Summary of Greenhouse Gas Rules

The Air Resources Division (ARD) amended Env-A 101, Definitions and Env-A 600, Statewide Permit System, effective December 21, 2010. These amendments are intended to address recent changes made by the US Environmental Protection Agency (EPA) that establish permitting requirements for greenhouse gas emissions under the Prevention of Significant Deterioration (PSD) and Title V permitting programs.

Background

On June 3, 2010, EPA finalized a rule that will regulate greenhouse gas (GHG) emissions under the PSD and Title V permitting programs (www.epa.gov/nsr/ghgpermitting.html). New Hampshire has EPA-approved PSD and Title V permitting programs, so the DES is responsible for issuing PSD permits and Title V permits for major stationary sources in the state.

Currently, the PSD major source threshold is either 100 or 250 tons per year (tpy), depending on the type of regulated source. For the Title V program, the major source threshold is 100 tpy for criteria air pollutants. The current thresholds are problematic in the context of regulating GHGs, which differ from most criteria pollutants, as they are emitted at much higher quantities. Under the current PSD program, any increase (i.e., more than one pound) of a GHG resulting from a proposed modification would trigger the major modification provisions, unless a “significant” net increase threshold is established for a regulated pollutant. As the EPA noted in the final rule for GHGs, if it strictly applied these statutory PSD and Title V applicability thresholds to sources of GHG emissions, it would bring tens of thousands of small sources and modifications into the PSD program each year, and millions of small sources into the Title V program.

The EPA has addressed this issue at the federal level by establishing much higher applicability thresholds. However, changes were also required to the current state rules because those rules did not reflect the higher thresholds necessary to effectively regulate GHG emissions under PSD and Title V. Unless the state rules were revised to establish separate, higher thresholds for GHGs, DES would not be able to effectively administer the EPA-approved PSD and Title V programs. The EPA would then assume responsibility for these programs until New Hampshire amended its PSD and Title V programs to address the quantity of affected sources and demonstrates that it has the resources to effectively administer these programs.

The New Hampshire Rule

To address the above concerns, DES adopted the following rule changes:

1) Adopted definition of “greenhouse gases”: DES adopted a definition of “greenhouse gases” in Env-A 101, since this term will be used in establishing new major source and major modification thresholds for GHGs. The definition is consistent with the definition in RSA 125-L, and with the definition recently adopted by EPA.
2) Adopted definition of “carbon dioxide equivalent emissions” (CO₂e): GHGs (as contained in the proposed definition) are comprised of six different gases, each of which exhibits a different global warming potential (GWP). For example, one ton of methane emissions will have a substantially higher GWP than one ton of carbon dioxide emissions. For this reason, a standardized method of expressing GHG emissions is needed for comparison to the respective PSD and Title V program applicability thresholds. The definition is consistent with the EPA definition contained in the final federal rule.

3) Amended current definitions of “major source,” “major stationary source” and “significant”: The ARD proposed changes to the definitions of “major source”, “major stationary source”, and “significant” where they are currently defined in Env-A 101 and Env-A 600. DES revised these definitions to clarify that, for purposes of GHG permitting, the major source threshold for PSD and Title V is 100,000 tpy CO₂e, and the major modification threshold under the PSD program is a net emissions increase of at least 75,000 tpy CO₂e. These thresholds are consistent with those recently promulgated by EPA.

Without the above changes, DES estimates that hundreds (if not thousands) of small sources in New Hampshire would have become regulated as new major sources under the PSD and Title V programs. DES anticipates that the number of major sources in New Hampshire will not change significantly as a result of adopting these amendments.

DES proposed and recently adopted rules

EPA greenhouse gas permitting
www.epa.gov/nsr/ghgpermitting.html