

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT  
APCD/Stationary Sources Program

**INTER-OFFICE COMMUNICATION**

PS Memo #: 11-05

To: Stationary Sources Program Staff, Local Agencies and Regulated Community

From: Scott Patefield

Date: November 28, 2011

RE: Adoption of Alternative Operating Scenario (AOS) for Natural Gas Fired Reciprocating Internal Combustion Engine (RICE) Permits Not Containing an AOS Provision

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The Division has received an increasing number of requests to allow the replacement of RICE at facilities permitted without an AOS provision for replacement of engines that have broken down or are in need of repair. Since the Division has gone through the Kaizen Process to streamline oil and gas permitting efforts, the Division's RICE permit template contains standard AOS language allowing for operational flexibility to make equipment changes in order to deal with an engine breakdown or periodic maintenance and repair of an existing onsite engine.

In order to alleviate permitting burden and to allow sources with operational flexibility, sources with natural gas RICE permits that do not contain AOS language are permitted to replace natural gas fired RICE following the AOS conditions found in PS Memo 98-006, titled, Natural Gas Fired Reciprocating Internal Combustion Engine (RICE) AOS. For full details of the AOS conditions, see PS Memo 98-006, which contains language detailing the conditions and requirements of replacement RICE. A permit modification to incorporate a replacement engine is not required for sources operating replacement engines when following the AOS conditions found in PS Memo 98-006.

In summary, PS Memo 98-006 states, "The AOS allows a source to either temporarily or permanently replace an existing engine so long as the new engine meets the requirements of the AOS. The replacement of an existing engine with a new engine constitutes construction of a new emissions unit, not "routine replacement" of an existing unit. Ordinarily, the source would have to go through the permitting process and obtain a construction permit or an operating permit modification prior to such construction. The AOS serves as an advanced permit for the new engine, and therefore allows the source to replace an existing engine without undertaking a separate permit review. The AOS cannot be used for additional new emission points for any site. In other words, an engine that is being installed as an entirely new emission point and not as part of an AOS-approved installation related to an existing onsite engine has to go through the regular CP/OP permitting process."

The AOS conditions require a source to perform a portable analyzer test of any (temporary or permanent) replacement engine within seven days of commencing operation of the replacement engine. The results of all tests and the associated calculations required by the AOS shall be submitted to the Division within 30 calendar days of the test or within 60 days of the test if such testing is required to demonstrate compliance with NSPS or MACT requirements.

For permanent engine replacements, an Air Pollutant Emissions Notice (APEN) that includes the specific manufacturer, model and serial number and horsepower of the permanent replacement engine shall be filed with the Division within 14 calendar days of commencing operation of the permanent replacement engine. The APEN shall be accompanied by the appropriate APEN filing fee, a cover letter explaining that the permittee is exercising an alternative operation scenario and is installing a permanent replacement engine, and a copy of the relevant Applicability Reports for the replacement engine. Example Applicability Reports can be found in Appendix A of PS Memo 98-006. This submittal shall be accompanied by a certification from the Responsible Official indicating that “based on the information and belief formed after reasonable inquiry, the statements and information included in the submittal are true, accurate and complete”.

The AOS cannot be used for a permanent engine replacement of a grandfathered or permit exempt engine or an engine that is not subject to emission limits.

This PS Memo does not contain all applicable requirements of the AOS conditions found in PS Memo 98-006, for complete AOS conditions and requirements, see PS Memo 98-006.