Multi-point Ground Flares Alternative Means of Emission Limitation

Fact Sheet

Action

- On August 20, 2015, the U.S. Environmental Protection Agency (EPA) took a series of actions related to options for controlling air emissions using flares at chemical production facilities.

- Consistent with the requirements of the Clean Air Act, the EPA is approving the alternative means of emission limitation requests submitted by Dow and ExxonMobil which would allow the companies to build and operate an emissions control technology known as a "multi-point ground flare."

- The EPA has determined that these multi-point ground flares (MPGF) can achieve emission reductions at least as stringent as the existing standards where use of elevated flares as a control strategy is allowed.

- Dow-Texas Operations plans to operate MPGF at their propane dehydrogenation and light hydrocarbons plants in Freeport, TX. ExxonMobil plans to operate MPGF at their olefins plant in Baytown, Texas and their plastics plant in Mont Belvieu, Texas.

- EPA's approval establishes specific operating conditions that Dow and ExxonMobil must follow to ensure the equivalent emissions reduction goals are met.

- In addition, the EPA is requesting comment on an alternative means of emission limitation request from Occidental Chemical Corporation to build and operate MPGF at its Ingleside, Texas, ethylene plant.

- The EPA is also requesting public comment on a framework related to MPGF burner testing and emissions control equivalency demonstrations that would streamline the process of evaluating future similar alternative means of emission limitation requests.

- The EPA will accept comment on the alternative means of emission limitation request from Occidental and the framework for 45 days after a notice is published in the *Federal Register.*

Background

- On February 13, 2015, the EPA requested comment on alternative means of emission limitation requests submitted by Dow and ExxonMobil which would allow the companies to build and MPGF at a number of their chemical production facilities.

- Units at these facilities are subject to a number of National Emission Standards for Hazardous Air Pollutants (NESHAP) and New Source Performance Standards (NSPS), including the Miscellaneous Organic NESHAP (MON), the Ethylene MACT, Synthetic Organic Chemical Manufacturing Industry (SOCMI) NSPS for Distillation, Reactors, Storage Tanks, and Polymer Manufacturing.

- All of these rules point to emission control requirements for flares in the General Provisions. These requirements were developed for elevated flares with a single flare tip.

- The MPGF cannot meet the flare requirements in the General Provisions for exit velocity because they operate at higher pressure and exit velocity.

- MPGF are capable of handling much larger waste gas flows than elevated flares. They operate smokelessly and achieve high combustion efficiencies under certain conditions.

- It is almost impossible to test MPGF because they contain 300 + burners installed in an array pattern that cover the size approximately equivalent to that of a football field. To demonstrate good combustion efficiency at all times, the MPGF burner manufacturers have conducted combustion efficiency testing on the individual burners. Based on these tests, operational limits have been developed that provide for good combustion efficiency.

How to Comment

- Comments, identified by Docket ID No. EPA-HQ-OAR-2014-0738, may be submitted by one of the following methods:
    - Federal eRulemaking Portal: http://www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.
    - Email: A-and-R-Docket@epa.gov. Include Docket ID No. EPA-HQ-OAR-2014-0738 in the subject line of the message.
    - Fax: (202) 566-9744.

- Mail: Environmental Protection Agency, EPA Docket Center (EPA/DC), Mail Code 28221T, Attention: Docket ID No. EPA-HQ-OAR-2014-0738, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Please include a total of two copies. In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn: Desk Officer for EPA, 725 17th Street, NW, Washington, D.C. 20503.
- Hand/Courier Delivery: EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue, NW, Washington, D.C. 20004. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

- For tips on submitting comments, see http://www2.epa.gov/dockets/commenting-epa-dockets

For More Information

- To download this action from the EPA's website, go to http://www.epa.gov/ttn/atw/groundflares/groundflarespg.html.

- Today's action 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 at the EPA Headquarters, room number 3334 in the EPA William Jefferson Clinton West Building, 1301 Constitution Avenue, NW, Washington, D.C. 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 these proposed actions can be accessed using Docket ID No. EPA-HQ-OAR-2014-0738.
- For further information about this action, contact Mr. Andrew Bouchard of the EPA's Office of Air Quality Planning and Standards, at (919) 541-4036 or by email at Bouchard.Andrew@epa.gov.