



Air Permit Renewal Planned for Hazardous Waste Incinerator

Veolia ES Technical Solutions Air Permit

Sauget, Illinois

Oct. 2014

Public hearing scheduled

EPA will hold a public hearing from 3 to 7 p.m., **Wednesday, Dec. 3**, at:

SIU-Edwardsville
East St. Louis Higher Education
Campus
Room 2002 Building D
601 James R. Thompson Blvd.

If you need special accommodations to attend the hearing, contact Andrea Morgan at morgan.andrea@epa.gov by **Friday, Nov. 21**.

How to comment

You will have an opportunity to make oral comments at the public hearing. You may also send EPA written comments on Veolia's permit renewal until **Friday, Dec. 19**. There are several ways to comment (*see Page 4 for details*).

For more information

You may review the draft permit and a document called a "Statement of Basis," which details reasons for the permit changes. Visit one of these libraries:

Central Library, 1301 Olive St, St. Louis.

East St. Louis Library, 5300 State St., East St. Louis.

Cahokia Public Library, 140 Cahokia Park Drive, East St. Louis.

Facility tours available

Veolia is offering tours of its Sauget facility. To arrange a tour, contact Doug Harris, 618-271-2804.

The U.S. Environmental Protection Agency plans to renew a Clean Air Act operating permit for Veolia ES Technical Solutions LLC. The permit is for a facility at 7 Mobile Ave. in Sauget, Illinois that stores and burns hazardous waste. EPA is accepting public comments on the renewal (*see box, left*).

In addition to emissions limits, work practice requirements, and monitoring and recordkeeping requirements found in Veolia's current permit, the renewed permit would incorporate some changes, including:

- Limits on how much arsenic, lead, mercury and other metals Veolia can put into its incinerators – called the "feedrate limits" or "OPLs" – based on results of Veolia's performance tests in October 2013.
- Enhanced waste analysis procedures to ensure compliance with the metal feedrate limits.
- Temporary (12 months) installation and operation of a special emissions monitoring system on each incinerator to ensure the feedrate limits are adequate to assure compliance with applicable emissions limits.
- New requirements for emergency generators.

Veolia will continue operating under its current permit until EPA either renews the permit or denies the company's application.

Background

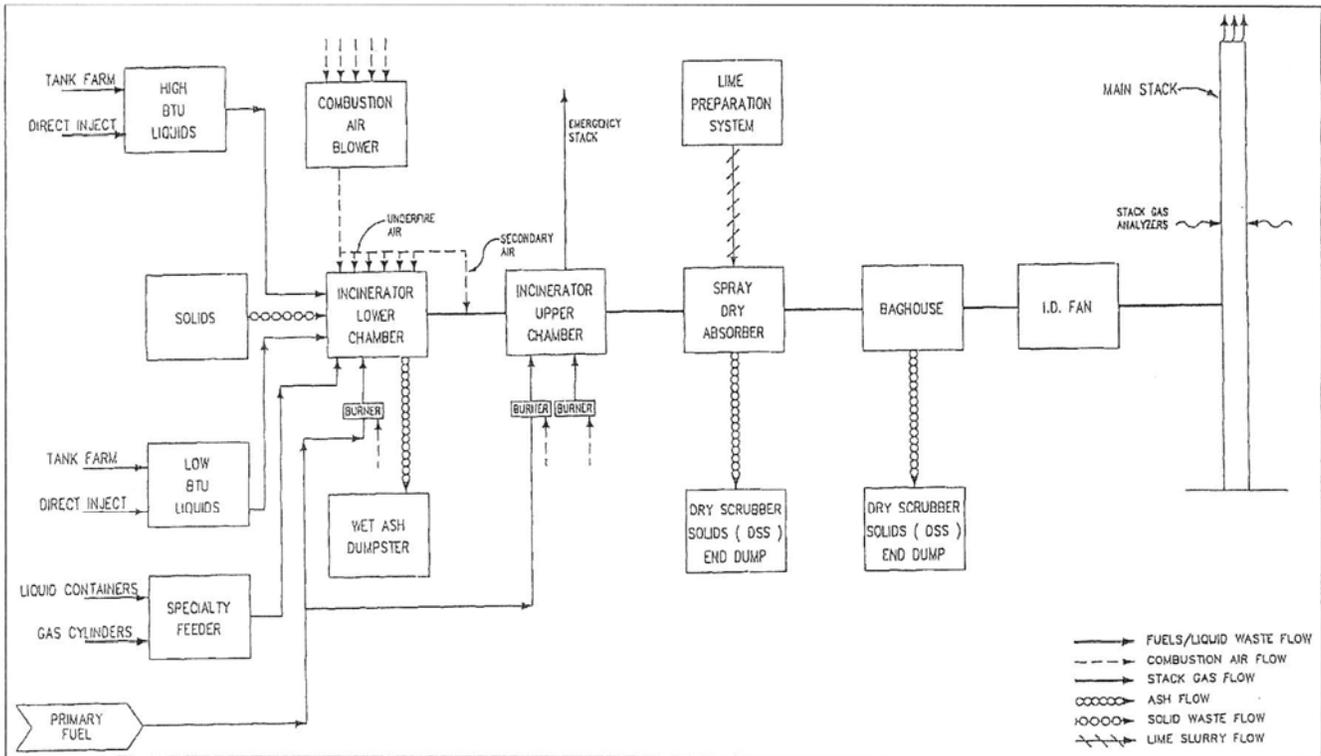
The Clean Air Act requires an operating permit – known as a Title V permit – for facilities that emit or have the capacity to emit large amounts of air pollution and for certain types of facilities that must comply with specific federal standards. Veolia is required to get a Title V permit because it is subject to federal standards for incinerators and because it has the capacity to emit large amounts of pollution. This permit details the amount of pollution the facility can emit and what it must do to control the pollution. A Title V permit is valid for five years and may be renewed in five-year increments.

EPA issued Veolia's initial permit Sept. 12, 2008. In January 2013, EPA began a process to revise the 2008 permit, but later chose to simply incorporate the proposed changes into Veolia's permit renewal.

Pollutants affected by the permit

Veolia's Sauget facility emits a variety of pollutants regulated by EPA, including:

- Carbon monoxide.
- Nitrogen oxides.
- Sulfur dioxide.
- Fine particles, known as particulate matter.
- Volatile organic compounds.
- Mercury.
- Semi-volatile metals such as cadmium and lead.
- Low-volatile metals such as arsenic, beryllium and chromium.
- Dioxins and furans.
- Hydrogen chloride.



This diagram shows the Unit 2 combustion process. The combustion processes of Units 3 and 4 are slightly different, but follow similar principles.

Burning hazardous waste

Hazardous waste – which is toxic, flammable or corrosive and can react with other materials – can be produced by businesses or manufacturing operations. Burning hazardous waste, usually in specially designed incinerators, boilers and industrial furnaces, is one way to safely manage it.

Burning reduces waste volume by converting solids and liquids to ash while destroying toxic organic compounds. Disposing of the ash in a landfill is safer and more efficient than disposal of untreated hazardous waste. The ash from hazardous waste combustion must be tested. If it is still hazardous, it must be treated before it is disposed of in a landfill. However, the incineration of waste can result in emissions of hazardous air pollutants into the air.

Veolia has three hazardous waste combustors: #2, #3, and #4 (#1 was closed in 1992). Veolia receives hazardous waste in gas, liquid and solid forms.

Veolia may store liquid waste in a tank farm prior to burning it. Carbon adsorption units are attached to each tank to help control emissions of gases from the tanks.

Veolia stores bulk solid wastes in a building prior to combustion. The structure is maintained at negative pressure to minimize emissions. Before certain types of

waste are burned they are repackaged from their original containers into more manageable containers.

Veolia burns gaseous wastes in Combustor #2 only.

Each combustor has a primary and secondary combustion chamber that includes natural gas-fired auxiliary burners used during startup, shutdown, and malfunctions, and for additional heat input. The combustors are also connected to spray dryer absorbers and baghouses, which help control air pollution.

Combustor #4 also has a tempering chamber and activated carbon injection to further help control air pollution. Veolia is required to monitor continually for carbon monoxide and hydrogen chloride emissions.

The combustors are augmented by a lime handling system and an ash handling system. The lime handling system feeds lime to the spray dry absorber, as lime is an important material in this air pollution control technology. The ash handling system ensures that ash produced during the combustion process is collected and properly disposed of.

Changes to the permit

A Title V permit is an enforceable compilation of all operating terms, conditions and limitations that apply to an emission source. It is meant to improve compliance

by making clear the Clean Air Act requirements with which the facility must comply. The permitting authority ensures requirements that apply to the facility are included and that there is enough monitoring and recordkeeping required to verify that the source is in compliance with permit requirements. EPA, the Title V permitting authority for the Sauget facility, is proposing to make changes to and renew Veolia's existing permit.

Proposed changes to Veolia's monitoring requirements will verify the facility is complying with the feedrate limits and that the limits will assure compliance with the Clean Air Act (*see "Monitoring," below*).

EPA also removed some requirements that no longer apply. For example, an emission limit previously included in the permit to meet federal standards for the boiler is no longer applicable because EPA has promulgated new federal standards that apply to the boiler. EPA is therefore replacing that emissions limit with the new federal standards for boilers.

Setting the limits

Veolia's permit includes emission limits established by the following regulations or permits:

- National Emission Standards for Hazardous Air Pollutants, or NESHAPs, which are standards promulgated under Section 112 of the Clean Air Act and promulgated under 40 C.F.R. Parts 61 and 63. Veolia is subject to the NESHAP for hazardous waste combustors, 40 C.F.R. Part 63, Subpart EEE.
- New Source Performance Standards, which are emission standards promulgated under the authority of Section 111 of the Clean Air Act and promulgated under 40 C.F.R. Part 60.
- The Illinois State Implementation Plan, state regulations found at Title 35 of the Illinois Administrative Code, which are approved and made federally enforceable by EPA and codified at 40 C.F.R. § 52.720.
- Construction and operating permits issued by the Illinois EPA.

Most requirements in the current permit will not change in the renewal. However, EPA is adding feedrate limits for certain heavy metals and updating other operating parameter limits as required by federal regulations for hazardous waste combustors. These limits were established using the results of Veolia's October 2013 comprehensive performance tests, and Veolia already is required to comply with the limits under the NESHAP for hazardous waste combustors, the "HWC MACT."

Monitoring

In the proposed revisions to the Title V permit, EPA is augmenting Veolia's feedstream analysis procedures to ensure compliance with the metal feedrate limits. The

proposed enhanced waste analysis procedures would require Veolia to:

- Sample and analyze each feedstream accepted for incineration unless specifically exempted.
- Sample and analyze all batched, treated, blended, mixed or otherwise altered waste for mercury and other metals in its final form as feed for incineration prior to incineration, or perform a mass balance calculation to determine concentrations in the final batched, treated, blended, mixed or otherwise altered waste.
- Not batch, treat, blend, mix or otherwise alter feedstreams which are exempt from sampling unless Veolia samples and analyzes the otherwise exempt feedstream.
- Document the concentration of mercury, LVM and SVM in any fuel other than natural gas, including used oil, diesel and alternative fuels fed into the incinerators by either obtaining analytical results from each fuel supplier or conducting representative sampling of each fuel supply and analyzing such samples using appropriate quality assurance/quality control procedures and test methods. Veolia would follow this procedure at least once per year for each fuel supply.
- Document concentrations that fall below the detection limit in non-exempt feedstreams as equal to the detection limit.
- Maintain records of all required feedstream analyses for five years.

EPA also proposes requiring Veolia to temporarily install and operate a continuous emissions monitoring system, or CEMS, on each of its three combustion units. Veolia will operate the CEMSs as parametric monitoring systems to assess whether the operating parameter limits for specific metals are adequate to ensure compliance with federal rules. As parametric monitoring systems, the CEMSs will verify the adequacy of the feedrate limits. The systems will test the air emitted during incineration to determine the amount of mercury, semi-volatile metals, low-volatile metals and other metals emitted, and report results approximately once every 15 minutes. The test results will help Veolia and EPA ensure the feedrate limits are adequate to ensure that the facility can comply with the HWC MACT emissions limits for mercury, semi-volatile metals and low-volatile metals when complying with its metals feedrate limits.

EPA will require Veolia to operate the CEMSs for no less than 12 consecutive months or until EPA has enough information to determine if the proposed feedrate limits are adequate to ensure Veolia complies with the Clean Air Act.

Once EPA has collected sufficient information, EPA will no longer require Veolia to use multi-metal CEMSs.

Public comments encouraged

The public comment period expires on Friday, Dec. 19. All written comments must be postmarked or emailed **no later than Friday, Dec 19**. EPA will consider all comments before making a final decision on the permit renewal. If you submit a written comment, include your name and address and all reasonable references, factual grounds and supporting material. Be sure to note whether you would like to receive notification of EPA's final decision and its responses to comments.

There are several ways to submit written comments:

By visiting www.regulations.gov – put Docket ID No. EPA-R05-OAR-2014-0280 in the search box.

By mail to:

George Czerniak

U.S. EPA Region 5 (A-18J)

77 W. Jackson Blvd.

Chicago, IL 60604

By email to:

John Mooney

mooney.john@epa.gov

Public hearing details

At the Dec. 3 public hearing you may submit a written statement or make an oral statement. There will be a signup sheet at the entrance for those who wish to present oral testimony. Presentations will be given on a first-come-first-served basis. A court reporter will record all oral statements.

Each speaker will be limited to five to ten minutes depending on the number of presenters. The EPA representative may ask clarifying questions during the oral presentations but will not respond to the comments at that time.

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