

Fact Sheet - Final Changes for Certain Ethanol Production Facilities Under Three Clean Air Act Permitting Programs

ACTION

- On April 12, 2007, the Environmental Protection Agency (EPA) modified the definition of “chemical process plants” as it applies to three Clean Air Act permitting programs. These three programs are the:
 1. Prevention of Significant Deterioration (PSD) permitting program – a preconstruction permitting program for areas that meet national air quality standards;
 2. Nonattainment New Source Review (NSR) permitting program – a preconstruction permitting program for areas not meeting national air quality standards; and the
 3. Operating Permits (Title V) program - which improves compliance with emission requirements by requiring operating permits that consolidate Clean Air Act requirements such as national emissions standards for toxic air pollutants and standards of performance.
- Ethanol is produced at corn milling facilities for industrial use, use as fuel or for human consumption. Before today’s rule changes, corn milling facilities that produced only ethanol for fuel use, were considered by EPA to be a “chemical process plant” while facilities that produced only ethanol for human consumption were not considered by EPA to be in that category. Generally, a primary difference between production of industrial or fuel ethanol and ethanol for human consumption is that a small amount of gasoline or solvent is added to the fuel ethanol to make it undrinkable and the process does not generally use food-grade equipment. Otherwise, the processes are generally similar.
- This final rule will provide equal treatment for corn milling facilities as well as any facility that produces ethanol by processing carbohydrate feedstock such as corn through a natural fermentation. This rule applies to those facilities regardless of whether the ethanol produced is for human consumption, for fuel, or for an industrial purpose.
- EPA’s air permitting programs rely upon emissions thresholds to determine when program requirements will apply. If a facility has the potential to emit target air pollutants in amounts equal to or greater than the threshold, requirements to obtain permits that outline emissions controls will apply. This final rule establishes the same emissions thresholds for facilities that produce ethanol using corn or other carbohydrate feedstocks – 250 tons per year for the PSD permitting

program. The thresholds for the nonattainment NSR and Title V programs will remain at current levels.

- Under the final rule, permitted emissions limits and other requirements for existing sources remain in effect and enforceable. These limits and other requirements may only be modified through a permit revision demonstrating that modifications meet all requirements that apply to the facility and will not contribute to air quality that would violate the National Ambient Air Quality Standards.
- The final rule also will no longer require facilities that use carbohydrate feedstocks in producing ethanol to count fugitive emissions of criteria pollutants when determining if they meet or exceed the emissions threshold for the title V operating permits, nonattainment NSR, or PSD programs. Fugitive emissions are emissions that do not come from process stacks or vents. This change may allow some plants to expand production.

BACKGROUND

- Congress established the PSD and major NSR programs as part of the 1977 Clean Air Act Amendments. PSD and major NSR are preconstruction permitting programs that assure the goals of attaining and maintaining air quality and providing for economic growth. These goals are achieved through installation of state-of-the-art control technology at new plants and at existing plants that undergo a major modification.
- Congress established the title V operating permits program as part of the 1990 Clean Air Act Amendments. Title V is intended to improve compliance with emission requirements by requiring operating permits that consolidate requirements, requiring annual certifications of compliance, and in some cases creating additional monitoring requirements.
- Under the Clean Air Act, there are two potential thresholds for determining whether a source is a major source under the PSD program -- one threshold is 100 tons per year and the other is 250 tons per year.
- To determine which threshold is relevant for a particular facility under the Clean Air Act permitting programs, EPA determines what source category it belongs to and has used the Standard Industrial Classification (SIC) manual as a guide to make such determinations. If the source falls within one of 27 source categories listed in the PSD regulations, then the 100 tons per year threshold applies. Otherwise, the 250 tons per year threshold is applicable.

- One of the source categories in this list of 27 source categories is chemical process plants. The SIC code for chemical process plants includes establishments primarily engaged in manufacturing ethanol fuel. Where corn milling operations produce ethanol fuel, EPA has historically determined that these operations fall within the source category of chemical process plants. As a result, before today's rule, EPA determined that the 100 tons per year threshold was applicable to corn milling operations that produce fuel. The 250 tons per year threshold was applied by EPA to corn milling operations that produced only products for human consumption.
- Before today's rule, as a chemical process plant, fuel and industrial ethanol facilities were required to include fugitive emissions of criteria pollutants in their emissions threshold totals for determining the applicability of PSD, nonattainment NSR, and operating permit major source thresholds. Today's rule eliminates that requirement for fuel and industrial ethanol produced by processing carbohydrate feedstock through a natural fermentation process.
- The Clean Air Act requires EPA to set [National Ambient Air Quality Standards](#) for six common air pollutants. These commonly found air pollutants (also known as "criteria pollutants") are found all over the United States. They are particle pollution (often referred to as particulate matter), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. These pollutants can harm human health and the environment, and cause property damage.

FOR ADDITIONAL INFORMATION

- The final rule may be found at EPA's Web site at <http://www.epa.gov/nsr>.
- Interested parties can download information on this final action from EPA's Web site at: www.epa.gov/nsr.
- Today's final rule and other background information are also available either electronically at <http://www.regulations.gov>, EPA's electronic public docket and comment system, or in hardcopy at the EPA Docket Center's Public Reading Room.
- The Public Reading Room is located in the EPA Headquarters Library, Room Number 3334 in the EPA West Building, located at 1301 Constitution Ave., NW, Washington, DC. Hours of operation are 8:30 a.m. to 4:30 p.m. eastern standard time, Monday through Friday, excluding Federal holidays.

- Visitors are required to show photographic identification, pass through a metal detector, and sign the EPA visitor log. All visitor materials will be processed through an X-ray machine as well. Visitors will be provided a badge that must be visible at all times.
- Materials for this action can be accessed using Docket ID No. EPA-HQ-OAR-2006-0089.
- For general information about this final rule, contact Joanna Swanson of EPA's Office of Air Quality Planning and Standards at (919) 541-5282, or swanson.joanna@epa.gov