



Implementation of the GHG Tailoring Rule – Regulatory Impacts and Issues

Phase-In Steps: Step 1



- January 2, 2011 to June 30, 2011
- No new permitting actions due solely to GHG emissions during this time period; only sources undertaking permitting actions “anyway” for other pollutants will need to address GHG
 - PSD permitting applicability:
 - “Anyway” sources will be subject to the PSD requirements only if they increase GHG emissions by 75,000 tpy CO₂e or more
 - Title V permitting applicability:
 - Only those sources currently with title V permits, subject to PSD permitting under Step 1 above
- No sources will be subject to Clean Air Act permitting requirements based solely on their GHG emissions

Step 1 (PSD) – Impacts & Issues



- Projects that ARE subject to PSD for criteria pollutants and have PTE CO₂e equal to or greater than 75,000 tpy CO₂e are NOT subject to BACT for GHGs as long as the project receives its construction permit prior to January 2, 2011, regardless of when it begins actual construction (Pre-Step 1)
 - Note: PSD regulations typically allow a source up to 18 months (extensions possible) to “commence construction” of a project after it receives its construction permit.
 - Note: For minor (not subject to PSD) sources, state rules do not have a deadline for sources to “commence construction” of a project after it receives its construction permit.

Phase-In Steps: Step 2 (PSD)



- On and after July 1, 2011...
- Step 1 (“anyway”) sources will continue to be subject to GHG permitting requirements
- Additionally, for projects that begin actual construction after July 1, 2011:
 - New sources that have the potential to emit GHGs at or above 100,000 tpy CO₂e
 - Note: If other Regulated NSR pollutants exceed the PSD significant emission rates, they are also subject to PSD (40 CFR 52.21(b)(49)(v)(a))
 - Modifications at existing sources that have GHG PTE > 100,000 tpy CO₂e at or above 75,000 tpy CO₂e will be subject to PSD GHG permitting requirements
 - Note: If other Regulated NSR pollutants exceed the PSD significant emission rates, they are also subject to PSD (40 CFR 52.21(b)(49)(v)(b))
 - Note: If a source w/ GHG PTE > 100,000 tpy CO₂e has a modification less than 75,000 tpy CO₂e and other Regulated NSR pollutants exceed the PSD significant emission rates, they are NOT subject to PSD (40 CFR 52.21(b)(49)(v)(b))

Where does this “begin actual construction” concept come from?



- 40 CFR 52.21(a)(2)(iii)
 - “No new major stationary source or major modification ...shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements....”
- 40 CFR 52.21(b)(11)
 - “Begin actual construction means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.”
- See Final Tailoring Rule: 75 FR 31527 and 31594

Step 2 (PSD) – Impacts & Issues



- Projects that are NOT subject to PSD for criteria pollutants (NO_x, SO₂, CO, PM/PM₁₀, PM_{2.5}, VOC, lead), but have the PTE CO₂e equal to or greater than 100,000 tpy (or modifications at existing 100,000 tpy CO₂e sources at or above 75,000 tpy) ARE subject to PSD unless they begin actual construction of the project before July 1, 2011.
 - For example, the PSD avoidance permits issued to the small biomass power plants and production facilities are potentially impacted by this.

Non-inclusive List of Permits Potentially Affected by the Step 2 “Begin Actual Construction” Deadline



<u>Plant Name, Parent Company</u>	<u>County</u>	<u>Capacity</u>	<u>Description</u>
Biomass Gas & Electric LLC, Greenleaf Environmental Solutions	Forsyth	32 MW	Woodwaste Gasifier Power Plant
Greenway Renewable Power, LLC, Rollcast Energy	Heard	50 MW	Wood Biomass Power Plant
Plant Carl, Green Energy Partners, LLC	Franklin	25 MW	Wood Biomass/Chicken Litter Power Plant
Piedmont Green Power, Rollcast Energy	Lamar	50 MW	Wood Biomass Power Plant
Bainbridge Power, South Eastern Generation Corp.	Decatur	170 MW	No. 2 Fuel Oil Power Plant
Paul Creek Energy Center, LLC,	Washington	225 MW	3 Simple Cycle Natural Gas Fired CT Power Plant
Fitzgerald Renewable Energy, LLC, Decker Energy	Ben Hill	60 MW	Wood/Biomass Power Plant
Greenway Renewable Power, LLC, Rollcast Energy	Troup	50 MW	Wood/ Biomass Power Plant
United Biomass	Brantley	14 ton/hr	Extruded Wood Brickettes
Wiregrass Plant	Lowndes	45 MW	Wood Biomass Power Plant

BACT for GHGs



- Same as BACT for NO_x, SO₂, PM, VOC, etc.
- “The term ‘best available control technology’ means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this Act emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant....”

Future Training and Guidance for GHGs



- EPA quotes regarding BACT from Final GHG Tailoring Rule:
 - “[W]e recognize the need to develop and issue technical and policy guidance for permitting of GHGs, and we plan to accomplish it through a separate effort that will involve stakeholder input... This includes technical guidance and database tools that EPA anticipates issuing by June 2010, and policy guidance that will be issued by the end of 2010.” [75 FR 31526]
 - “EPA is actively developing BACT policy guidance for GHGs that will undergo notice and comment and will culminate in training courses for ... permitting authorities. The results of all of these efforts will roll out over the remainder of 2010.” [75 FR 31589]

Phase-In Steps: Step 2 (Title V)



- On and after July 1, 2011...
- Title V permitting applicability
 - A GHG emission source (which is not already subject to Title V) will be subject to Title V if it has potential to emit for GHGs of 100,000 tpy or more on a CO₂e basis.
 - New Title V sources must submit application within 1-yr of becoming major source. Application deadline of July 1, 2012 for 100,000 tpy CO₂e sources that are not currently Title V sources.
 - Sources may elect to submit their Title V applications by May 1, 2012 to ensure that they are covered by the Application Shield described in 40 CFR 70.5(a)(2).
 - Sources seeking to avoid being subject to Title V will need to have a synthetic minor permit issued GHGs prior to July 1, 2012. EPD would need an application to be submitted prior to October 1, 2011 in order to meet this deadline.
 - For new major sources that commence operation after July 1, 2011, Title V applications are due within 1-yr of commencing operation.
 - For sources already subject to Title V, we will be asking them to report their GHG PTE (greater than, or less than, 100,000 tpy CO₂e) in any application submitted after July 1, 2011.
 - Mandatory GHG Reporting Rule is not an applicable requirement for Title V purposes

Phase-In Steps: Step 3



- The rule establishes an enforceable commitment to complete another rulemaking no later than July 1, 2012.
 - EPA will consider, during the implementation of step 2, whether it will be possible to administer GHG permitting programs for additional sources.
 - EPA will establish that step 3 would take effect on July 1, 2013.
- Step 3, if different from step 2, will not require permitting of sources with GHG emissions below 50,000 tpy CO₂e
- EPA commits to explore a wide range of streamlining options during step 3 proposal
- EPA plans to solicit comment on a permanent exclusion of certain sources from PSD, Title V or both
- NOTE: All this is contingent upon EPA completing this additional rulemaking.

Phase-in Steps: Further Action



- EPA committed to not require permits for smaller sources (below 50,000 tpy CO₂e) until April 30, 2016 or later
- The rule establishes an enforceable commitment for EPA to complete a study within 5 years projecting the administrative burdens that remain for small sources after EPA has had time to develop (and states have had time to adopt) streamlining measures to reduce the permitting burden for such sources
- EPA will use this study to serve as the basis for an additional rulemaking that would take further action to address small sources, as appropriate. EPA is making an enforceable commitment to complete this rulemaking by April 30, 2016
- EPA plans to solicit comment on a permanent exclusion of certain sources from PSD, Title V or both.
- NOTE: All this is contingent upon EPA completing this additional rulemaking.

Other Regulatory Impacts



- So far, attention has been focused on PSD and Title V regulations.
- Need to evaluate whether or not other changes to Georgia EPD's regulations are necessary.
 - SIP Permit exemptions [391-3-1-.03(6)] for GHG emissions?
 - Permit by Rule categories [391-3-1-.03(11)] updated to account for GHG emissions?
 - Definitions [391-3-1-.01]?
 - Provisions [391-3-1-.02] for projects not subject to PSD?
- Besides the regulations, other documents may need revision such as applications and guidance documents (i.e. EPD's Potential to Emit Guidance document)

Key Dates to Remember



- January 2, 2011 – Step 1 begins
- January 2, 2011 – Construction permit applications (including any pending construction permit applications) begin including GHG PTE if the project would exceed PTE of 75,000 tpy CO₂e
- July 1, 2011 – Step 2 begins
- July 1, 2011 - Existing Title V sources to start reporting GHG PTE in their Title V applications (only if they were submitting an application anyway)
- October 1, 2011 – Deadline for sources wanting to avoid Title V to submit their SIP Synthetic Minor applications
- May 1, 2012 – New Title V Sources may elect to submit their initial Title V applications 60 days early in order to ensure Application Shield coverage
- July 1, 2012 – Deadline for new (due to GHGs) Title V sources to submit their Title V applications