U.S.Department
of Transportation

**Research and
Special Programs
Administration**

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

JUN 25 1998

Mr. Daniel Schultz, Chief
Department of Environmental Quality
Field Operations Section
Environmental Response Division
Knapps Centre
PO Box 30426
Lansing, MI 48909-7926

Ref. No.: 98-0111

Dear Mr. Schultz:

This is in response to your letter dated May 13, 1998, concerning the applicability of the small quantity exception in 49 CFR 173.4 to soil samples derived from a U.S. Environmental Protection Agency (EPA) sampling technique. Specifically, you ask about EPA's SW-846 Test Method 5035 which calls for the addition of 25 ml of methanol to a 25-gram soil sample and whether the methanol and soil mixture meets the small quantity exception. You also ask if materials packaged under the small quantity exception have a 500 ml weight limitation.

The quantity limitations in § 173.4 are imposed upon the entire contents of each inner receptacle. When classifying the material, the shipper must determine whether the material is a liquid or solid based on the definitions in § 171.8. The 25 ml of liquid methanol added to 25 grams of soil is regulated as one material, not two separate materials. The total quantity of the mixed materials per inner receptacle must not exceed 30 ml for a liquid or 30 grams for a solid. Therefore, if the methanol and soil mixture still meets the definition of a hazardous material and is defined as a liquid, the total volume of material per inner receptacle must not exceed 30 ml to meet the small quantity exception.

173.4

Your second question concerns small quantity package weight limitations. A completed small quantity package must not exceed 29 kg (§ 173.4(a)(8)). However, the Hazardous Materials Regulations (49 CFR Parts 171-185) do not restrict the number of inner receptacles in a small quantity package.

I hope this satisfies your request.

Sincerely,

John A. Gale
Transportation Regulations Specialist
Office of Hazardous Materials Standards

STATE OF MICHIGAN

JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET www.deq.state.mi.us

RUSSELL J. HARDING, Director

REPLY TO:

ENVIRONMENTAL RESPONSE DIVISION
KNAPPS CENTRE
PO BOX 30426
LANSING MI 48909-7926

BAH
File 173.4

May 13, 1998

Edward T. Mazzullo
DHM-10
Director of Hazardous Material Standards
U.S.DOT/RSPA
400 7th Street S.W.
Washington, DC 20590-0001

Dear Mr. Mazzullo:

SUBJECT: Small Quantity Shipping of Environmental Samples

The State of Michigan, Department of Environmental Quality has recently instituted a new U.S. EPA sampling technique for soils contaminated with volatile organic chemicals. The method is SW 846, Method 5035. A question has arisen regarding the applicability of 49 CFR Part 173.4 for the shipping of such samples. In talking with Mr. Michael Stevens of your office, he indicated that you would be able to provide us with a written opinion on the applicability of the regulation to our situation.

The sampling method calls for the addition of 25 ml of methanol (MeOH) to 25 grams of soil. It is our understanding that in order to qualify for the small quantity exemption, we need to ship in individual containers less than 30 ml of a flammable liquid. We also understand that the shipping package cannot contain over 500 ml total of methanol (or a total of 20 samples in a single cooler). Thus, assuming all applicable packaging and shipping requirements were complied with, our samples preserved in methanol could be legally shipped under the small quantity exemption as we do the rest of our environmental samples.

However, a consultant has called us and claimed that DOT in another state has ruled that because the methanol was added to the soil sample, the total volume of material (liquid and solid together) was over the 30 ml limit, which meant the sample no longer fits the definition of a small quantity.

If you would please clarify, as it relates to both the 30ml and 500ml exemptions, whether our understanding is correct, it would be very helpful. If you have any questions about our method or need further clarification, please contact myself or our lead technical contact on the method, Mr. Robert Delaney, at 517-373-7406.

Sincerely,

Daniel Schultz

Daniel Schultz, Chief
Field Operations Section
Environmental Response Division
517-241-7706

cc: Mr. Robert Delaney, MDEQ