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OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

JUN -5 1991

MEMORANDUM

SUBJECT: Determination on the Regulatory Status of Two Waste Oil,
Management Practices Utilized by Wyoming Coal Companies

TO: Robert L. Duprey, Director
Hazardous Waste Management Division

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste

This memorandum responds to your March 4, 1991 request for regulatory determinations regarding two different scenarios in which waste oil is utilized by Wyoming coal companies. These determinations concern: 1) whether the waste oil is a solid waste when used in certain ways, 2) whether the waste oil is being legitimately recycled (rather than disposed of) when used in these ways, and 3) whether the management of the waste oil is subject to Part 266 Subpart E. Although your memorandum does not specify what type of waste the "waste oil" is, our response assumes it is "used oil." The responses to your questions may change based on what the "waste oil" is. For example, a listed oily waste or an unused off-specification product oil could have a different regulatory status than used oil under the different recycling scenarios you describe.

1. Coal Treating.

In the first scenario, the coal companies mix/spray approximately three gallons of used oil per ton/cubic yard of pea-coal (coal crushed to pea size) during railroad car loading. The used oil is used to suppress coal dust while in transit to power plants and, to a lesser extent, to increase the BTU value of the coal. It is my understanding that this is a standard practice in the coal industry and that the pea-coal is burned as fuel.

Because the used oil is being burned for energy recovery (assuming the oil is a spent material rather than an unused commercial fuel oil product), the used oil is a solid waste (see 40 CFR 261.2(c)(2)). Because the coal/oil is ultimately used as a fuel, the material is subject to regulation as a "used oil" being burned for energy recovery (see 40 CFR Part 266 Subpart E).

The toxicity characteristic and TCLP are not applicable as long as the used oil is legitimately recycled. (See the exemption at Section 261.6(a)(2)(iii)).

Insofar as such use of the used oil is a standard practice within the coal industry, our concerns regarding whether this is a legitimate recycling practice focus on the amounts of used oil being used and on the hazardous constituents contained in the waste oil itself. (If such use was not a standard practice, the Agency would be concerned about the actual use of the waste oil for this purpose.) More specifically, if used oil is used in excess of the amounts necessary (e.g., if the oil leaks out of the railroad cars while in transit), such use could be considered sham recycling, subject to regulation as a hazardous waste management activity if the used oil exhibits a hazardous characteristic.

2. Use in making explosives.

In the second scenario, the used oil is used as an ingredient to produce ANFO (an acronym for an explosive normally made by combining ammonium nitrate and a fuel oil, such as a product #1/#2 diesel oil blend or product #2 diesel oil) that is used to remove overburden/coal from the earth. The key determination is whether such use of the used oil is legitimate recycling (i.e., is the waste oil a legitimate ingredient in the production of ANFO). If the used oil is not a legitimate ingredient, the used oil is a solid waste (and hazardous if it exhibits a characteristic of a hazardous waste), and the use of the used oil to produce the ANFO, as well as the use of the used oil-derived ANFO, would be subject to permitting requirements.

A key factor in evaluating whether the used oil is a legitimate ingredient is a comparison of the constituents found in the used oil to the constituents found in the analogous raw material, i.e. fuel oil. To the extent that there are hazardous constituents in the oil that are not found in the fuel oil (or that are present in the fuel oil, but in significantly lower concentrations), the oil is not a legitimate ingredient in the production of ANFO (unless it can be demonstrated that such hazardous constituents are actually useful in the production of the product or to the product itself). (Note: Other factors to consider include an assessment of: 1) how the oil is managed (i.e., whether the oil is handled in a manner similar to the fuel oil before use and whether it is handled in a manner to prevent release to the environment), 2) whether the oil is as effective as the fuel oil when used as an ingredient in ANFO production (i.e., whether more used oil must be used to replace the fuel oil and whether the waste oil-derived ANFO performs as well as the fuel oil-derived ANFO), and 3) whether excessive amounts of oil are used (i.e., excessive amounts of oil being used could indicate an intent to discard)].

If the used oil is not a legitimate ingredient in the production of ANFO, then it is a solid waste being treated by mixing with ammonium nitrate and the toxicity characteristic is applicable. And, if hazardous, the used oil may be subject to the "open burning and detonation" requirements of 40 CFR 265.382. [Note: Whether the used oil-derived ANFO itself performs as well as the fuel oil-derived ANFO is not the determining factor in considering the regulatory status of the waste oil. In other words, just because a secondary material can be used as an ingredient and still result in a usable product does not, by itself, mean that the secondary material is not a solid waste and nor does it mean, necessarily, that the processing is legitimate recycling. Rather, the determining factors must include the consideration of the constituents in the secondary material and the role these constituents play in the production of the product.]

You mentioned in your letter that the Mine Safety and Health Administration (MSHA) is currently allowing/monitoring this practice at Bridger Coal Company from a health and safety standpoint. It should be noted that although there is agency overlap between EPA and MSHA regarding health, safety and environmental considerations, neither agency's jurisdiction supersedes the other's. For example, if EPA determined that the used oil is a legitimate ingredient in the production of ANFO, this would not absolve the coal company from its regulatory obligations under the MSHA. Likewise, if MSHA grants approval of the use of used oil as an ingredient in ANFO, this does not absolve the company from its regulatory obligations under RCRA. Nonetheless, you may find it useful to share this response with your colleague from MSHA, Mr. Dick Fischer, whom you mention in your letter.

I hope this has helped to resolve the issues you have presented regarding the current regulatory status of used oil used as a dust suppressant in the transportation of pea-coal and as an ingredient in the production of ANFO. As you know, we are currently developing regulations applicable to the management of used oil. If you have any further questions regarding the regulation of used oil or the determination of legitimate vs. sham recycling, your staff should contact Denise Wright (for used oil) or Mitch Kidwell (for recycling) at FTS 475-8551.