



GOVERNMENT OF PUERTO RICO  
OFFICE OF THE GOVERNOR  
ENVIRONMENTAL QUALITY AREA



Air Quality Area

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Proposed Amendments  
Regulation for the Control of Atmospheric Air Pollution  
**Puerto Rico Tailoring Requirements  
for Greenhouse Gases**

## Introduction

On May 3, 2010 the U.S. Environmental Protection Agency issued a final rule known as Prevention of Significant Deterioration and Title V Greenhouse Gases Tailoring Rule. This rule sets thresholds for greenhouse gases (GHG) emissions that define when permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing facilities.

The final rule “tailors” the requirements of these Clean Air Act permitting programs to limit which facilities will be required to obtain PSD and title V permits. Although emissions thresholds of 100 and 250 tons per year are appropriate for criteria pollutants, without the tailoring rule, these emission thresholds would lead to dramatic increases in number of required permits, and EQB Title V program ability to manage air quality would be severely impaired.

The Environmental Quality Board (EQB) has reviewed the Regulation for the Control of Atmospheric Air Pollution (RCAP) in order to verify if the Rules are consistent with the Tailoring Rule applicability threshold and the ability to issue Title V permits to GHG sources.

EQB determined that Rule 601 (Applicability for Title V Sources) of the RCAP allows EQB to regulate GHG through the Title V permit procedures. Rule 601(a) of the RCAP establishes that the provisions of Part VI for the Commonwealth of Puerto Rico apply to any major source or any source category designated by the Administrator pursuant to 40 CFR Section 70.3. Nevertheless, EQB needs to amend and include definitions to the RCAP to regulate GHG sources.

To comply with the Tailoring Rule requirements, EQB could not adopt the interpretations of the terms *major source* or any of its component terms (*a major stationary source, any air pollutant, or subject to regulation*), or the numerical thresholds without proper amendments to the definitions in the RCAP. The amendments will include the revision to the definitions of *major stationary source, regulated air pollutant or regulated substance, and regulated pollutant (for presumptive fee calculation)*. Also, it is required to define the following terms; *tpy carbon dioxide equivalent, global warming potential, and greenhouse gases*.

## **PROPOSED AMMENDMENT TO RULE 102 OF SIP**

We are revising Rule 102 definitions in order to incorporate the requirements for the regulation of Greenhouse Gases. This is completed according to the rule published by EPA: Prevention of Significant Deterioration and Title V Greenhouse Gases Tailoring Rule. The amendments include the revision of the following definitions: Major Stationary Source, and Regulated Air Pollutant or Regulated Substance. In addition, the following definitions were included: Global Warming Potential (GWP), Greenhouse Gases (GHG) and Tpy Carbon Dioxide Equivalent (CO<sub>2</sub>e).

We are revising the definition of Regulated pollutant for presumptive fee calculation in order to collect fees from the major stationary sources for greenhouse gases. The Prevention of Significant Deterioration and Title V Greenhouse Gases Tailoring Rule published by EPA gives flexibility to the States in how they collect fees, so long as the State covers the Title V program costs.

### **Major Source or Major Stationary Source**

Means any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control)) belonging to a single major industrial grouping and that are described in paragraph (A) or (B) of this definition. For the purposes of defining "major source," a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual.

(A) For the purpose of construction will be defined as:

- (i) **Any** of the following sources which have potential to emit one hundred tons per year or more of any **regulated** air pollutant, from the following types of stationary sources:
  - (1) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input,
  - (2) coal cleaning plants (with thermal dryers),

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- (3) kraft pulp mills,
  - (4) portland cement plants,
  - (5) primary zinc smelters,
  - (6) iron and steel mill plants,
  - (7) primary aluminum ore reduction plants (with thermal dryers),
  - (8) primary copper smelters,
  - (9) municipal incinerators capable of charging more than 250 tons of refuse per day,
  - (10) hydrofluoric acid plants,
  - (11) sulfuric acid plants,
  - (12) nitric acid plants,
  - (13) petroleum refineries,
  - (14) lime plants,
  - (15) phosphate rock processing plants,
  - (16) coke oven batteries,
  - (17) sulfur recovery plants,
  - (18) carbon black plants (furnace process),
  - (19) primary lead smelters,
  - (20) fuel conversion plants,
  - (21) sintering plants,
  - (22) secondary metal production plants,
  - (23) chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140),
  - (24) fossil-fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input,
  - (25) petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels,
  - (26) taconite ore processing plants,
  - (27) glass fiber processing plants,
  - (28) charcoal production plants; and
  - (29) Any other stationary source category regulated under section 111 or 112 of the Act
- (ii) Any other source with the potential to emit two hundred and fifty (250) tons per year or more of any **regulated** air pollutant.

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- (iii) Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (A)(i), as a major stationary source if the change would constitute a major stationary source by itself.
- (iv) A major source that is major for volatile organic compounds or NO<sub>x</sub> shall be considered major for ozone.

(B)- For the purpose of operating a source:

(1) A major source under Section 112 of the Act, is defined as:

- (i) For pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to Section 112(b) of the Act (provided in Appendix A of these Part VI rules), 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as the Administrator may establish by rule (including fugitive emissions of any such pollutant from the source). Notwithstanding the preceding sentence, emissions from any oil gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or
- (ii) For radionuclides, "major source" shall have the meaning specified by the Administrator by rule.

(2) A major stationary source of air pollutants, as defined in Section 302 of the Act, that directly emits or has the potential to emit 100 tpy or more of any regulated air pollutant (including fugitive emissions of any such pollutant from the source). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of Section 302(j) of the Act, unless the source belongs to one of the following categories of stationary source:

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- (1) Coal cleaning plants (with thermal dryers);
  - (2) Kraft pulp mills;
  - (3) Portland cement plants;
  - (4) Primary zinc smelters;
  - (5) Iron and steel mills;
  - (6) Primary aluminum ore reduction plants;
  - (7) Primary copper smelters;
  - (8) Municipal incinerators capable of charging more than 250 tons of refuse per day;
  - (9) Hydrofluoric, sulfuric, or nitric acid plants;
  - (10) Petroleum refineries;
  - (11) Lime plants;
  - (12) Phosphate rock processing plants;
  - (13) Coke oven batteries;
  - (14) Sulfur recovery plants;
  - (15) Carbon black plants (furnace process);
  - (16) Primary lead smelters;
  - (17) Fuel conversion plants;
  - (18) Sintering plants;
  - (19) Secondary metal production plants;
  - (20) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
  - (21) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
  - (22) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
  - (23) Taconite ore processing plants;
  - (24) Glass fiber processing plants;
  - (25) Charcoal production plants;
  - (26) Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; or
  - (27) Any other stationary source category regulated under section 111 or 112 of the Act.
- (3) A major stationary source as defined in Part D of Title I of the Act, including:

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- (i) For ozone non-attainment areas, sources with the potential to emit 100 tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as "marginal" or "moderate," 50 tpy or more in areas classified as "serious," 25 tpy or more in areas classified as "severe," and 10 tpy or more in areas classified as "extreme," (fugitive emissions shall not be considered in determining whether a source is a major source unless the source belongs to one of the stationary source categories listed in paragraph 2 above); except that the references in this paragraph to 100, 50, 25 and 10 tpy of nitrogen oxides shall not apply with respect to any source for which the Administrator has made a finding, under Section 182(f) (1) or (2) of the Act, that requirements under Section 182(f) of the Act do not apply;
- (ii) For ozone transport regions established pursuant to section 184 of the Act, sources with the potential to emit 50 tpy or more of volatile organic compounds;
- (iii) For carbon monoxide non-attainment areas:
  - (A) That are classified as "serious," and
  - (B) in which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the Administrator, sources with the potential to emit 50 tpy or more of carbon monoxide; and
- (iv) For particulate matter (PM-10) non-attainment areas classified as "serious," sources with the potential to emit 70 tpy or more of PM-10, or where applicable a PM-10 precursor.

**Regulated air pollutant or Regulated Substance**

Means, for any air pollutant, that the pollutant is subject to either a provision in the Clean Air Act, or a nationally-applicable regulation codified by the Administrator in Subchapter C of Title 40 of the Code of Federal Regulations (40 CFR), that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity. Except that:

- (A) For the purpose of construction:

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- (1) Greenhouse gases (GHGs), the air pollutant defined in §86.1818–12(a) of 40 CFR as the aggregate group of six greenhouse gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation except as provided in paragraphs (A)(4) through (5).
- (2) For purposes of paragraphs (A)(3) through (4), the term tpy CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) shall represent an amount of GHGs emitted, and shall be computed as follows:
  - (a) Multiplying the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A–1 to subpart A of part 98 of 40 CFR—Global Warming Potentials.
  - (b) Sum the resultant value from paragraph (A)(2)(a) of this section for each gas to compute a tpy CO<sub>2</sub>e.
- (3) Beginning January 2, 2011, the pollutant GHGs is subject to regulation if:
  - (a) The stationary source is a new major stationary source for a regulated air pollutant that is not GHGs, and also will emit or will have the potential to emit 75,000 tpy CO<sub>2</sub>e or more; or
  - (b) The stationary source is an existing major stationary source for a regulated air pollutant that is not GHGs, and also will have an emissions increase of a regulated air pollutant, and an emissions increase of 75,000 tpy CO<sub>2</sub>e or more;
- (4) Beginning July 1, 2011, in addition to the provisions in paragraph (A)(3) of this section, the pollutant GHGs shall also be subject to regulation:
  - (a) At a new stationary source that will emit or have the potential to emit 100,000 tpy CO<sub>2</sub>e; or
  - (b) At an existing stationary source that emits or has the potential to emit 100,000 tpy CO<sub>2</sub>e, when such stationary source undertakes a physical

change or change in the method of operation that will result in an emissions increase of 75,000 tpy CO<sub>2</sub>e or more.

(B) For the purpose of operating a source:

- (1) Greenhouse gases (GHGs), the air pollutant defined in section 86.1818–12(a) of 40 CFR as the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation unless, as of July 1, 2011, the GHG emissions are at a stationary source emitting or having the potential to emit 100,000 tpy CO<sub>2</sub> equivalent emissions.
- (2) The term tpy CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) shall represent an amount of GHGs emitted, and shall be computed by multiplying the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A–1 to subpart A of part 98 of 40 CFR—Global Warming Potentials, and summing the resultant value for each to compute a tpy CO<sub>2</sub>e.

**Regulated pollutant (for presumptive fee calculation)**

Which is used only for purposes of section (b)(2) of Rule 610, means any "regulated air pollutant" except the following:

- (1) Carbon monoxide;
- (2) Any pollutant that is a regulated air pollutant solely because it is a Class I or II substance to a standard promulgated under or established by Title VI of the Act;
- (3) Any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation under Section 112(r) of the Act; or
- (4) Greenhouse gases under 100,000 tpy of CO<sub>2</sub>e.

**Global Warming Potential (GWP)**

means the cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative effects to a reference gas. The global warming potential values are defined in Table A-1 of subpart A of part 98 of Title 40 of the Code of Federal Regulations (40 CFR).

### **Greenhouse Gases (GHG)**

means the aggregate group of six greenhouse gases which are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

### **Tpy Carbon Dioxide Equivalent (CO<sub>2</sub>e)**

shall represent an amount of GHG emitted, and shall be computed by multiplying the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A-1 to subpart A of part 98 of 40 CFR – Global Warming Potentials, and summing the resultant value for each to compute a tpy CO<sub>2</sub>e .