

FACT SHEET

PROPOSED REVISIONS TO NEW SOURCE PERFORMANCE STANDARDS (NSPS) FOR NITRIC ACID PLANTS

ACTION

- On September 30, 2011, the U.S. Environmental Protection Agency (EPA) proposed to strengthen air pollution limits for nitric acid plants. Most nitric acid is used to produce fertilizer.
- The proposed standards, known as New Source Performance Standards (NSPS), would limit emissions of nitrogen oxides (NO_x) from new, modified, and reconstructed nitric acid plants. NO_x is a key ingredient in the formation of ground-level ozone (smog). It also contributes to the formation of fine particle pollution.
- Currently, the NO_x emissions limit is 3.0 pounds of NO_x per ton of nitric acid produced. The Agency is proposing to lower the limit to 0.50 pounds NO_x per ton of nitric acid produced. EPA estimates that this proposed rule would reduce NO_x emissions from these facilities by 2,000 tons per year.
- Nitric acid plants are likely to use selective catalytic reduction (SCR) as the control technology to meet these limits.
- There are an estimated 40 nitric acid plants in the US. This rule would only apply to those facilities if they modified their production facilities. EPA estimates that six new facilities will come on line over the next 5 years and be subject to these requirements.
- EPA will take public comment on the proposal for 45 days following publication in the *Federal Register*. EPA will hold a public hearing, if one is requested.

HEALTH and ENVIRONMENTAL BENEFITS

- The proposed rule would protect human health and the environment by reducing nitrogen oxides (NO_x).
- NO_x can react in the air to form ground-level ozone. Ozone can cause coughing, shortness of breath, aggravate asthma and other chronic lung diseases such as emphysema and bronchitis. Ozone can lead to reduced lung function in both children and adults.
- NO_x can also form fine particle pollution. Exposure to fine particle pollution is associated with significant adverse health effects including, shortness of breath, bronchitis, asthma attacks, heart attacks and premature death. Particle pollution also contributes to haze, which reduces visibility in cities and in our national parks and wilderness areas.

- NO_x also reacts with moisture in the atmosphere to form acid rain, which, when deposited, causes acidification of soil and surface waters.
- EPA estimates the total annual costs to comply with this proposed rule would be \$90,000 for six new sources (\$15,000 per plant). This would have a negligible impact on the industry and consumers.
- Nitric acid production units also emit another nitrogen compound known as nitrous oxide (N₂O), which is considered a greenhouse gas (GHG). EPA is not proposing an N₂O emission standard in this action. Despite limited data from nitric acid facilities in the U.S, EPA encourages owners/operators of nitric acid production units to consider using technologies such as nonselective catalytic reduction, or combinations of controls such as SCR plus secondary or tertiary catalysts, which are effective in controlling both NO_x and N₂O.

BACKGROUND

- The primary purpose of the NSPS is to help areas attain and maintain air quality by ensuring that the best demonstrated emission control technologies are installed as new facilities are updated and existing facilities are updated or expanded, when it is most cost-effective to build in controls. Since 1970, the NSPS have been successful in achieving long-term emissions reductions in numerous industries by assuring that cost-effective controls are installed on new, reconstructed, or modified sources.
- EPA issued the current NSPS for Nitric Acid Plants (40 CFR part 60, Subpart G) in December 1971. Since that time, EPA has completed several reviews of the standards and made only minor changes to testing and monitoring requirements.
- On February 4, 2009, the Sierra Club and Environmental Integrity Project notified the EPA of their intent to sue for the EPA's failure to review the NSPS for Nitric Acid Production. EPA and the litigants agreed to propose this rule by September 30, 2011

FOR MORE INFORMATION

- To download a copy of the final rules, go to the EPA's website at: <http://www.epa.gov/ttn/oarpg>, under Recent Additions.
- Today's proposed rule and other background information are also available either electronically at <http://www.regulations.gov>, the 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, Room Number 3334 in the EPA West Building, located at 1301 Constitution Avenue, 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 proposed action can be accessed using Docket ID No. EPA-HQ-OAR-2010-0750.

- HOW TO COMMENT: Comments should be identified by Docket ID No. EPA-HQ-OAR-2010-0750 and submitted by one of the following methods:
 - Federal eRulemaking Portal (<http://www.regulations.gov>)
 - E-mail (a-and-r-docket@epa.gov)
 - Mail (EPA Docket Center, Environmental Protection Agency; Mailcode 6102T; 1200 Pennsylvania Avenue, NW; Washington, DC 20460), or
 - Hand delivery (EPA Docket Center, Environmental Protection Agency, Room 3334; 1301 Constitution Avenue, NW; Washington, DC).

- For further information about the proposed rule, contact Chuck French of the EPA's Office of Air Quality Planning and Standards (OAQPS) at (919) 541-7912 or french.chuck@epa.gov.