

DATE: November 3, 2011

TO: Affected Air Permit Applicants

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SUBJECT: **Program Management Decision Memorandum: Implementation of U.S. Environmental Protection Agency's Deferral for Carbon Dioxide Emissions From Bioenergy and Other Biogenic Sources Under the Prevention of Significant Deterioration and Title V Programs****PURPOSE**

The purpose of this memorandum is to provide guidance to owners and operators of sources with biogenic Carbon Dioxide (CO₂) emissions, as defined by federal rule, who submit permit applications that include greenhouse gases. This guidance will apply from the date of this memorandum until the Minnesota Pollution Control Agency (MPCA) has promulgated a final permanent rule to implement the U.S. Environmental Protection Agency's (EPA) requirements for permitting greenhouse gases. The MPCA promulgated a temporary rule for permitting greenhouse gases on January 24, 2011. Temporary rules are effective for a period of two years. The MPCA must therefore undertake additional rulemaking to make the temporary rules permanent. The permanent rule will address biogenic CO₂ emissions in addition to permit requirements for other greenhouse gas emission sources.

BACKGROUND

On June 3, 2010, the EPA published the final Prevention of Significant Deterioration (PSD) and Title V Greenhouse Gas (GHG) Tailoring Rule (75 FR 31514). This new rule set permit applicability thresholds for GHG emissions for new and existing industrial facilities. New sources and modifications to existing sources were regulated as of January 2, 2011, and existing sources were regulated as of July 1, 2011. The Tailoring Rule did not provide any exemptions from the permit applicability thresholds for sources of biogenic CO₂ emissions.

Based on comments received and a petition on the subject of biogenic CO₂ emissions, the EPA decided that further analysis of permitting requirements for biogenic CO₂ emissions. Consequently, the EPA decided to defer including biogenic CO₂ emissions in permitting while it studied the question further. Biogenic CO₂ emissions will be excluded when determining whether a stationary source meets the PSD and Title V applicability thresholds. This deferral lasts until July 21, 2014. The EPA elaborates on its deferral, published on July 20, 2011 (76 FR 43492):

This action defers for a period of three (3) years [from the date of publication] the consideration of CO₂ emissions from bioenergy and other biogenic sources (hereinafter referred to as "biogenic CO₂ emissions") when determining whether a stationary source meets the PSD and Title V applicability thresholds, including those for the application of BACT. Stationary sources that combust biomass (or otherwise emit biogenic CO₂ emissions) and construct or modify during the deferral period will avoid the application of PSD to the biogenic CO₂ emissions resulting from those actions. This deferral applies only to biogenic CO₂ emissions and does not affect non-GHG pollutants or other GHGs (e.g., methane (CH₄) and nitrous oxide (N₂O)) emitted from the combustion of biomass fuel. Also, this deferral only pertains to biogenic CO₂ emissions in the PSD and Title V

programs and does not pertain to any other EPA programs such as the GHG Reporting Program.

APPLICABILITY

According to the EPA (76 FR 43493), the following types of sources may now exclude biogenic CO₂ from permit applicability determinations.

Biogenic CO₂ emissions are defined as emissions of CO₂ from a stationary source directly resulting from the combustion or decomposition of biologically-based materials other than fossil fuels and mineral sources of carbon. Examples of “biogenic CO₂ emissions” include, but are not limited to:

- CO₂ generated from the biological decomposition of waste in landfills, wastewater treatment or manure management processes.
- CO₂ from the combustion of biogas collected from biological decomposition of waste in landfills, wastewater treatment or manure management processes.
- CO₂ from fermentation during ethanol production or other industrial fermentation processes.
- CO₂ from combustion of the biological fraction of municipal solid waste or biosolids.
- CO₂ from combustion of the biological fraction of tire-derived fuel.
- CO₂ derived from combustion of biological material, including all types of wood and wood waste, forest residue, and agricultural material.

The main impact is on the calculations of the potential to emit and actual emissions of GHGs. As noted in the quotation under the “Background” section, CO₂ emissions are excluded from potential to emit calculations under the deferral, but methane and nitrous oxide must continue to be included in the calculations. Also, this does not affect any other EPA programs that pertain to stationary sources, such as New Source Performance Standards (NSPS) or the GHG Reporting Program.

MPCA GUIDANCE

The MPCA will implement the EPA rules for biogenic sources for PSD and Title V purposes through permanent rulemaking. This rulemaking is in process and expected to be completed in late 2012.

The MPCA’s temporary rules do not exclude biogenic CO₂. In the interim period until permanent rules are promulgated, the MPCA will implement as a policy the EPA’s regulations for permit applicants, as delineated in 40 CFR § 51.166(b)(48)(ii)(a); 40 CFR § 52.21(b)(49)(ii)(a); 40 CFR § 70.2 – the definition of subject to regulation, paragraph (2); and 40 CFR 40 CFR § 71.2 – the definition of subject to regulation, paragraph (2). These revised regulations revise the definition of subject to regulation to include the following (76 FR 43507):

...prior to July 21, 2014, the mass of the greenhouse gas carbon dioxide shall not include carbon dioxide emissions resulting from the combustion or decomposition of nonfossilized and biodegradable organic material originating from plants, animals, or micro-organisms (including products, by-products, residues and waste from agriculture, forestry and related industries as well as the nonfossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material).