

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
Stationary Sources Program / Air Pollution Control Division

PS Memo 11-02

TO: Stationary Sources Staff, Local Agencies, Regulated Community

FROM: Kirsten King and Roland C. Hea

DATE: March 1, 2011; Update July 22, 2014

RE: Operating Permits and the Greenhouse Gas Tailoring Rule

Update:

Effective Jan. 2, 2011, greenhouse gases became subject to regulation for Prevention of Significant Deterioration (PSD) “anyway” stationary sources. Beginning July 1, 2011, any stationary source with the potential to emit more than 100,000 tons per year of equivalent carbon dioxide (CO₂e) and 100 tons per year of greenhouse gases may be required to obtain a Title V Operating Permit and/or a PSD preconstruction permit. Colorado incorporated the U.S. Environmental Protection Agency’s (EPA) Tailoring Rule revisions into Air Quality Control Commission (AQCC) Regulation 3 on Oct. 21, 2010.

On June 23, 2014, the U.S. Supreme Court issued its decision in *Utility Air Regulatory Group v. EPA* (Case No. 12-1146). The court said EPA may not treat greenhouse gases as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The court also said that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on greenhouse gas emissions based on the application of Best Available Control Technology (BACT).

We and EPA are evaluating the implications of the court’s decision. As we better understand the full impact of the decision on PSD and Title V permitting regulations, we’ll provide relevant guidance and information on GHG permitting requirements through this website.

Background

40 CFR § 70.5(c)(3)(i) and Colorado Regulation No. 3, Part C, § III.C.3.a require that Operating Permit applications must include “all emissions of pollutants for which the source is major, and all emissions of regulated air pollutants.”

The definition of “regulated air pollutants” can be found in § 70.2 and in Colorado Regulation No. 3, Part A, § I.B.37. Neither definition includes Greenhouse Gasses (GHG).

The inclusion of GHG as a pollutant triggering Title V applicability is addressed in Federal Register 75:106 (June 3, 2010) p. 31514. In that rulemaking, the definition of “Subject to Regulation” was added to 40 CFR §70.2. In Colorado Regulation No. 3, that revision is addressed in the definition of major source in Part A, § I.B.25.c. and the definition of subject to regulation in Part A, § I.B.44. The result of the revisions is that a major source for Title V purposes now includes any stationary source that as of July 1, 2011 emits or has the potential to emit 100,000 tpy CO₂ equivalent (CO₂e) emissions **and** 100 tpy total GHG mass emissions from all six GHG pollutants (Note: these are not CO₂e emissions).

Similarly, the definition of “Subject to Regulation” was added to 40 CFR §51.166. In Colorado Regulation No. 3, that revision is addressed in the definition of regulated NSR pollutant in Part D, § II.A.38. and the definition of subject to regulation in Part A, § I.B.44. The result of the revisions is that a major stationary source for New Source Review (NSR) now includes any stationary source that as of July 1, 2011 emits or has the potential to emit 100,000 tpy CO₂ equivalent (CO₂e) emissions **and** 100 tpy (for listed sources) or 250 tpy (for all other sources) total GHG mass emissions from all six GHG pollutants (Note: these are not CO₂e emissions).

Source Obligations

The GHG rules as set forth in the June 3, 2010, Federal Register are implemented in two steps: Step 1 is from January 2, 2011 to June 30, 2011. Step 2 is from July 1, 2011 to June 30, 2013. See the attached Scenarios for additional guidance.

For Operating Permit Application Shield purposes (see Regulation No. 3, Part C, § II.B.), sources who fail to submit the required GHG information (as required in the Scenarios) will not be denied the Shield based solely on that fact.

Title V/PSD GHG Tailoring Rule Scenarios

Step 1 (Permits issued between January 2, 2011 – June 30, 2011)

Note: During this time, no sources would be subject to any Clean Air Act permitting requirements due solely to GHG emissions.

PSD refers to the Prevention of Significant Deterioration program.

BACT refers to Best Available Control Technology.

PTE refers to the Potential to Emit as defined in Regulation No. 3, Part A, § I.B.37.

Existing Facility undergoing a Modification

Scenario #1*

- Current PSD/Title V facility (existing Major Stationary Source) based on non-GHG emissions; and
- Undergoing a PSD major modification (i.e. there is a significant net emissions increase) for a PSD pollutant other than GHG **AND** the project has GHG significant net emissions increase of 75,000 tpy or more of total GHG, on a CO₂e basis and >0 tpy net GHG mass emissions increase (not CO₂e).

Note: Your GHG PTE does not have to be over 100K tpy since under PSD if you are major for one PSD pollutant you are subject to the significance level for all pollutants.

Permit Action

In addition to the criteria pollutant permit action the source will either be subject to GHG BACT or will need to get a GHG synthetic minor permit limit to avoid PSD review for GHG if the permit was not issued prior to January 2, 2011.

Scenario #2*

- Existing minor facility.
- Undergoing a modification which is Major by itself based on non-GHG emissions (i.e. emissions ≥ 250 tpy, or ≥ 100 tpy for listed sources); and
- The project has GHG significant net emissions increase of 75,000 tpy or more of total GHG, on a CO₂e basis and >0 tpy net GHG mass emissions increase (not CO₂e).

Note: Your GHG PTE does not have to be over 100,000 tpy since under PSD if you are major for one PSD pollutant you are subject to the significance level for all pollutants.

Permit Action

In addition to the criteria pollutant permit action the source will either be subject to GHG BACT or will need to get a GHG synthetic minor permit limit to avoid PSD review for GHG if the permit was not issued prior to January 2, 2011.

Scenario #3

- Current Title V facility based on non-GHG emissions; and
- Emits or has the potential to emit GHG emissions of at least 100,000 tpy on a CO₂e basis **and** 100 tpy GHG mass emissions; and
- Has an in-house Title V application for a new emission point or an emissions increase from an existing point, renewal, minor, or significant modification (received prior to Jan. 2, 2011).
- A net emission increase of >75,000 TPY GHG on a CO₂e basis and >0 tpy net GHG mass emissions increase (not CO₂e).
- No major modification for any non-GHG PSD pollutant,

Action required

NONE

New Greenfield Facility

Scenario #1*

- Application in for a new PSD/Title V facility (Greenfield construction of a Major Stationary Source) based on non-GHG emissions; and
- The new facility has GHG PTE of 75,000 tpy or more of total GHG, on a CO₂e basis and >0 tpy net GHG mass emissions increase (not CO₂e).

Note: Your GHG PTE does not have to be over 100,000 tpy since under PSD if you are major for one PSD pollutant you are subject to the significance level for all pollutants.

Permit Action

In addition to the criteria pollutant permit action the source will either be subject to GHG BACT or will need to get a GHG synthetic minor permit limit to avoid PSD review for GHG if the permit was not issued prior to January 2, 2011.

Existing Facility undergoing a Title V only action

Scenario # 1

- Current Title V facility based on non-GHG emissions; and

- Emits or has the potential to emit GHG emissions of at least 100,000 tpy on a CO₂e basis **and** 100 tpy total GHG mass emissions (not CO₂e). ; and
- Submits a Title V application for a new, renewal or modification between Jan 2, 2011 and July 1, 2011
- The permit likely will not be issued until after July 1, 2011

Action Required

The Title V permit application must identify GHG emissions.

Step 2 (Permits issued between July 1, 2011 to June 30, 2013)

The Step 1 scenarios noted with an asterisk * continue to apply.

Existing Facility undergoing a Modification

Scenario #1

- Current major PSD facility (existing Major Stationary Source) based on non-GHG emissions; and
- Undergoing a modification such that the project has a GHG significant net emissions increase of 75,000 tpy or more of total GHG, on a CO₂e basis and >0 tpy net GHG mass emissions increase (not CO₂e).
- There does not have to be a significant net emissions increase of any criteria pollutant.

Note: Your GHG PTE does not have to be over 100K since under PSD if you are major for one PSD pollutant you are subject to the significance level for all pollutants.

Permit Action

Subject to GHG BACT or needs a GHG synthetic minor construction permit limit since the permit will not be issued before July 1, 2011.

Scenario #2

- Existing minor facility; and
- Application in for a modification which is Major by itself based on GHG emissions (i.e. $\geq 100,000$ tpy CO₂e, and 100/250 tpy total GHG mass emissions (not CO₂e).

Permit Action

The source will either be subject to GHG BACT or will need to get a GHG synthetic minor permit limit to avoid PSD review for GHG if the permit is not issued prior to July 1, 2011. Source must submit a Title V permit application within one year of becoming subject to the title V. See also the transitional Title V application discussion under the Major for GHG only scenario below.

New Greenfield Facility

Scenario #1

- Construction permit application in for a new (Greenfield construction) major Title V facility for non-GHG emissions and is minor for PSD for non-GHG emissions; and
- Emits or has the potential to emit GHG emissions of at least 100,000 tpy on a CO₂e basis and 250 tpy (100 tpy for listed sources) total GHG mass emissions (not CO₂e).

Permit Action

Subject to GHG BACT or needs a GHG synthetic minor construction permit limit since the permit will not be issued before July 1, 2011. Will need to apply for a Title V permit one year after becoming subject to the Title V program.

Scenario #2

- Construction permit application in for a new (Greenfield construction) facility; and
- Emits or has the potential to emit GHG emissions of at least 100,000 tpy on a CO₂e basis and 250 tpy (100 tpy for listed sources) total GHG mass emissions (not CO₂e).
- Emission levels of criteria or HAP emissions do not exceed T5 levels.

Permit Action

Subject to GHG BACT or needs a GHG synthetic minor construction permit limit since the permit will not be issued before July 1, 2011.

If a PSD permit is issued (w/GHG BACT) after July 1, 2011, the source will need to submit a Title V permit application within one year of becoming subject to the Title V program.

If source is issued a GHG syn minor permit after July 1, 2011, no Title V permit application is necessary.

Existing Facility undergoing a Title V only action

Scenario #1

- Existing Title V facility based on non-GHG emissions; and
- Emits or has the potential to emit GHG emissions of at least 100,000 tpy on a CO₂e basis and 100 tpy total GHG mass emissions (not CO₂e); and
- Submits a Title V application for new, renewal or modification after July 1, 2011

Action Required

Title V permit application must identify GHG emissions

Existing Facility major for GHG only

Scenario #1

- Existing facility; and
- Emits or has the potential to emit GHG emissions of at least 100,000 tpy on a CO₂e basis and 100 tpy total GHG mass emissions (not CO₂e).
- Emission levels of criteria or HAP emissions do not exceed Title V levels.

Permit Action

Submit a Title V permit application by July 1, 2012 or get a synthetic minor permit by July 1, 2012 for GHG to avoid Title V permitting requirements. Note that if a source chooses to get a synthetic minor permit, but the permit will not issued by July 1, 2012 then they may submit an abbreviated “transitional” Title V application on or before July 1, 2012. This application would be deemed timely but not complete so would not be granted the applications shield (see Regulation No. 3, Part C, § II.B.). However, it would provide protection for the source for enforcement action for failure to submit a Title V application and not having the application shield would only become an issue if their synthetic minor permit was not issued within 18 months of the Title V application due date.