

Control of Hazardous Air Pollutants From Mobile Sources

Early Credit Technology Requirement Revision

The U.S. Environmental Protection Agency (EPA) is revising the February 26, 2007 mobile source air toxics rule (MSAT2) requirement regarding the benzene control technologies that qualify a refiner to generate early benzene credits. This action adds another specific benzene control technology, benzene alkylation, to the four operational or technological changes that the 2007 rule currently allows. This action also allows refiners to request EPA approval of other benzene-reducing operational changes or technologies for the purpose of generating early credits.

Background

This action started as a direct final rulemaking (DFRM)[73 FR 13132, March 12, 2008]. We received adverse comment on the DFRM, so it was withdrawn. A parallel Notice of Proposed Rulemaking (NPRM) accompanied the DFRM in case adverse comment was received. This action finalizes the NPRM.

Commenters were primarily concerned that the rule would not result in reduced benzene vehicle emissions, and would increase vehicle aromatics emissions. This action shows that while fuel aromatics and fuel benzene levels both affect vehicle benzene emissions, fuel benzene has more than a 20-fold impact on benzene

emissions from vehicles than other fuel components, including fuel aromatics levels. Alkylation or any other benzene reduction technology reduces benzene vehicle exhaust emissions more than 95%. There is less than a 1% difference among benzene reduction technologies in their effectiveness at reducing benzene vehicle emissions. Also, converting the small amount of benzene in gasoline (1 vol%) to aromatics would increase the fuel aromatics levels minimally (compared to total fuel aromatics of 20-40 vol%), and thus would have a correspondingly minimal effect on vehicle aromatics emissions.

Commenters also opposed the proposed petition process that would allow other future refinery operational changes to be approved after review by EPA. The petition process is appropriate because a refiner must show that the change would reduce fuel benzene levels. The petition process has the added value of being more timely than a rulemaking, which is important because of the time constraints surrounding the application for generating early credits and the early credit generation period itself.

For More Information

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