

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV 612 EAST LAMAR BLVD, SUITE 400 ARLINGTON, TEXAS 76011-4125

June 12, 2009

Lt Col Craig L. Adams
Secretariat, USAF Radioisotope Committee
Department of the Air Force
AFMSA/SG3PB
1400 Key Blvd., Suite 400
Rosslyn, VA 22209-1554

SUBJECT: SERVICE PROVIDER PERMITS

The NRC performs a formal biennial review of the USAF Radioisotope Committee (RIC) Master Materials License program. As part of that review, the NRC Project Manager attends the quarterly RIC meetings and informally meets with the RIC staff to discuss program activities. As the NRC Project Manager, I would like to take this opportunity to provide additional information regarding the technical review of service provider permits, which we discussed after the last RIC meeting on May 12, 2009.

I have enclosed three documents which you may find useful in performing the technical review of service provider permits that dismantle/disassemble gauges or devices for the purposes of removal and/or disposal of sealed sources. The documents include: (1) NRC Information Notice 2009-005, "Contamination Events Resulting from Damage to Sealed Radioactive Sources during Gauge Dismantlement and Non-Routine Maintenance Operations," (2) NRC Inspection Report 030-35997/08-001, and (3) Notice of Violation and Proposed Imposition of Civil Penalty to Sabia, Inc.

The Information Notice provides examples of several recent events involving gauge/device disassembly/dismantlement activities and the common causal factors associated with these events. The enclosed Inspection Report and Notice of Violation may provide some additional insight as to the consequences that can result from dismantlement/disassembly activities. As a result of the event described in the Inspection Report, an NRC licensee's facility became extensively contaminated, licensee employees became externally contaminated, and one licensee employee received a measurable intake of radioactive material. This event occurred, in part, because the licensee lacked proper procedures and engineering controls for conducting the dismantlement/disassembly activities. This event, its causes, and its consequences underscore the need for a robust program to conduct dismantlement/disassembly activities.

The permit review process should thoroughly review the permittee's procedures and engineering controls that are developed for each type of gauge or device that is to be dismantled/disassembled. The radiation protection program description should be commensurate with the activity and sufficient to ensure compliance with 10 CFR Part 20 requirements. The permittee should have the Sealed Source Device Registry (SSDR) available for each type of gauge or device that is being dismantled/disassembled. The SSDR for each type of gauge/device being dismantled/disassembled should be reviewed by staff prior to performing the activities. If the SSDR is not available for a particular gauge or device, then specific procedures should be developed for the dismantlement/disassembly process. It is also beneficial to review the SSDR for the source that is contained inside of the gauge/device being

dismantled/disassembled, since this may provide pertinent information regarding the dimensions and construction of the source that will be removed and handled. Additional precautions are warranted for activities involving potentially damaged/deteriorated gauges/devices or those that have been in storage for an extended period of time.

For dismantlement activities there should be a methodical process for conducting the activity and contingencies should be identified for any event that could possibly occur. The contingencies should include procedures and processes to respond to a contamination event, including the availability of instrumentation, the availability of appropriate shielding for the type of radionuclide that is in the gauge/device being dismantled, and supplies to limit the spread of contamination. Please note that removal of a gauge or device from storage for purposes of dismantlement or removal of the sealed source constitutes "use" and therefore, the gauge/device should be leak tested as required by permit condition and the SSDR. During the dismantlement process, it is prudent to conduct routine monitoring for contamination so that potential problems can be quickly identified and mitigated.

It is the responsibility of the MML and the permit holder to thoroughly review the activities authorized under the service provider's permit to ensure that the activities being performed are authorized appropriately on the permit. The permit should clearly state which type of gauge(s)/device(s) the permit holder is authorized to dismantle. There should not be a generic procedure that allows the service provider to dismantle any type of gauge or device that is received under the permit.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

If you have any questions regarding this letter or our discussion, please contact me at 817-276-6552.

Sincerely,

Rachel S. Browder, Health Physicist Nuclear Materials Safety Branch B

Pachel & Brouder

Docket: 030-28641 License: 42-23539-01AF

Enclosures:

- 1. NRC Information Notice 2009-005, Contamination Events Resulting From Damage to Sealed Radioactive Sources during Gauge Dismantlement and Non-Routine Maintenance Operations (ML090370785)
- 2. NRC Inspection Report 030-35997/08-001 (ML082940325)
- 3. Notice of Violation and Proposed Imposition of Civil Penalty-\$13,000 [NRC Inspection Report 030-35997/08-001] (ML090290215)

bcc (email w/o enclosures): RSBrowder JFKatanic JEWhitten 5th Floor Docket File

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	Publicly Avail	■ Yes □ No	Sensitive Value: N/A		

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