 51.166(b)(13)(i) to (ii)(b), inclusive.

(16) “Best Available Control Technology” or “BACT” means an emission limitation, including a limitation on visible emissions, based upon the maximum degree of reduction for each applicable air pollutant emitted from any proposed stationary source or modification which the commissioner, on a case-by-case basis, determines is achievable in accordance with section 22a-174-3a of the Regulations of Connecticut State Agencies. BACT may include, without limitation, the application of production processes, work practice standards or available methods, systems, and techniques, including fuel cleaning or treatment, the use of clean fuels, or innovative techniques for the control of such air pollutant.

(17) “Begin actual construction” means “begin actual construction” as defined in 40 CFR 51.165(a)(1)(xv).

(18) “Biodiesel fuel” means the liquid fuel composed of mono alkyl esters of long-chain fatty acids derived from vegetable oils or animal fats, which fuel conforms to ASTM D6751-08, Standard Specification for Biodiesel Fuel Blend Stock for Middle Distillate Fuels, or the current active version thereof.

(19) “Brush” means shrubs, vegetation or prunings, the diameter of which is not greater than three inches at the widest point.

(20) “BTU” means British thermal unit, which is the amount of heat required to raise the temperature of one pound of water one degree Fahrenheit.

(21) “Carbon dioxide equivalent emissions” or “CO₂e” means an amount of GHGs emitted, computed as follows:

(A) Individually, for each of the six component gases, multiply the mass amount of emissions of the component gas (tons per year) by the gas’s associated global warming potential identified in 40 CFR 98, Table A-1 (October 30, 2009); and

(B) Sum each of the six values resulting from the calculation in subparagraph (A) of this subdivision to equal the “CO₂e.”

[(21)] (22) “CAS Number” means the number given to a compound by the American Chemical Society's Chemical Abstract Service.

[(22)] (23) “CFR” means the Code of Federal Regulations.

[(23)] (24) “Combustion efficiency” means the percentage calculated in accordance with the following formula:

$$CE = [CO_2] / [CO] + [CO_2] (100)$$

where: CE = Combustion efficiency in percent;
 CO₂ = Amount of carbon dioxide;
 CO = Amount of carbon monoxide; and
 CO and CO₂ are both measured in volume units.

[(24)] (25) “Commence operation” means the owner or operator of the stationary source has begun or caused to begin, any activity which has the potential to emit any air pollutant.

[(25)] (26) “Commence construction” means that the owner or operator of the proposed stationary source or proposed modification to a stationary source has all necessary permits or approvals required pursuant to the Act, any regulations adopted thereunder and section 22a-174-1, et seq. of the Regulations of Connecticut State Agencies, and has either:

- (A) Begun, or caused to begin, a continuous program of physical on-site construction of the source, subject to the permit issued by the commissioner, without any breaks in such construction of more than eighteen months; or
- (B) Entered into binding agreements or contractual obligations to undertake actual construction of the source within a reasonable time, which cannot be canceled or modified without substantial economic loss to the owner or operator.

[(26)] (27) “Commissioner” means the Commissioner of Environmental Protection, or any member of the Department or any local air pollution control official or agency authorized by the commissioner, acting singly or jointly, to whom the commissioner assigns any function arising under the provisions of these regulations.

[(27)] (28) “Construction” means “construction” as defined in 40 CFR 51.165 (a)(1)(xviii).

[(28)] (29) “CEM” or “Continuous emission monitoring” means a system for continuously measuring the emissions of any pollutant from a stationary source.

[(29)] (30) “CERC” or “Continuous emissions reduction credit” means a real, quantifiable, surplus, permanent and enforceable reduction of an air pollutant at a source which is:

- (A) Certified by the commissioner through a SIP approved plan; and
- (B) Generated over an uninterrupted period of time in increments of one ton of a specified air pollutant.

[(30)] (31) “Criteria air pollutant” means any air pollutant for which an ambient air quality standard has been established by the Administrator in accordance with Section 107 of the Act.

[(31)] (32) “Department” means the Department of Environmental Protection.

[(32)] (33) “Dioxin emissions” means the total emissions of polychlorodibenzo-p-dioxins (PCDDs) and polychlorodibenzofurans (PCDFs) converted to the toxic equivalence amount of 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD). For the purposes of this definition, the commissioner shall determine the toxic equivalence amount of 2,3,7,8-TCDD by multiplying the concentration of each isomer in the sample by the appropriate Toxic Equivalency Factor (TEF) set forth in Table 1-1 and then adding the products to obtain the total dioxin emissions in the sample.

| Table 1-1 | |
|---|---------|
| FORM OF DIOXIN EMISSIONS | TEF |
| monochlorodibenzo-p-dioxin | 0 |
| dichlorodibenzo-p-dioxin | 0 |
| trichlorodibenzo-p-dioxin | 0 |
| 2,3,7,8-tetrachlorodibenzo-p-dioxin | 1.0 |
| Other tetrachlorodibenzo-p-dioxins | 0.01 |
| 1,2,3,7,8-pentachlorodibenzo-p-dioxin | 0.5 |
| other pentachlorodibenzo-p-dioxins | 0.005 |
| 1,2,3,4,7,8-hexachlorodibenzo-p-dioxin | 0.04 |
| 1,2,3,6,7,8-hexachlorodibenzo-p-dioxin | 0.04 |
| 1,2,3,7,8,9-hexachlorodibenzo-p-dioxin | 0.04 |
| other hexachlorodibenzo-p-dioxins | 0.0004 |
| 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin | 0.001 |
| other heptachlorodibenzo-p-dioxins | 0.00001 |
| octachlorodibenzo-p-dioxin | 0 |
| monochlorodibenzofuran | 0 |
| dichlorodibenzofuran | 0 |

| | |
|---------------------------------------|---------|
| trichlorodibenzofuran | 0 |
| 2,3,7,8-tetrachlorodibenzofuran | 0.1 |
| other tetrachlorodibenzofurans | 0.001 |
| 1,2,3,7,8-pentachlorodibenzofuran | 0.1 |
| 2,3,4,7,8-pentachlorodibenzofuran | 0.1 |
| other pentachlorodibenzofurans | 0.001 |
| 1,2,3,4,7,8-hexachlorodibenzofuran | 0.01 |
| 1,2,3,6,7,8-hexachlorodibenzofuran | 0.01 |
| 2,3,4,6,7,8-hexachlorodibenzofuran | 0.01 |
| 1,2,3,7,8,9-hexachlorodibenzofuran | 0.01 |
| other hexachlorodibenzofurans | 0.0001 |
| 1,2,3,4,6,7,8-heptachlorodibenzofuran | 0.001 |
| 1,2,3,4,7,8,9-heptachlorodibenzofuran | 0.001 |
| other heptachlorodibenzofurans | 0.00001 |
| octachlorodibenzofuran | 0 |

[(33)] (34) “Discharge point” means any stack or area from which a hazardous air pollutant is released into the ambient air.

[(34)] (35) “Dispersion technique” means “dispersion technique” as defined in 40 CFR 51.100(hh).

[(35)] (36) “Distillate oil” or “distillate fuel oil” means any fuel oil of No. 1 or No. 2 grades, as defined by ASTM D396-09, Standard Specification for Fuel Oils, or the current active version thereof.

[(36)] (37) “DERC” or “Discrete emission reduction credit” means the real, quantifiable, surplus, permanent, and enforceable reduction of an air pollutant at a source, which is:

- (A) Certified by the commissioner through a SIP approved plan; and
- (B) Generated during a specified period of time.

[(37)] (38) “Emission” means the release or discharge of an air pollutant into the ambient air from any source.

[(38)] (39) “Emission limitation” and “Emission standard” means “ emission limitation” and “emission standard” as defined in 40 CFR 51.100(z).

[(39)] (40) “Emission unit” means “emission unit” as defined in 40 CFR 51.165(a)(1)(vii).

[(40)] (41) “ERC” or “Emission reduction credit” means real, quantifiable, surplus, permanent, and enforceable reductions of air pollutant emissions from a source, when such reductions are certified by the commissioner through a SIP approved plan and recorded as CERCs or DERCs.

[(41)] (42) “Excessive concentration” means “excessive concentration” as defined in 40 CFR 51.000(kk).

[(42)] (43) “Federally enforceable” means “federally enforceable” as defined in 40 CFR 51.165(a)(1)(xiv).

[(43)] (44) “Flare” means an apparatus, device, process, or procedure for the burning of flammable gases or vapors at or near the exit of a stack, flue or vent.

[(44)] (45) “Fuel-burning equipment” means any furnace, boiler, apparatus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power.

[(45)] (46) “Fugitive dust” means solid airborne particulate matter emitted from any source other than through a stack.

[(46)] (47) “Fugitive emissions” means fugitive dust or those emissions that cannot reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

[(47)] (48) “Good engineering practice (GEP) stack height” means “good engineering practice (GEP) stack height” as defined in 40 CFR 51.100(ii).

(49) “Greenhouse gases” or “GHGs” means the aggregate of the following six component gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), any hydroflouorocarbon (HFC) or any perfluorocarbon (PFC).

[(48)] (50) “Hazardous air pollutant,” except as otherwise provided in section 22a-174-3a of the Regulations of Connecticut State Agencies, means a substance listed in section 22a-174-29 of the Regulations of Connecticut State Agencies.

[(49)] (51) “Hazard limiting value” or “HLV” means the highest acceptable concentration of a hazardous air pollutant in the ambient air, pursuant to section 22a-174-29 of the Regulations of Connecticut State Agencies. The primary use of this term is in the derivation of the maximum allowable stack concentration for a source.

[(50)] (52) “Heat input” means the total gross calorific value of all fuels burned, measured in BTU by ASTM Method D2015-66, D240-64, or D1826-64, using the highest heating value of each fuel.

[(51)] (53) “Incinerator” means any device, apparatus, equipment, slab, or structure used for destroying, reducing, or salvaging, by fire or heat, any material or substance including, but not limited to, refuse, rubbish, garbage, trade waste, debris or scrap; or facilities for cremating human or animal remains provided that, for the purposes of this definition, sources primarily combusting the following used oil types are not incinerators:

- (A) Used oil meeting the specifications of 40 CFR 279.11; or
- (B) Used oil burned in space heaters meeting the requirements of 40 CFR 279.23.

[(52)] (54) “Indian governing body” has the same meaning as in 40 CFR 51.166(b)(28).

[(53)] (55) “Indian reservation” means “Indian reservation” as defined in 40 CFR 51.166(b)(27).

[(54)] (56) “Indirect source” means any building, structure, facility installation, or combination thereof, that has or leads to associated activity as a result of which an air pollutant is or may be emitted. Indirect sources include, but are not limited to: shopping centers, sports complexes, drive-in theaters or restaurants, parking lots or garages, residential, commercial, industrial or institutional buildings or developments, amusement parks and other recreational areas, highways, and airports.

[(55)] (57) “Indirect source construction permit” means a permit issued by the commissioner authorizing the construction of an indirect source.

[(56)] (58) “Innovative control technology” means “innovative control technology” as defined in 40 CFR 51.166 (b)(19).

[(57)] (59) “Internal offset” means any federally enforceable reduction of actual emissions from one or more stationary sources on the same premises which are used to offset potential emissions increases from a proposed stationary source on such premises in accordance with the provisions of section 22a-174-3a(l) of the Regulations of Connecticut State Agencies.

[(58)] (60) “LAER” or “Lowest Achievable Emission Rate” means “lowest achievable emission rate” as defined in 40 CFR 51.165(a)(1)(xiii).

[(59)] (61) “Major modification” means “major modification” as defined in 40 CFR 51.165(a)(1)(v), provided that, for the purposes of this definition, the term “significant” has the same meaning as in 40 CFR 51.166(b)(23)(i) and:

- (A) The values for nitrogen oxides as an ozone precursor and volatile organic compounds are each twenty-five (25) tons per year, and
- (B) Asbestos, beryllium and vinyl chloride are excluded.

[(60)] (62) “Major source baseline date” means January 6, 1975 for particulate matter and sulfur dioxide and February 8, 1988 for nitrogen dioxide.

[(61)] (63) “Major stationary source” means “major stationary source” as defined in 40 CFR 51.165(a)(1)(iv), provided that:

- (A) A stationary source that emits or has the potential to emit twenty-five (25) tons per year of volatile organic compounds or nitrogen oxides as an ozone precursor in any severe ozone nonattainment area is a “major stationary source;” and
- (B) A stationary source that emits or has the potential to emit fifty (50) tons per year of volatile organic compounds or nitrogen oxides as an ozone precursor in any serious ozone nonattainment area is a “major stationary source.”

[(62)] (64) “Malfunction” means “malfunction” as defined in 40 CFR 60.2.

[(63)] (65) “MACT” or “Maximum achievable control technology” means a method of achieving an emission limitation or reducing the emission of hazardous air pollutants as determined by the commissioner pursuant to section 22a-174-33(e) of the Regulations of Connecticut State Agencies or by the Administrator pursuant to 40 CFR 63.

[(64)] (66) “Maximum allowable stack concentration” or “MASC” is the maximum allowable concentration of a hazardous air pollutant in the exhaust gas stream at the discharge point of a stationary source under actual operating conditions.

[(65)] (67) “Maximum capacity” means the design maximum hourly capacity of a stationary source or highest demonstrated hourly capacity of a stationary source, whichever is greater, multiplied by 365 days per year and 24 hours per day, or some other time period as may be accepted by the commissioner.

[(66)] (68) “Maximum uncontrolled emissions” means the rate of emissions for a source, determined without the application of air pollution control equipment unless the source is incapable of being operated without the air pollution control equipment, of a particular air pollutant where such rate is calculated using:

- (A) The maximum capacity of the source unless the commissioner determines that the source is physically unable to operate at that capacity or unless the maximum capacity is limited by restrictions on production rates, hours of operation, or types of materials processed, stored or combusted either through permit conditions or other order of the commissioner; and
- (B) Information from the Compilation of Air Pollutant Emission Factors (AP-42) published by the U. S. Environmental Protection Agency, relevant source test data or other information deemed more representative by the commissioner.

[(67)] (69) “Minor permit modification” means a change to a permit that is required for the permittee to lawfully engage in any of the activities or proposed activities at a stationary source as identified in section 22a-174-2a(e) of the Regulations of Connecticut State Agencies.

[(68)] (70) “Minor source” means any stationary source which emits, and has the potential to emit, pollutants at rates or in amounts lower than those specified in subdivision [(61)] (63) of this section.

[(69)] (71) “Minor source baseline date” means June 7, 1988 for particulate matter, December 17, 1984 for sulfur dioxide and June 7, 1988 for nitrogen dioxide.

[(70)] (72) “Mobile source” means a source designed or constructed to move from one location to another during normal operation except portable equipment and includes, but is not limited to, automobiles, buses, trucks, tractors, earth moving equipment, hoists, cranes, aircraft, locomotives operating on rails, vessels for transportation on water, lawnmowers, and other small home appliances.

[(71)] (73) “Modification” or “modified source” means with respect to a stationary source, any physical change or change in the method of operation that would result in an exceedance of the allowable emissions of any individual air pollutant, any increase in the maximum capacity, or any potential emissions of any individual air pollutant not previously emitted, except that:

- (A) Routine maintenance, repair or replacement at a stationary source shall not be considered a physical change; and
- (B) The following shall not be considered a change in the method of operation:
 - (i) any increase in the production rate, if such increase does not exceed the operating design capacity of the affected facility and such increase does not cause or allow an exceedance of the rates or emission limits authorized by a permit, order, or judgment for such a source, or
 - (ii) any increase in hours of operation and such increase does not cause or allow an exceedance of the rates or emissions limits authorized by a permit, order, or judgment for such source.

[(72)] (74) “Monitoring” means any action or procedure that is used to determine actual emissions from a stationary source or compliance with the requirements of any permit, order, statute or regulation.

[(73)] (75) “Net emissions increase” means “net emissions increase” as defined in 40 CFR 51.165 (a)(1)(vi) provided that:

- (A) For the purposes of this definition, the phrase “this section” found in 40 CFR 51.165(a)(1)(vi)(C)(2) refers to sections 22a-174-3a(k) and (l) of the Regulations of Connecticut State Agencies, and
- (B) Any increases or decreases in actual emissions at a stationary source are creditable only if such increases or decreases occurred within the previous five (5) years of the present modification.

[(74)] (76) “Nitrogen oxides” or “NO_x” means the sum of all oxides of nitrogen, expressed as nitrogen dioxide.

[(75)] (77) “Non-attainment” means that the quality of the ambient air, as measured by the commissioner, fails to meet any Ambient Air Quality Standard for a given pollutant for which such standards have been established by the United States Environmental Protection Agency.

[(76)] (78) “Non-attainment air pollutant” means the particular air pollutant for which an area is designated as a non-attainment area, except that volatile organic compounds and nitrogen oxides are non-attainment air pollutants for ozone non-attainment areas.

[(77)] (79) “Non-attainment area” means a geographic area which has been designated as nonattainment pursuant to 40 CFR 81 in accordance with the provisions of 42 USC 7407 (section 107 of the Act).

[(78)] (80) “Non-minor permit modification” means a change to a permit that is required for the permittee to lawfully engage in any of the activities or proposed activities at a stationary source as identified in section 22a-174-2a(d) of the Regulations of Connecticut State Agencies.

[(79)] (81) “Offset fill pipe” means a fill pipe that has bends or angles such that a straight sleeve cannot be installed.

[(80)] (82) “Opacity” means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

[(81)] (83) “Open burning” means the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through a stack or flue.

[(82)] (84) “Operator” means the person or persons who are legally responsible for the operation of a source of air pollution.

[(83)] (85) “Organic compounds” means any chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate.

[(84)] (86) “Particulate matter” or “PM” means any material, except water in uncombined form, that is or has been airborne and exists as a liquid or a solid in the ambient air.

[(85)] (87) “PM 2.5” means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method set forth in 40 CFR 50, Appendix L, and designated as a reference method in accordance with 40 CFR 53 or by an equivalent method approved by the Administrator in accordance with 40 CFR 53.

[(86)] (88) “PM 10” means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method set forth in 40 CFR 50, Appendix M, and designated as a reference method in accordance with 40 CFR 53 or by an equivalent method approved by the Administrator in accordance with 40 CFR 53.

[(87)] (89) “Permit” means any license issued pursuant to Chapter 446c of the Connecticut General Statutes.

[(88)] (90) “Person” means “person” as defined in section 22a-170 of the Connecticut General Statutes.

[(89)] (91) “Potential emissions” or “potential to emit” means the maximum capacity of a stationary source, including all physical and operational limitations, to emit any air pollutant, including fugitive emissions to the extent quantifiable, provided that:

- (A) Any physical limitation on such capacity, not including air pollution control equipment, shall be treated as part of the stationary source as determined by the commissioner or Administrator; and
- (B) Any operational limitation on such capacity, including air pollution control equipment, or a restriction on the hours of operation or on the type or amount of material processed, stored or combusted, shall be treated as part of the stationary source if the limitation or restriction is practicably enforceable.

[(90)] (92) “Practicably enforceable” means:

- (A) Any federally enforceable emission limitation or restriction on potential emissions; or
- (B) Any emission limitation or restriction on the potential emissions set forth in a permit, order, regulation or statute issued or administered by the commissioner, provided such emission limitation or operational restriction:
 - (i) identifies the subject stationary source or category of stationary source,
 - (ii) specifies an emission limitation using a short term emissions rate for such stationary source expressed in pounds per hour, pounds per unit of production or concentration levels sufficient to calculate the actual emissions from such stationary source or specifies an operational restriction for such stationary source such as hours of operation or fuel use restrictions sufficient to calculate the actual emissions from such source,
 - (iii) specifies appropriate monitoring to determine compliance with such limitation or restriction specified in accordance with [subparagraph] subclause (ii) of this [subdivision] subparagraph provided that if a twelve month rolling average is selected, the monitoring shall be CEM or equivalent, and
 - (iv) if an emission limitation or operational restriction is required to demonstrate that a state or federal standard does not apply, such emission limitation or restriction shall be calculated in accordance with [subparagraph] subclause (ii) of this [subdivision] subparagraph and expressed using the shortest technically and economically feasible averaging period, in no case longer than a twelve month rolling average. If a twelve month rolling average is selected, the monitoring shall be CEM or equivalent.

[(91)] (93) “Premises” means the grouping of all stationary sources at any one location and owned or under the control of the same person or persons.

[(92)] (94) “Process changes to control air pollution” means any modification that alters or implements production processes or available methods, including fuel switching, systems, techniques, work practice standards, operational standards or a combination thereof which is designed and implemented for the primary purpose of reducing emissions of air pollutants from a stationary source.

[(93)] (95) “Process source” means any operation, process, or activity except:

- (A) The burning of fuel for indirect heating in which the products of combustion do not come in contact with process material;
- (B) The burning of refuse; and
- (C) The processing of salvageable material by burning.

[(94)] (96) “Reasonably Available Control Technology” or “RACT” means the lowest emission limitation that a particular stationary source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.

[(95)] (97) “Reconstruct” or “reconstruction” means the renovation or re-building of a stationary source in accordance with the provisions of 40 CFR 60.15. A reconstructed stationary source shall be considered a new stationary source. The use of an alternative fuel or raw material by reason of an order in effect pursuant to sections 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974, or superseding legislation, or by reason of a Natural Gas Curtailment Plan pursuant to the Federal Power Act, or by reason of an order or rule pursuant to section 125 of the Clean Air Act, shall not be considered reconstruction.

[(96)] (98) “Region” means a Connecticut intrastate Air Quality Control Region or the Connecticut portion of an interstate Air Quality Control Region as defined by the EPA in 40 CFR 81.

[(97)] (99) “Residual oil” means any fuel oil of No. 4, No. 5, or No. 6 grades, as defined by ASTM D396-09, Standard Specification for Fuel Oils, or the current active version thereof.

[(98)] (100) “Resources recovery facility” means “resources recovery facility” as defined in section 22a-207(9) of the Connecticut General Statutes.

[(99)] (101) “Ringelmann chart” means the chart published and described in the U.S. Bureau of Mines Information Circular 8333.

[(100)] (102) “Secondary emissions” mean “secondary emissions” as defined in 40 CFR 51.165(a)(1)(viii).

[(101)] (103) “Serious non-attainment area for ozone” means all towns within the State of Connecticut, except those towns located in the severe non-attainment area for ozone.

[(102)] (104) “Severe non-attainment area for ozone” means the towns of Bethel, Bridgeport, Bridgewater, Brookfield, Danbury, Darien, Easton, Fairfield, Greenwich, Monroe, New Canaan, New Fairfield, New Milford, Newtown, Norwalk, Redding, Ridgefield, Sherman, Stamford, Stratford, Trumbull, Weston, Westport and Wilton.

[(103)] (105) “Solid waste” means unwanted or discarded materials, including solid, liquid, semisolid, or contained gaseous material.

[(104)] (106) “Source” means any property, real or personal, which emits or may emit any air pollutant.

[(105)] (107) “Stack” means “stack” as defined in 40 CFR 51.100 (ff), provided that stack shall also include a flare.

[(106)] (108) “Standard conditions” means a dry gas temperature of 68 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute (20 degrees C, 760 mmHg).

[(107)] (109) “State” as used in the phrase "any other state" means state, region, territory, commonwealth, military reservation, or Indian reservation.

[(108)] (110) “State implementation plan” or “SIP” means a plan required by section 110 of the Act which has been approved by the Administrator.

[(109)] (111) “Stationary source” means “stationary source” as defined in 40 CFR 51.165(a)(1)(i) and (ii), provided that any portable emissions unit which is moved from site to site but remains stationary during operation is a stationary source.

[(110)] (112) “Stripping facility” means any stationary source, except air pollution control equipment, the primary purpose of which is to remove organic compounds from water, soil or any other material.

[(111)] (113) “Submerged fill pipe” means any fill pipe the discharge opening of which remains entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid.

[(112)] (114) “Subregion” means a subdivision of a Region, as determined by the commissioner.

[(113)] (115) “Tank” means any vessel for containing liquids or gases.

[(114)] (116) “Title V source” means “Title V source” as defined in 22a-174-33 of the Regulations of Connecticut State Agencies.

[(115)] (117) “Throughput” means the rate, by volume or mass, of production in a manufacturing process, where the combined quantities of all materials introduced into the process, excluding air and water, are used to determine such rate.

[(116)] (118) “Total suspended particulate” means particulate matter as measured by the method described in 40 CFR 50, Appendix B.

[(117)] (119) “Unclassifiable area” means a geographic area which has not been designated either as an attainment area or a non-attainment area pursuant to 40 CFR 81 in accordance with the provisions of section 107 of the Clean Air Act.

[(118)] (120) “Volatile organic compound” or “VOC” means “volatile organic compound” as defined in 40 CFR 51.100(s), as amended from time to time.

[(119)] (121) “Waste water separator” means any tank, box, sump, or other container in which any volatile organic compound floating on or entrained or contained in water entering such tank, box, sump, or another container is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.

[(120)] (122) “Watercourse” means “watercourses” as defined in 22a-38(16) of the Connecticut General Statutes.

Sec. 2. Section 22a-174-33(a)(7) of the Regulations of Connecticut State Agencies is amended as follows:

- (7) “Regulated air pollutant” means any of the following:
- (A) Nitrogen oxides or any volatile organic compound;
 - (B) Any pollutant which is a criteria air pollutant as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies;
 - (C) Any pollutant emitted by a stationary source which is subject to any standard of performance for new stationary sources pursuant to 40 CFR 60;
 - (D) Any pollutant from a substance subject to a stratospheric ozone protection requirement pursuant to 40 CFR 82, Subpart A, Appendix A or B;
 - (E) Any pollutant subject to a national emission standard or other requirement pursuant to 40 CFR 63, and emitted by a source in a category listed in the Federal Register in accordance with section 112(e)(3) of the Act;
 - (F) Any pollutant from a stationary source which is subject to any standard or other requirement pursuant to 40 CFR 61; [or]
 - (G) Any pollutant listed in 40 CFR 68[.] ; or
 - (H) Greenhouse gases.

Sec. 3. Section 22a-174-33(a)(10) of the Regulations of Connecticut State Agencies is amended as follows:

- (10) “Title V source” means any premises at, in, or on which any of the following is located:
- (A) Any stationary source subject to 40 CFR 60 or 61;
 - (B) Any stationary source subject to 40 CFR 62, 63 or 68;
 - (C) Any stationary source subject to 40 CFR 72 to 78, inclusive;
 - (D) Any stationary source subject to section 129(e) of the Act;
 - (E) Any one or more stationary sources, which are located on one or more contiguous or adjacent properties under the control of the same person or persons and which in the aggregate emit, or have the potential to emit, including fugitive emissions, ten (10) tons or more per year of any hazardous air pollutant, or twenty-five (25) tons or more per year of any combination of hazardous air pollutants; or
 - (F) Any one or more stationary sources, which are located on one or more contiguous or adjacent properties under the control of the same person or persons and which belong to the same two-digit Standard Industrial Classification code, as published by the United States Office of Management and Budget in the Standard Industrial Classification Manual of 1987, and which in the aggregate emit, or have the potential to emit [air pollutants,] any air pollutant, including fugitive emissions, from those categories of sources listed in [(2)(i) to (xxvii)] subdivision (2) in the definition of “major source” in 40 CFR 70.2 as of August 2, 2010, of:
 - (i) one hundred (100) tons or more per year of any regulated air pollutant that is not a GHG,
 - (ii) fifty (50) tons or more per year of volatile organic compounds or nitrogen oxides in a serious ozone non-attainment area, [or]
 - (iii) twenty-five (25) tons or more per year of volatile organic compounds or nitrogen oxides in a severe ozone non-attainment area[; and] ,_or
 - (iv) 100,000 tons or more per year of GHG (CO₂e basis) and 100 tons or more per year of GHG (mass basis); and
 - (G) Notwithstanding the provisions of subparagraph (F) of this subdivision, any landfill containing only municipal solid waste, as that term is defined in section 22a-207(23) of the Connecticut General Statutes, shall not be considered a Title V source unless such landfill: [is subject to any applicable requirement identified in subparagraph (B) or (D) of this subdivision.]
 - (i) is subject to any applicable requirement identified in subparagraph (B) or (D) of this subdivision, or

- (ii) emits, or has the potential to emit, equal to or greater than:
 - (I) one hundred (100) tons per year of GHG (mass basis), and
 - (II) 100,000 tons per year of GHG (CO₂e basis).

Sec. 4. Section 22a-174-33(d)(1) and (2) of the Regulations of Connecticut State Agencies is amended as follows:

(1) In lieu of requiring an owner or operator of a Title V source described in subsection (a)(10)(E) or (F) of this section to obtain a Title V permit, the commissioner may, by permit or by order, limit all aggregate potential emissions of regulated air pollutants from such premises to less than the following amounts:

- (A) One hundred (100) tons per year of any regulated air pollutant;
- (B) Fifty (50) tons per year of volatile organic compounds or nitrogen oxides, in a serious ozone nonattainment area;
- (C) Twenty-five (25) tons per year of volatile organic compounds or nitrogen oxides, in a severe ozone nonattainment area; [and]
- (D) Ten (10) tons per year of any hazardous air pollutant, twenty-five (25) tons per year of any combination of hazardous air pollutants, or the quantity established by the Administrator pursuant to 40 CFR 63[.] ; or
- (E) 100,000 tons per year of CO₂e.

(2) A permit or order issued pursuant to this subsection shall require the owner or operator of the subject premises to:

- (A) Limit potential emissions at such premises to less than the amounts specified in subparagraphs (A) to [(D)] (E), inclusive, of subdivision (1) of this subsection;
- (B) Conduct monitoring, recordkeeping, or a combination of monitoring and recordkeeping sufficient to ensure compliance with such permit;
- (C) Maintain all records required by such permit or order at the premises for five (5) years after the creation of such records and make such records available, upon request, to the commissioner;
- (D) Submit compliance certifications to the commissioner pursuant to subdivision (q)(2) of this section; and
- (E) Comply with every term, emission limitation, condition, or other requirement of such permit or order, including the requirements that the terms, limitations and conditions of such permit or order are binding and legally enforceable, and that the emissions allowed are quantified.

Sec. 5. Section 22a-174-3a(a)(1) of the Regulations of Connecticut State Agencies is amended as follows:

(1) Applicability. Prior to beginning actual construction of any stationary source or modification not otherwise exempted in accordance with subdivision (2)(A) to (C) of this subsection, the owner or operator shall apply for and obtain a permit to construct and operate under this section for any:

- (A) New major stationary source;
- (B) Major modification;
- (C) New or reconstructed major source of hazardous air pollutants subject to the provisions of subsection (m) of this section;
- (D) New emission unit with potential emissions of fifteen (15) tons or more per year of any individual air pollutant;
- (E) Modification to an existing emission unit which increases potential emissions of any individual air pollutant from such unit by fifteen (15) tons or more per year;
- (F) Stationary source or modification that becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant; [or]
- (G) Incinerator for which construction commenced on or after June 1, 2009, except if such incinerator is used:
 - (i) for the primary purpose of reducing, controlling or eliminating air pollution, or
 - (ii) as a solid waste incineration unit subject to an emission guideline issued pursuant to Section 129 of the Act; [.]
- (H) Stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO₂e and one hundred (100) tons per year of greenhouse gases;
- (I) Major stationary source when such major stationary source undertakes a physical change or change in the method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO₂e; or
- (J) Stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO₂e and one hundred (100) tons per year of greenhouse gases, when such stationary source undertakes a physical change or change in the

method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO₂e.

Sec. 6. Section 22a-174-3a(d)(3) of the Regulations of Connecticut State Agencies is amended as follows:

(3) Before issuance of a permit or permit modification, the owner or operator shall demonstrate, to the satisfaction of the commissioner, that, with respect to the construction and operation of the subject stationary source or modification, the owner or operator shall:

- (A) Construct and operate such stationary source or modification in accordance with the permit, and operate such stationary source or modification in accordance with all applicable and relevant emission limitations, statutes, regulations, schedules for stack tests, and other order of the commissioner. In the event a conflict exists between the permit and another state or federally enforceable statute, regulation or order of the commissioner, the most stringent provision shall apply;
- (B) Operate such stationary source or modification without preventing or interfering with the attainment or maintenance of any applicable ambient air quality standards or any Prevention of Significant Deterioration increments under subsection (k) of this section;
- (C) Operate such stationary source or modification without preventing or interfering with the attainment or maintenance of any National Ambient Air Quality Standard in any other state and without interfering with the application of the requirements in any other state's implementation plan, adopted pursuant to section 110 of the Act;
- (D) Operate such stationary source or modification in accordance with all applicable emission standards and standards of performance pursuant to 40 CFR Parts 60, 61, and 63, as may be amended from time to time;
- (E) Install:
 - (i) sampling ports of a size, number and location as the commissioner may reasonably require,
 - (ii) instrumentation to monitor and record emission and other parameter data as the commissioner may require, and
 - (iii) such other sampling and testing facilities as the commissioner may require;
- (F) As the commissioner may require, conduct stack tests at the expense of such owner or operator, in accordance with subsection (e) of this section, and in accordance with permit conditions and methods prescribed by the

commissioner. Such stack tests shall demonstrate, to the commissioner's satisfaction, that the requirements of each and every applicable permit or order of the commissioner for such stationary source or modification are being met and that such stationary source or modification complies with the Regulations of Connecticut State Agencies and federal requirements;

- (G) Pay all fees required by the Department within forty-five (45) days of receipt of a tentative determination of the commissioner;
- (H) Incorporate Best Available Control Technology (BACT), as directed by the commissioner, for greenhouse gases and each [individual] air pollutant listed in Table 3a(k)(1) subject to, and in accordance with, subsection (j) of this section;
- (I) Incorporate the lowest achievable emission rate (LAER), as directed by the commissioner, for each [individual] air pollutant subject to, and in accordance with, subsection (l) of this section;
- (J) Incorporate the maximum available control technology (MACT), as directed by the commissioner, for each [individual] air pollutant subject to, and in accordance with, subsection (m) of this section;
- (K) As required by the commissioner, install monitoring equipment and perform monitoring to demonstrate compliance with any permit provision. Such monitoring may include, but not be limited to, continuous emission monitoring (CEM);
- (L) Provide the commissioner with current information regarding air pollutant emissions from such stationary source or modification, and in accordance with the commissioner's request, submit updated and current information regarding air pollutant emissions from any other stationary sources located on the applicable premises;
- (M) Comply with any applicable maximum allowable stack concentration or other emission limitation of section 22a-174-29 of the Regulations of Connecticut State Agencies, as may be amended;
- (N) Demonstrate that the emission limitation required of such stationary source or modification for the control of any air pollutant shall not be affected by that portion of the stack height of such stationary source or modification that exceeds good engineering practice stack height or by any other dispersion technique;
- (O) Comply with an approved operation and maintenance plan submitted pursuant to subsection (c)(2) of this section;
- (P) Have completed and submitted, on forms prescribed by the commissioner, a pre-inspection questionnaire, if requested to do so by the commissioner, which describes the equipment, processes and materials used;

- (Q) Make the permit available at the subject premises throughout the period that such permit is in effect; and
- (R) Comply with the applicable provisions of this section and any other applicable regulations, permits or orders of the commissioner for such stationary source or modification.

Sec. 7. Section 22a-174-3a(j)(1) of the Regulations of Connecticut State Agencies is amended as follows:

- (1) An owner or operator shall incorporate BACT for:
 - (A) Potential emissions of each [regulated] air pollutant above the significant emission rate thresholds in Table 3a(k) –1 of subsection (k) of this section, from each new major stationary source;
 - (B) Potential emissions of each [regulated] air pollutant above the significant emission rate thresholds in Table 3a(k) -1 of [subsection (k) of] this section, from each major modification. This requirement applies to each individual emission unit that is being modified as part of such major modification;
 - (C) Potential emissions of fifteen (15) tons or more per year of any [individual] air pollutant, from each new emission unit; [and]
 - (D) Potential emissions of fifteen (15) tons or more per year of any [individual] air pollutant, from a modification to each existing emission unit;[.]
 - (E) Potential emissions of 75,000 tons or more per year of CO2e from each new major stationary source;
 - (F) From each new stationary source, potential emissions of 100,000 tons or more per year of CO2e and potential emissions of one hundred (100) tons or more per year of greenhouse gases and potential emissions of each air pollutant above the significant emission rate threshold in Table 3a(k)-1 of this section;
 - (G) Potential emissions of 75,000 tons or more per year of CO2e from each major stationary source that undertakes a physical change or a change in the method of operation;
 - (H) Potential emissions of 75,000 tons or more per year of CO2e from each stationary source that:
 - (i) Undertakes a physical change or a change in the method of operation,
 - (ii) Emits or has the potential to emit equal to or greater than 100,000 tons per year CO2e, and
 - (iii) Emits or has the potential to emit equal to or greater than one hundred (100) tons or more per year of greenhouse gases; or

- (I) Potential emissions of each air pollutant above the significant emission rate thresholds in Table 3a(k)-1 of this section from each stationary source that:
- (i) Undertakes a physical change or a change in the method of operation,
 - (ii) Emits or has the potential to emit equal to or greater than 100,000 tons per year CO₂e, and
 - (iii) Emits or has the potential to emit equal to or greater than one hundred (100) tons or more per year of greenhouse gases; or

Sec. 8. Subdivisions (1) and (2) of section 22a-174-3a(k) of the Regulations of Connecticut State Agencies are amended as follows:

(1) The provisions of this subsection shall apply to the owner or operator of any new: [major stationary source for each criteria air pollutant that is significant from such new major stationary source located in an attainment area or unclassified area for such pollutant.]

- (A) Major stationary source for each air pollutant emitted at a level equal to or greater than the threshold designated in Table 3a(k)-1 from such new major stationary source located in an attainment area or unclassified area for such pollutant; or
- (B) Stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO₂e and one hundred (100) tons per year of greenhouse gases.

(2) The provisions of this subsection shall apply to the owner or operator of any [major modification for each criteria air pollutant from such major modification located in an attainment area or unclassified area for such pollutant, that has]:

- (A) [Actual emissions that are equal to or greater than the significant emission rate thresholds in Table 3a(k)-1 of this subsection; and] Major modification for each air pollutant from such major modification located in an attainment area or unclassified area for such pollutant, that has:
 - (i) Actual emissions that are equal to or greater than the significant emission rate thresholds in Table 3a(k)-1 of this subsection, and
 - (ii) A net emissions increase that is equal to or greater than the significant emission rate thresholds in Table 3a(k)-1 of this subsection;
- (B) [A net emissions increase that is equal to or greater than the significant emission rate thresholds in Table 3a(k)-1 of this subsection.] Major stationary source when such major stationary source undertakes a physical change or change in the method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO₂e; or

- (C) Stationary source that emits, or has the potential to emit, equal to or greater than 100,000 tons per year of CO₂e and one hundred (100) tons per year of greenhouse gases, when such stationary source undertakes a physical change or change in the method of operation that will result in a net emissions increase that is equal to or greater than 75,000 tons per year CO₂e.

Statement of Purpose:

The Department of Environmental Protection (DEP) is proposing this amendment to regulate greenhouse gas emissions in DEP's air quality permitting programs as required by the U.S. Environmental Protection Agency (EPA) in *Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule* (75 FR 31514; June 3, 2010; hereafter, the Tailoring Rule). EPA recently concluded that greenhouse gases constitute air pollutants that endanger the public health and welfare and are subject to regulation under the Clean Air Act. EPA proposed the Tailoring Rule to limit the issuance of air quality permits only to the largest stationary sources of greenhouse gas emissions; such sources include large industrial and educational facilities, large landfills and power plants. Absent the thresholds of the Tailoring Rule, many state permit programs would automatically regulate very small sources of greenhouse gases, because greenhouse gases would be regulated at the emissions thresholds developed for traditional pollutants. Connecticut does not automatically regulate new pollutants, so this amendment is required to provide for the permitting of greenhouse gas emissions.

The amendment consists of the addition of definitions of "greenhouse gases" and "carbon dioxide equivalent emissions" to the air quality regulations plus levels of greenhouse gas emissions that require a source owner to apply for a permit under DEP's new source review prevention of significant deterioration (NSR PSD) and Title V operating permit programs. Beyond the requirement to obtain a permit, the amendment does not include any emissions standards or control requirements for greenhouse gases.

As a result of the amendment, a number of existing sources, which DEP estimates is less than 20, will either need to modify existing permits to include greenhouse gases or obtain new permits based strictly on emissions of greenhouse gases. One or two new businesses may also be required to apply for and obtain an air quality permit based on greenhouse gas emissions, although DEP does not have sufficient information to estimate the number of such new sources. The Tailoring Rule requires that Connecticut adopt the necessary requirements as of January 2, 2011, or EPA will impose the requirements directly on Connecticut sources through a Federal Implementation Plan (FIP). Such a FIP would result in dual permitting by EPA and DEP, which could significantly slow the issuance of permits and modifications and increase costs to Connecticut businesses.