U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

APR 13 2001

Ref. No. 01-0036

Mr. Thomas Corbett
New York State Department of
Environmental Conservation
Div. of Solid and Hazardous Materials, Region 9
270 Michigan Avenue
Buffalo, NY 14203-2999

Dear Mr. Corbett:

This is in response to your letter dated January 25, 2001, requesting clarification on the applicability of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to the transport of mercury switches. In your letter you describe automotive mercury switches, each containing less than 1 gram of mercury, packaged in a plastic inner receptacle containing up to 0.98 pounds of mercury (450 switches), further packed in a fiberboard box. Specifically, you ask if automotive mercury switches, packaged in the described configuration are subject to the HMR when transported by highway.

The answer is no. As indicated by the letter "A" in Column 1 of the Hazardous Materials Table (HMT), "Mercury *contained in manufactured articles*", UN 2809, is subject to the HMR when transported by aircraft. It is regulated in other modes, such as by motor vehicle, only when it meets the definition in § 171.8 for a hazardous substance or hazardous waste. Mercury has an RQ of one pound. Therefore, a package containing 0.98 pounds of mercury would not meet the definition of a hazardous substance. Based on the information provided in your letter the switches do not meet the definition of a hazardous substance or hazardous waste and therefore are not subject to the HMR, unless transported by aircraft.

I hope this satisfies your request.

Sincerely,

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

01-0036

173.164

New York State Department of Environmental Conservation
Division of Solid and Hazardous Materials, Region 9
270 Michigan Avenue, Buffalo, New York, 14203-2999
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John P. Cahill
Commissioner

BA 11
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§ 173.164
Applicability
01-0036

January 25, 2001

Mr. Delmer F. Billings
Chief, Regulations Development
Office of Hazardous Materials Standards
U.S. Department of Transportation
400 Seventh Street S.W.
Washington D.C. 20590

Dear Mr. Billings:

This letter is requesting a written confirmation from the Department of Transportation (DOT) on the classification of automotive mercury switches under the Hazardous Materials Regulations (HMR; CFR Parts 171-180). I have made several calls to the DOT telephone hotline where details of proposed switch packaging and transportation were discussed with the hotline technical staff. A confirmation of the determination that the switches are excluded from regulation under (DOT) Regulation 49 CFR 173.164 is requested.

The mercury switches in question are automotive convenience light switches found in end-of-life automobiles. The New York State Department of Environmental Conservation is developing a switch collection program for automotive recycling yards that would allow the yards to use a pre-paid mailer package to ship the switches to a collection/recycling facility. Each yard that will participate in the program and each yard that ships automotive mercury switches to the collection/recycling facility must provide written certification that they are a Conditionally Exempt Small Quantity Generator (CESQG) of hazardous waste.

In conversations with DOT staff, I indicated that the manufacturers specifications and our independent analysis both confirm that automotive mercury switches contain less than 1000 mg per switch. I also stated that the shippers of the switches would be certified as CESQG's and that no hazardous waste manifests are required. The DOT hotline staff indicated that mercury containing devices that have less than1000 mg of mercury are excluded from DOT shipping requirements provided that:

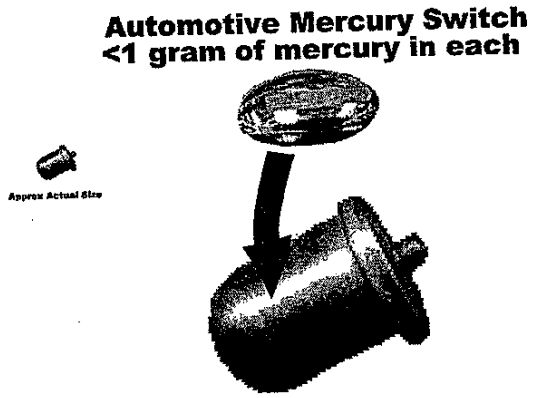
- Each package of the mercury containing devices (each <1000 mg of mercury) must contain <1 lb net weight of mercury,
- Each shipper qualifies as a CESQG of hazardous waste ,
- The exclusion applies only to shipping via highway,

- There is no limit on the number of < 1 lb net mercury packages that may be shipped on the same vehicle,
- The <1 lb net mercury packages may be placed in a larger secondary container provided the inner containers are of sufficient strength to be shipped as individual packages.

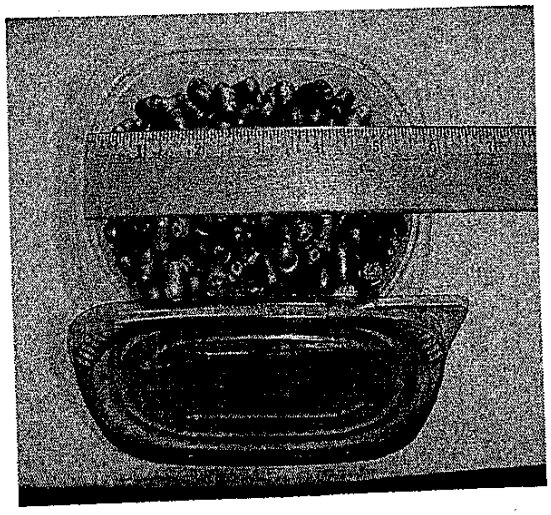
Details of the proposed NYSDEC automotive mercury switch collection are as follows:

- No leaking or damaged switches may be placed in the shipping container; no traces of elemental mercury are allowed.
- Each shipper must include a CESQG certification with each package of switches.
- The container with 450 switches will keep the net weight of mercury in the container below 1 pound.
- The switches will be placed in a zip-lock plastic bag before being placed in the molded plastic container.
- The molded plastic container will be placed inside a standard fiberboard shipping box.
- Each box will have pre-paid shipping via UPS ground to the collection/recycling facility.

The following graphics are supplied to illustrate the automotive mercury switch and part of our proposed packaging:



450 automotive mercury switches (.98 lbs of mercury) in container. Switches will be put in zip-lock plastic bag, placed in the plastic container with lid, and the closed container will be placed into a fiberboard box to make the complete package.



If you have any questions, please contact me at 716/851-7220.

716-851-7255

Sincerely,

Thomas G. Corbett

Thomas Corbett
Environmental Chemist II

TC:lj