U.S. Department
of Transportation
**Research and
Special Programs
Administration**

JUN 4 2002

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

Mr. James R. Price
Senior Environmental Compliance
& Health and Safety Officer
Science Applications International Corporation
10260 Campus Point Drive
M/S B2-M
San Diego, CA 92121

Reference No.: 02-0116

Dear Mr. Price:

This is in response to your letter requesting clarification of the shipping paper and contamination control requirements for radioactive materials under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Your company operates Mobile Vehicle and Cargo Inspection Systems (VACIS) to inspect the contents of trucks, containers, cargo and passenger vehicles for explosive devices and/or contraband. Each Mobile VACIS is equipped with a semi-permanently mounted gauge device (Type A package) containing either a 59 Gbq Cesium-137 or 37 Gbq Cobalt-60 radioactive material sealed source.

Your questions are paraphrased and answered as follows:

Q1. Science Applications International Corporation (SAIC) prepares a shipping paper when the Mobile VACIS first enters a public highway. Can the same shipping paper remain with the vehicle for its lifetime or until the Type A package is reshipped or transferred to another vehicle?

A1. The answer is yes. The same shipping paper may remain with the Mobile VACIS for its lifetime provided the content (including quantity) of the Type A package remains the same or the Type A package is reshipped or transferred to another vehicle.

Q2. Section 173.443(a) requires a determination of the level of non-fixed radioactive contamination. SAIC interprets this to mean that a wipe survey must be performed prior to putting the vehicle into service on a public highway. SAIC would perform subsequent wipe surveys in accordance with the requirements of its Device Registry which requires leak testing prior to initial use and at intervals not to exceed 12 months. The techniques used would be capable of detecting 185 Bq of removable contamination. Additional contamination surveys would not be required each time the truck is driven on a public highway. Would our procedures satisfy the requirements of the HMR?

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173.443

A2. Section 173.443(a) requires the level of non-fixed (removable) radioactive contamination on the external surfaces of a package offered for transportation to be kept as low as reasonably achievable. The HMR require that the non-fixed radiation contamination not exceed the limits set forth in Table 11 and authorize the use of a wipe survey or other assessment method to check for non-fixed radioactive contamination. The HMR do not prescribe surveys at scheduled intervals. However, the shipper should have an assessment methodology in place to ensure compliance whenever the material is in transport.

I hope this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,

Hattie L. Mitchell

Hattie L. Mitchell
Chief, Regulatory Review and Reinvention
Office of Hazardous Materials Standards

Corbin
§ 172.200
§ 173.443 (a)
Shipping Papers/RAM

Science Applications International Corporation
An Employee-Owned Company

April 17, 2002
Transmitted Via Facsimile

02-0116

Mr. Edward T. Mazzullo
Director, Office of Hazardous Material Standards
U.S. DOT/RSPA (DHM-10)
400 7th St. SW
Washington DC 20590-0001

Re: Request for Regulatory Interpretation

Dear Mr. Mazzullo:

Science Applications International Corporation (SAIC) appreciates your assistance in helping us clarify the applicability of the U.S. DOT Hazardous Material Regulations (HMRs) to our Mobile Vehicle and Cargo Inspection System (Mobile VACIS) product.

Mobile VACIS is a truck-mounted gamma-ray imaging system (see picture attached) designed to non-intrusively inspect the contents of trucks, containers, cargo and passenger vehicles for explosive devices and/or contraband. Operators viewing Mobile VACIS radiographic images of scanned cargo are able to quickly and easily identify hidden compartments associated with the transportation of explosives, weapons and other threats. To accomplish this, each Mobile VACIS is equipped with a semi-permanently mounted gauge device (Type A package) containing either a 59 GBq Cesium-137, or a 37 GBq Cobolt-60, radioactive material sealed source. The vehicle with source does not require a hazardous material placard. The Mobile VACIS holds a "Registry of Radioactive Sealed Sources and Devices, Safety Evaluation of Device" (Device Registry; No.: CA0215D103S for the Cs-137 unit and CA0215D107S for the Co-60) issued by the California Department of Health Services, as a U.S. NRC Agreement State, and is distributed to specific licensees. Mobile VACIS customers presently include various U.S. government agencies (U.S. Customs operates several dozen systems) and other non-governmental parties.

SAIC has interpreted the HMRs as being applicable to the Mobile VACIS (equipped with the radioactive material source) whenever it travels in commerce over public roadways, but is seeking your concurrence/clarification on the applicability of certain specific requirements, as follows:

1. Subpart C of 49 CFR Part 172 requires each person who offers a hazardous material for transportation to describe the hazardous material on a shipping paper. SAIC has interpreted this requirement, as it relates to the use of the Mobile VACIS in commerce, as requiring a shipping paper covering the Type A package being carried on the Mobile VACIS at the point it first enters a public road. This same shipping paper would then accompany the Mobile VACIS for its lifetime or until such time the Mobile VACIS (or

more specifically, the Type A package) was re-shipped or transferred from one carrier to another. Therefore, new shipping papers would not be required/completed each time the truck was driven over a public highway.

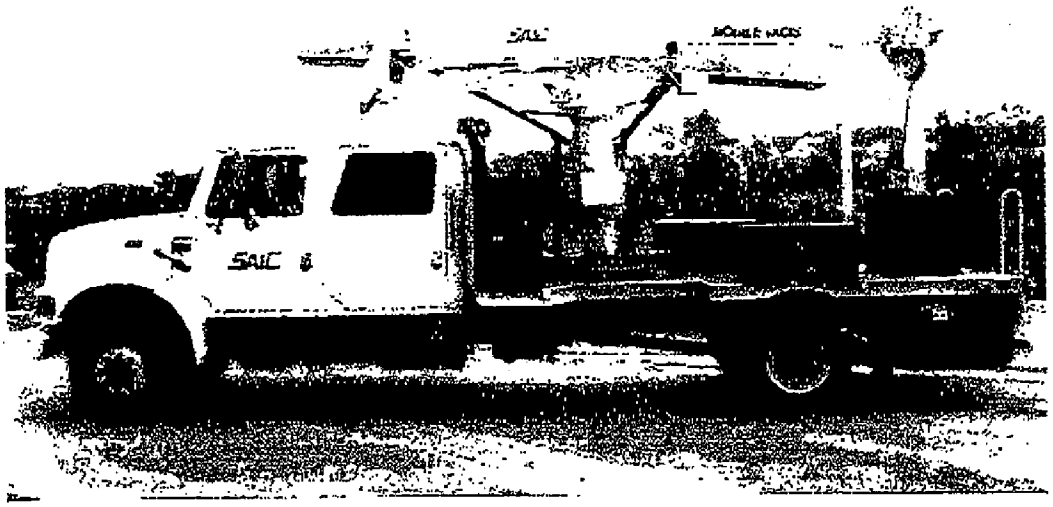
2. 49 CFR 173.443(a) requires, in part, a determination of the level of non-fixed radioactive contamination by performing a wipe survey on the external surfaces of each package offered for transport. SAIC has interpreted this requirement, as it relates to the use of the Mobile VACIS in commerce, as requiring a wipe survey of its Type A package prior to the vehicle first being driven onto a public road. Once the Mobile VACIS is deployed, subsequent wipe surveys of the Mobile VACIS Type A package would be performed in accordance with the requirements of its Device Registry. The Device Registry requires leak testing prior to initial use and at intervals not to exceed 12 months using techniques capable of detecting 185 Bq of removable contamination. Therefore, additional contamination surveys would not be required/performed each time the truck was driven over a public highway.

Your timely assistance in this matter is greatly appreciated. If you have any questions with regard to the issues addressed in this letter, please don't hesitate to contact our technical representative, Linda Bray at (858) 826-9664, or the undersigned at (858) 826-4359.

Sincerely,
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

JAMES R. PRICE
Senior Environmental Compliance
& Health and Safety Officer

Attachment


SAIC