



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

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

APR 16 2003

Ms. Linda G. Bray
SAIC Health Physicist
16701 West Bernardo Drive
San Diego, CA 92127

Reference No. 03-0071

Dear Ms. Bray:

This responds to your letter requesting clarification of the labeling requirements under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You ask if the "activity" and "transport index" values, when required on a RADIOACTIVE label, may be expressed as less than (<) the maximum initial starting value. You state that you wish to use permanent labels on a Type A package installed in a Mobile Vehicle and Cargo Inspection System (Mobile VACIS) and that the "activity" and "transport index" values decrease over a time period of between 8 to 15 years. You also reference a previous clarification letter regarding the use of a permanent shipping paper that remains with the vehicle for its life time (Reference No. 02-0116, June 4, 2002).

The answer to your question is no. There are no provisions in the HMR to express the value of the "activity" or the "transport index" of a RADIOACTIVE label in a manner other than the actual value. Our letter of clarification regarding the permanent shipping paper states that 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 and the Type A package is not reshipped or transferred to another vehicle. If the content (including quantity) of the Type A package changes (i.e. decreases over time), a new shipping paper would have to be prepared and new RADIOACTIVE labels reflecting the decreased "activity" and "transport index" affixed to the Type A package. Since radioactive material decays, we suggest that you may wish to prepare a new shipping paper and affix a new label reflecting the new level of activity periodically.

I hope this satisfies your request.

Sincerely

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



030071

173.403



Science Applications International Corporation
An Employee-Owned Company

Corbin
§173.403
Labeling
03-0071

March 4, 2003
Edward Mazzullo
Director Office of Hazardous Material Standards
USDOT/RSPA (DHM)-10
400 Seventh St. S.W.
Washington, D.C. 20590

Subject: Request for Clarification of Label Documentation

Reference: 02-0116, Letter from Hattie Mitchell to James Price, regarding clarification of shipping paper and contamination control requirements.

Dear Mr. Mazzullo,

SAIC produces a Mobile Vehicle and Cargo Inspection System (Mobile VACIS), which is designed to non-intrusively inspect the contents of cargo containers and vehicles. These systems include a standard International Truck, and are equipped with a semi-permanently mounted gauge device (Type A package) containing either a Cs-137 source or a Co-60 source. The Cs-137 source has a maximum activity of 59GBq ($\pm 15\%$) and the Co-60 source has a maximum activity of 37 GBq ($\pm 25\%$). These devices have been approved for use by Specific Licensees under Sealed Source and Device Registries CA-0215-D-103S and CA-0215-D-107S.

The gauge housing is a DOT Type 7A package, and the source remains in the gauge housing for all use and transport operations. In essence once the vehicle is manufactured, the source is always considered in transport. The primary end users of the system include US Customs and other related government operations. The systems were designed so that those users could readily transport and deploy the systems at various ports of entry and border crossings as part of the homeland defense initiatives. To facilitate that rapid transport and deployment, SAIC previously requested and received (Reference No 02-0116) a letter of clarification regarding the use of a single shipping paper, that remains with the vehicle for its lifetime.


In addition to the permanent shipping paper, SAIC has provided permanent labels for the gauge housing which indicate the device qualifies as a Yellow II material, with a T.I of <1 , and a maximum source activity of $< 59\text{GBq}$ or $< 37\text{GBq}$ as applicable. A copy of the label is included in attachments 1 and 2. These permanent labels were again provided to support the needs of the end user for rapid deployment without having to complete and attach new hazard labels for each movement. The use of the $<$ symbol allows the end

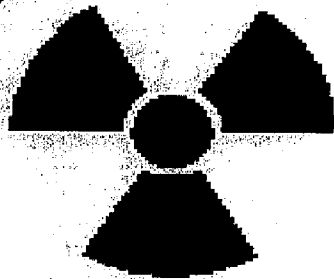


user to have a consistent method for labeling and understanding the hazard levels associated with the system. (There are over 70 Mobile systems in service).

SAIC noted that the regulations for labeling specified in 49 CFR 172.403 allow the use of abbreviations for the source activity, but do not specify that for the T.I. value. Neither section specifically address the use of the < symbol. Since the sources will typically stay packaged for transport with the systems for between 8 to 15 years, it is understood that the T.I. value and activity will decrease over time. However, labeling of the worst case initial activity seemed the most prudent approach. SAIC is requesting clarification and approval for the use of the < symbol for the maximum T.I. value and maximum initial source activity for the permanent labels.

Thank you for your attention regarding this matter and should you have any additional questions or concerns please contact me at your earliest convenience.


Linda G. Bray
SAIC Health Physicist
Tel.: (858) 826-9664
Fax.: (858) 826-9224



RADIOACTIVE II

CONTENTS: Cobalt-60

ACTIVITY: <37 GBq (1.0Ci)

**< 1.0
TRANSPORT INDEX**

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Attachment 1