



PSD Applicability - Alternative Fuels

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Overview

- PSD (40 CFR 52.21) provides an alternative fuels exemption in the definition of physical or operational change. The exemption applies to a source when:
 - ◆ The source was capable of accommodating [the alt fuel] before January 6, 1975, and
 - ◆ The change would not be prohibited under any federally enforceable permit condition which was established after January 6, 1975.
- It works like the RMRR exemption – just apply it and be happy
- PSD rules do not define what is (or what is not) an alternative fuel
- What happens if a source was built after January, 1975?
- The alt fuel exemption is not contained in the Clean Air Act itself



Background

- ◆ NSPS has a similarly worded exemption. The stated intent of the NSPS exemption was to “eliminate inequities where equipment had been put into partial operation prior to the proposed standards” (36 FR 15,704)
- ◆ Thus, the PSD exemption was designed to eliminate inequities faced by facilities which were designed and constructed to burn more than one fuel, but were not burning all of those fuels as of January 6, 1975



What potentially qualifies as an Alternative Fuel?

- ◆ The rule does not define “Alternative Fuel.”
- ◆ The following can be gleaned from EPA correspondence:
 - The alt fuel exemption is/was NOT intended to apply to the addition of fuel additives (such as various wastes)
 - Blending of primary fuels (such as lignite and sub-bituminous coal) – EPA’s position – Any fuel switching, including blending, is considered a “change in the method of operation.” Thus, the alt fuel exclusion must be carefully analyzed in this case (if the blending has not been specifically authorized by a permit).
 - If a particular fuel did not “exist” (was “not generally available” as a primary fuel) in 1975 (and prior), the exclusion is essentially useless – Petroleum Coke?



What if my current permit is silent on the nature of fuels combusted?

- ◆ For a unit constructed after January, 1975, the alt fuel exemption is not applicable. Since at least as far back as 1996 (first Title V permits), your permit must specifically allow any desired fuels or fuel mixtures – “shredded tire chips” versus TDF?
- ◆ For older units, you may be able use the alt fuels exemption (if applicable) to avoid PSD. There are risks.



For the Older Units – What if physical changes have occurred since 1975?

- ◆ Essentially, the guidance should mirror the crystal clear RMRR guidance ☺.
- ◆ 1981 EPA Guidance – “In order for a plant to be capable of accommodating coal, the company must show not only that the design for the source contemplated the equipment, but also the equipment actually was installed (by when?) and still remains in existence.”
- ◆ 2006 EPA Guidance – “... in order for [Company’s] proposed fuel switch to be exempt from PSD permitting, the source must have been designed and constructed to accommodate the lignite fuel prior to January 6, 1975, and the source must have been continuously capable of accommodating the alternative fuel since before January 6, 1975.”



Related PSD Exemption

- “Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste”
- EPA successfully narrowed this exemption in 1988:
 - ◆ “EPA’s intent in establishing the subject exemption was to address fuel consisting of either the total collected mixture of municipal type waste, i.e., municipal solid waste, or the bulk of such mixture excluding the noncombustible waste fraction, i.e., refuse derived fuel. In the preamble to the 1980 PSD amendments as applying to "fuel derived in whole or in part from municipal solid waste" [45 FR 52698]. The concept of "derived in whole" appears to refer to a fuel prepared from the complete content of municipal solid waste.”
 - ◆ Policy confirmed again in 1992 and 1996 – TDF does not qualify for this particular exemption. It is not a “MSW” in the PSD world.



One more potentially important point

- Not all fuel conversion projects (which technically fail the exemption) will require new/upgraded emission controls
- For example: An older boiler is and always has been capable of accommodating coal, but coal handling and storage facilities must be added to the site – BACT should only apply to the new equipment (if PSD otherwise applies on a pollutant-by-pollutant basis)