

# Nitric Acid Production



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## Proposed Rule: Mandatory Reporting of Greenhouse Gases

*Under the proposed Mandatory Reporting of Greenhouse Gases (GHGs) rule, owners or operators of facilities that contain nitric acid production (as defined below) would report emissions from nitric acid production processes and all other source categories located at the facility for which methods are defined in the rule. Owners or operators would collect emission data; calculate GHG emissions; and follow the specified procedures for quality assurance, missing data, recordkeeping, and reporting.*

### How Is This Source Category Defined?

Under the proposal, the nitric acid production source category consists of facilities that produce weak nitric acid (30 to 70 percent in strength) using oxidation, condensation, and absorption.

### What GHGs Would Be Reported?

The proposal calls for nitric acid production facilities to report the following emissions:

- Nitrous oxide (N<sub>2</sub>O) process emissions from each nitric acid production line.

In addition, each facility would report GHG emissions for other source categories for which calculation methods are provided in the rule. For example, facilities would report carbon dioxide (CO<sub>2</sub>), N<sub>2</sub>O, and methane (CH<sub>4</sub>) emissions from each stationary combustion unit on site by following the requirements of 40 CFR part 98, subpart C (General Stationary Fuel Combustion Sources). Please refer to the relevant information sheet for a summary of the proposal for calculating and reporting emissions from any other source categories at the facility.

### How Would GHG Emissions Be Calculated?

Under the proposal, N<sub>2</sub>O process emissions for each nitric acid production line would be calculated by multiplying the site-specific emission factor for each production line by the measured annual nitric acid production for that line. The site-specific emission factor for each production line would be determined by an annual performance test to measure N<sub>2</sub>O from the absorber tail gas vent and the production rate for that production line.

When N<sub>2</sub>O abatement devices (such as nonselective catalytic reduction) are used, the N<sub>2</sub>O process emissions would be adjusted for the amount of N<sub>2</sub>O removed using a destruction factor. The destruction factor is the destruction efficiency specified by the abatement device manufacturer.

### What Information Would Be Reported?

In addition to the information required by the General Provisions at 40 CFR 98.3(c), the proposal calls for each nitric acid production line to report the following information:

- Annual nitric acid production capacity.
- Annual nitric acid production.
- Number of operating hours in the calendar year.
- The site-specific emission factor.

- Type of nitric acid process used.
- Type of abatement device used and its destruction efficiency.
- The percent of time the abatement device operated during the calendar year.

## **For More Information**

This series of information sheets is intended to assist reporting facilities/owners in understanding key provisions of the proposed rule. However, these information sheets are not intended to be a substitution for the rule. Visit EPA's Web site ([www.epa.gov/climatechange/emissions/ghgrulemaking.html](http://www.epa.gov/climatechange/emissions/ghgrulemaking.html)) for more information, including the proposed preamble and rule and additional information sheets on specific industries, or go to [www.regulations.gov](http://www.regulations.gov) to access the rulemaking docket (EPA-HQ OAR-2008-0508). For questions that cannot be answered through the Web site or docket, call 1-877-GHG-1188.