

PIONEER

NATURAL RESOURCES

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Environmental Protection Agency
EPA Docket Center (EPA/DC)
Attention: Docket ID No. EPA-HQ-OAR-2014-0738
Mailcode 28221T
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Submitted electronically at: www.regulations.gov

Re: Pioneer Natural Resources' Comments on EPA's Receipt of Approval Requests for the Operation of Pressure-Assisted Multi-Point Ground Flare Technology; Request for Comments; 80 Federal Register 8023 (February 13, 2014); Docket ID No. EPA-HQ-OAR-2014-0738

Dear Sir or Madam:

Pioneer Natural Resources USA, Inc. ("Pioneer") greatly appreciates the opportunity to submit comments in response to the Environmental Protection Agency's ("EPA") Request for Comments on Dow and ExxonMobil's Alternative Means of Emission Limitation ("AMEL") requests for multi-point ground flares ("MPGF") during the formal public comment period. Pioneer supports the pending AMEL requests.

Pioneer is a large independent oil and gas exploration and production company, headquartered in Dallas, Texas. The company employs approximately 4,000 people and produces approximately 180,000 barrels of oil equivalent per day. Pioneer is the largest operator in the Spraberry/Wolfcamp oil field in West Texas and is one of the most active drillers there and in the South Texas Eagle Ford Shale play. Complementing these areas, Pioneer has operations in the Edwards trend area and the West Panhandle gas field located in Texas. Pioneer also has exploration, development, and oil and gas production activities in the Raton gas field located in southern Colorado.

In some of its large and complex facilities in its South Texas Eagle Ford play, Pioneer currently operates sonic flares manufactured by GBA Corona. As EPA acknowledges, pressure assisted flares are also known as sonic flares because the exit velocity during periods of high-pressure

feeds is at sonic velocities.¹ Pioneer is therefore very familiar with the technologies proposed in the AMEL requests as well as the characteristic of sonic flares having velocities greater than those set in 40 CFR Parts 60 and 63, and EPA's resulting concerns.

Pioneer offers the following data and analysis to assist in the evaluation of the AMEL's in question, as well as to prompt a rule revision or at least guidance that would allow the use of these newer and more technologically-advanced and environmentally-friendly sonic flares in addition to those flares currently allowed. In order to address EPA's concerns with sonic flares, these comments include the manufacturer-provided technical points as well.

Pioneer understands that EPA's primary concerns are flame instability, flame liftoff, and/or flameout at the high velocities. Though Pioneer agrees that these concerns have some merit for high velocity sonic flares that would exceed the existing tip velocity requirements of 40 CFR §60.18 and 40 CFR §63.11(b), Pioneer has experience with several sonic flare installations which do not inherently result in potential for flameout and/or degraded combustion. Further, Pioneer strongly contends that high pressure sonic flares, including MPGFs, can be designed such that combustion efficiency is improved and potential risk of flame instability is mitigated. Based on Pioneer's operational knowledge of sonic flares in its operations, as well as recent technical discussions with GBA Corona, Pioneer supports the approval of the AMEL applications for use of MPGFs.

As mentioned above, Pioneer operates GBA Corona's "Corona Sonic Flare" (CSF) at several large and complex Eagle Ford facilities to control a high BTU hydrocarbon gas stream (> 1300 BTU/SCF) which is routed to flare during maintenance, startup, and shutdown (MSS) and emergency situations. Multiple flare designs experienced issues in achieving smokeless combustion for our applications. However, the GBA Corona CSF flares have been able to achieve smokeless combustion since installation by virtue of their sonic velocities. As may be the case with Dow and ExxonMobil's MPGF's, the high pressure sonic flares use high gas velocity to increase momentum entraining large quantities of air. Pioneer has operated five of these sonic flares since 2012 and not a single flameout event has occurred in that time period.

There are certain potential environmental benefits of sonic flares worth noting. Sonic flares have less radiation and therefore, a reduced boom length/stack height; they generally will have less emissions because they require less purge and no gas assist and they have efficient combustion; and they also eliminate the need for the utilities required for operating an air blower for an air-assisted flare.

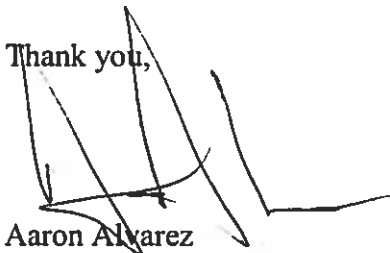
¹ 80 Fed. Reg. 8028

Pioneer understands the reasons behind EPA's concerns about combustibility (net heating value) and flammability of the waste stream as potential causes of flameout and/or less efficient combustion; however, Pioneer is not commenting on the appropriateness of the precise values that EPA is proposing for both applications. Pioneer is, however, asserting that a highly combustible gas will completely mitigate the combustion concerns which serve as the basis for the tip velocity requirements in both §60.18 and §63.11(b).

In conclusion, Pioneer supports the approval of Dow and ExxonMobil's AMEL applications which would allow a flare to operate with tip velocity in excess of those defined in §60.18 and §63.11(b). Furthermore, Pioneer requests that EPA strongly consider revisions to both regulations as they pertain to tip velocity requirements placed on combustion control devices used for NSPS and MACT authorized sources, and perhaps more importantly, as they are currently considered the flare BACT standard by which many state air permitting agencies are restricted in authorizing industrial activity within their jurisdictions. These regulatory tip velocity requirements are outdated, too generic in nature, and significantly hinder the efficiencies and potential environmental benefits achieved by sonic flares and perhaps other emerging technologies.

Pioneer greatly appreciates the opportunity to submit these comments to EPA's above-referenced AMEL Request for Comments. Please contact us if you have any questions or require additional information.

Thank you,



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