



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

MAR 17 2000

Mr. Malcolm G. Maxwell
Technical Manager
A/C Industrial Service
1111 Marauder Street
Chico, California 95973

Ref. No. 99-0300

Dear Mr. Maxwell:

This is in response to your letter dated October 29, 1999, regarding the proper segregation and separation of Class 8 (corrosive liquid) and Division 4.1 (flammable solid) hazardous wastes in lab packs under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180).

Class 8 liquids and Division 4.1 solids may not be loaded, transported, or stored together in the same transport vehicle or storage facility during the course of transportation unless separated in a manner that in the event of leakage from packages, commingling of the hazardous materials will not occur. Class 8 liquids may not be loaded above or adjacent to Class 4 (flammable) materials. However, shippers may load truckload shipments of such materials together when it is known that the mixture of contents would not cause a fire or a dangerous evolution of heat or gas.

The HMR require that separation must be accomplished by some means of physical separation, such as non-permeable barriers, non-reactive freight, or non-combustible, non-reactive absorbents between packages of hazardous materials required to be separated. The provisions for separation can be met by placing barriers (i.e., impediments, obstructions, dividers) between packages inside of the transport vehicle that prevent commingling of materials in the event of leakage from the packages (See § 177.848(e)(3)).

I hope this satisfies your inquiry. If we can be of further assistance, please contact us.

Sincerely,

Delmer F. Billings
Chief, Standards Development
Office of Hazardous Materials Standards



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October 29, 1999

U.S. Department of Transportation
Information Center
400 Seventh Street S.W.
Washington, D.C. 20590

SUBJECT: REQUEST OF GUIDENCE.

Dear Information Center Representative:

A/C Industrial Services Corporation (A/C) is a licensed hazardous waste hauler in the State of California. Recently, one of our drivers was stopped by the California Highway Patrol (CHP) and concluded that A/C was transporting various classes of hazardous waste without the proper segregation. The primary issue was that corrosive liquids (Class 8) were transported in the same freight container with flammable solids (Class 4). While it has not been proven that the class 8 material was transported above or adjacent to a class 4 material, a question did arise that we would appreciate your interpretation.

Does a class 8 (liquid) hazardous waste, packaged as a lab pack (as defined in 49 CFR 173.12) adjacent to a class 4.1 hazardous waste also lab packed meet the intention of appropriate separation with the transporter knowing that the corrosive materials will not cause a fire or a dangerous evolution of gas in accordance with 49 CFR 177.848?

The specific materials involved are wastes related to the illicit manufacture of methamphetamine (A/C is an emergency response contractor to the DEA and California EPA Department of Toxic Substance Control to remove the hazardous wastes associated with its manufacturing process). Often times corrosive materials (both alkaline and acidic) are discovered contaminated with small amounts of red phosphorus (used as a catalyst in the process) that are packaged as a lab pack and transported as a corrosive liquid since it does not meet the definition of any other hazardous class. The class 4.1 material shipped is pure red phosphorus that is also lab packed and even through it is not in liquid form, absorbent is always added to cushion the inner container so that it does not break in the normal course of transportation.

The precise purpose of the lab pack is that in the event the interior containers break, the absorbent (of sufficient quantity) inside the lab pack to absorb all free liquids. The absorbent inside the lab pack acts as separation method, preventing the potential commingling of incompatible materials and waste.

A/C knows the chemical nature of the process and how the corrosive waste was generated, and that the addition of red phosphorus into a corrosive solution will not cause a fire or dangerous evolution of heat or gas.

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This request stems from a call I place to the DOT Information Center this day (about 1:15 p.m. PDT). In talking with the transportation specialist (Debbie), no previous guidance was found and at her suggestion this letter is forwarded to you.

A/C requests a written perspective of this particular circumstance since it can develop in providing hazardous waste removal services to the DEA and local enforcement agencies. If necessary, A/C further requests a transportation variance for this situation if the department determines that a variance is appropriate.

A/C looks forward to your prompt response in this matter. Should you have any additional questions regarding this request, please contact me at your convenience at (530) 343-5488 (telephone) or (530) 343-4356 (fax).

Sincerely,



Malcolm G. Maxwell
Technical Manager

(Sent by facsimile transmission only - no original hard copy will be forwarded)