



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
SOLID WASTE AND EMERGENCY  
RESPONSE

FEB 8 2007

Mr. Wade Winters, President  
Regulatory Resources, Inc.  
240 Joshua Road  
Kennewick, Washington 99338

Dear Mr. Winters:

Thank you for your December 18, 2000, letter to Ms. Sasseville requesting an interpretation of the RCRA hazardous waste regulations, which reference regulations of the U.S. Department of Transportation (DOT). Your email of June 29, 2006, to David Eberly and Sue Slotnick brought to my attention that the Agency had not responded to your letter. I apologize for the delay in our response.

As you note in your letter, DOT revised and restructured 49 CFR Part 173 in 1990 (55 FR 52617, December 21, 1990) such that the citations to the definitions for a flammable compressed gas, an oxidizer, a forbidden explosive, a Class A explosive, and a Class B explosive contained in the ignitability characteristic (40 CFR 261.21) and the reactivity characteristic (40 CFR 261.23) no longer refer to the correct DOT regulations. The Agency has been aware of this problem and has recently addressed this issue for the ignitability characteristic at 71 FR 40254, July 14, 2006 (see enclosure 1, which contains the appropriate portions of the Federal Register notice in which the obsolete references to the DOT regulations in the ignitability definitions at 40 CFR 261.21 were replaced). The Agency also plans to address this issue for the reactivity characteristic in a future Federal Register notice. For your convenience, the 1980 DOT regulatory language for explosives is reproduced in enclosure 2.

With respect to the specific questions you raised in your letter, our responses are summarized below:

1. If the 40 CFR 261.23(a)(8) reactive criterion is no longer valid because "those referenced DOT regulations cannot be used," why is the Office of Solid Waste maintaining the ignitable gas and oxidizer criteria as is?

Your letter referenced a February 24, 1995, EPA memorandum which you believe withdrew the eighth criterion §261.23(a)(8) under the characteristic of reactivity. It did not. In order to withdraw or revise any regulatory requirement, EPA would have to engage in a rulemaking process, in which public comment was solicited. Therefore, all eight (8) reactivity criteria in 40 CFR 261.23(a) remain in effect.

With respect to references to DOT regulations for an "ignitable compressed gas" and an "oxidizer," as noted above, EPA has revised the regulatory text and replaced the obsolete references to the DOT regulations contained in the definitions for an ignitable compressed gas and an oxidizer, 40 CFR 261.21(a)(3) and 261.21(a)(4), respectively, with the actual language from the referenced sections of the DOT regulations that was published in Title 49 of the CFR at the time of the finalization of the RCRA regulations (1980). The 1980 DOT regulatory language was included in place of the references to the 1980 DOT regulations in order to make it easier for the regulated community to find and apply the definitions of ignitable compressed gas and oxidizer for the purposes of §261.21. The implementation and enforcement of the ignitability characteristic has not changed in any way since the time that it was first promulgated in 1980.

The 1980 DOT definitions for forbidden, Class A, and Class B explosives contain many references to other regulatory sections within the 1980 DOT regulations; it was not feasible to include all of the language for the explosives definitions in 40 CFR 261.23(a)(8) (in place of the references) as was done for the definitions for an ignitable compressed gas and for an oxidizer. At the time that the DOT hazardous materials regulations were revised (1990), DOT included in the new regulations a table that showed the relationship between the old definitions and the new definitions for forbidden, Class A, and Class B explosives. EPA is now preparing a Federal Register notice which will update 40 CFR 261.23(a)(8) based on the table published by DOT.

2. If a generator must use characterization criteria that were last published ten years ago, is the Office of Solid Waste providing the DOT hazardous material regulations classification data for these materials and the test criteria that accompanies the DOT classification determination?

As noted previously, the Agency has already revised the regulatory text for the ignitability characteristics of ignitable compressed gas and oxidizer; these changes were published in the Federal Register at 71 FR 40254 and will be in the Code of Federal Regulations next year. For your convenience, the 1980 DOT regulatory language for a forbidden explosive, a Class A explosive, and a Class B explosive are reproduced in enclosure 2 to this letter. The 1980 DOT regulations for ignitable compressed gas, oxidizer, and explosives are to be relied upon for the purposes of identifying a solid waste as exhibiting these specific hazardous characteristics.

3. If "Yes" to question 2, does the Office of Solid Waste provide the entire list of liquid oxidizing materials from the Hazardous Materials Table in 49 CFR 172.101 since the DOT classification criteria for liquid oxidizers in the 1990 CFR allowed the generator to classify based on analogy with existing liquid oxidizers from the Hazardous Materials Table?

Only the 1980 DOT regulatory definitions specifically cited in the RCRA rules are to be used for the purposes of identifying a hazardous waste. Therefore, the definition of an oxidizer published in 1980 in Title 49 of the CFR should not be used, unless it is cited in the RCRA hazardous waste rules, in identifying a waste as hazardous.

4. If "No" to question 2, how is the generator to obtain the necessary 1990 DOT classification information required by the RCRA regulations for the designation of ignitable gases and oxidizers?

See the response to questions 1 and 2. See also 71 FR 40254.

5. Why and how did the Office of Solid Waste determine that DOT forbidden explosives and former DOT Class A and B explosives were no longer a threat to human health and the environment when managed as waste and disposed?

The 1980 DOT regulations cited in the RCRA reactivity characteristic (forbidden, Class A, and Class B explosives) are still in effect and are reproduced in their entirety in the attachment for your convenience. Thus, the Office of Solid Waste has not determined that such explosives are no longer a threat to human health and the environment when disposed.

Should you need further information about the identification of characteristically hazardous waste, please contact Cathy Davis at (703) 308-7271 or [davis.catherinem@epa.gov](mailto:davis.catherinem@epa.gov).

Sincerely,



Robert Dellinger, Director  
Hazardous Waste Identification Division

Enclosure

December 18, 2000

Ms. Sonya Sasseville  
U.S. EPA  
1200 Pennsylvania Ave., N.W.  
MC 5303W  
Washington, DC 20460

Dear Ms. Sasseville:

Thank you for your attention concerning the following RCRA waste designation dilemma.

Some of the criteria for the designation of ignitable and reactive characteristic wastes refer back to the U.S. Department of Transportation (DOT) Hazardous Materials Regulations (HMRs), 49 CFR 100-180. Specifically these are ignitable gases (40 CFR 261.21(a)(3)) and oxidizers (40 CFR 261.21(a)(4)); and the reactive characteristic concerning forbidden and Class A or B explosives (40 CFR 261.23(a)(8)). Each of these references refers to specific citations in the DOT HMRs.

In 1991, the U.S. DOT adopted major changes to the HMRs (docket HM-181). The revised HMRs made specific changes to material classification for flammable (ignitable) gases, liquid oxidizers, and explosives, including a new regulatory citation for each. Most of the changes, including material classification, became effective by DOT on October 1, 1996.

Inconsistencies exist in the DOT HMR references cited in 40 CFR 261.21(a)(3), 40 CFR 261.21(a)(4), and 40 CFR 261.23(a)(8). For example, the DOT reference for the D001 sub-characteristic oxidizer in 40 CFR 261.21(a)(4) is 49 CFR 173.151. This DOT HMR reference applies to exceptions for shipments of Class 4, Flammable Solids and has no application to the classification of oxidizers.

In a letter from James F. Michael to Lawrence A. Wapensky, February 24, 1995 (Faxback 13735), the Office of Solid Waste states that for the reactive characteristic concerning forbidden and Class A or B explosives (40 CFR 261.23(a)(8)):

"The DOT regulations cited in 261.23(a)(8) have recently been changed and expanded to conform with Department of Defense hazard classes, therefore, presenting difficulties in implementing the Federal regulatory definition of reactivity under RCRA. Until such time that 261.23(a)(8) is updated, those referenced DOT regulations can not be used for determining reactivity. Reactivity determinations should be made using the remaining criteria at 261.23(a)(1) - (7)."

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Regarding the referenced DOT HMR cites in 40 CFR 261.21(a)(3) and (4), no written guidance is available from EPA. However, the RCRA Hotline service provides verbal guidance based on the input received from the Office of Solid Waste. The RCRA Hotline states that the generator must determine the ignitable gas and oxidizer characteristics in 261.21(a)(3) and (4), respectively, based on the DOT HMRs in existence at the time when the HMR citations were valid. In other words, a generator must have available and use the criteria from the 1990 DOT HMR, 49 CFR 100-177, since this is the last time these criteria were published in the CFR.

My questions are:

1. If the 40 CFR 261.23(a)(8) reactive criterion is no longer valid because "those referenced DOT regulations can not be used," why is the Office of Solid Waste maintaining the ignitable gas and oxidizer criteria as is?
2. If a generator must use characterization criteria that were last published ten years ago, is the Office of Solid Waste providing the DOT HMR classification data for these materials and the test criteria that accompanies the DOT classification determination?
3. If "Yes" to question 2, does the Office of Solid Waste provide the entire list of liquid oxidizing materials from the Hazardous Materials Table (HMT) in 49 CFR 172.101 since the DOT classification criteria for liquid oxidizers in the 1990 CFR allowed the generator to classify based on analogy with existing liquid oxidizers from the HMT?
4. If "No" to question 2, how is the generator to obtain the necessary 1990 DOT classification information required by the RCRA regulations for the designation of ignitable gas and oxidizers?
5. Why and how did the Office of Solid Waste determine that DOT forbidden explosives and former DOT Class A and B explosives were no longer a threat to human health and the environment when managed as waste and disposed?

Thank you in advance for your clarification of these questions. I look forward to your reply.

For Regulatory Resources, Inc.,



Wade A. Winters, CET, CHMM  
President

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