STATE OF COLORADO

Bill Ritter, Jr., Governor James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S. Denver, Colorado 80246-1530 Phone (303) 692-2000 TDD Line (303) 691-7700 Located in Glendale, Colorado Laboratory Services Division 8100 Lowry Blvd. Denver, Colorado 80230-6928 (303) 692-3090

Colorado Department of Public Health and Environment

http://www.cdphe.state.co.us

JAN 0 3 2008

Sealed Source and Device Registrations Office of Federal and State Materials and Environmental Management Programs U.S. Nuclear Regulatory Commission Washington, DC 20555

Attention: John P. Jankovich, Ph.D., Team Leader

This letter is to inform you that one of our specific radioactive material licensees has decided to no longer provide source replacement activities for a device used by licensees located in the State of Utah, and the State of Ohio. Specifically, Boulder Scientific Company of Mead, Colorado is no longer installing Antimony-124 sources in their Model 200 Beryllium detector for Brush Resources, Inc., in Delta, UT or for Brush Wellman Inc., in Elmore, Ohio. To our knowledge there are only three Model 200 devices in use in the United States.

In 2005 Boulder Scientific Company (BSC) initiated the application process for a sealed source and device evaluation through the Colorado program for the purpose of updating certain information in the existing SSD Evaluation – particularly the source model and activity - but has recently decided to abandon this application for the Model 200 device. The issue of a differing source was brought to our attention by Ujagar Bachu of your office.

The inactive SSD Evaluation (NR-0837-D-801-U) for the Model 200 device manufactured by BSC was issued by the U.S. Atomic Energy Commission in 1960, and prior to Colorado becoming an Agreement State. When Colorado became an Agreement State in 1968, this particular SSD Evaluation was for some reason not transferred or assumed by our (Colorado) program. Our Department requested that BSC submit an application in order to update the SSD Evaluation once it was brought to our attention that the original source manufacturer and specific source model number was no longer available. As stated above however, BSC has decided to no longer pursue a new SSD evaluation for this device. The BSC license will be amended to remove authorization for resourcing of the Model 200 device. It is not known whether source replacement activities would or should be performed by the user in UT or OH, or whether the device is still in use.

This correspondence is being provided to the NRC due to the last SSD Evaluation being issued by the NRCs predecessor (AEC) and the NRCs past involvement and communication regarding our licensee and this SSD Evaluation. Similar correspondence is being sent to the Agreement State programs in Utah and Ohio.

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U. S. Nuclear Regulatory Commission Page 2 of 2

If you have any questions, please contact James Jarvis of the Radiation Management Unit at james.jarvis@state.co.us or (303) 692-3454.

Stephen F. Tarlton, Unit Leader Radiation Management Unit Hazardous Materials and Waste Management Division

Enclosure: Correspondence from Boulder Scientific Company to Colorado Agreement State Program.

NOV 21 2007 HAZARDOUS MATERIALS AND WASTE MANAGEMENT

November 19, 2007

James S. Jarvis, M.S. AND W Health Physicist Radiation management Unit – HMWME-B2 Colorado Dept. of Public Health and Environment 4300 Cherry Creek Drive South Denver, Colorado 80246-1530

598 Third Street P.O. Box 548 Mead, CO 80542-0548

Boulder

Scientific

Company'

phone 970 535-4494 fax 970 535-4584

www.bouldersci.com

Mr. Jarvis:

2.

This letter is in response to your request for information and direction on closing the SSD evaluation for the Boulder Scientific Model 200 Beryllium Analyzer.

Boulder Scientific (BSC) wishes to cease and rescind the SSD evaluation for the Model 200 Beryllium detector. Boulder Scientific has no more Model 200 instruments in service.

In response to your specific items of the July 16, 2007 email:

1. Evaluations of BSC records indicate a total of seven Model 200 devices were sold.

- Remaining current devices are:
- One each in use at the mine and laboratory at:

Brush Resources Inc P.O.Box 815 10 miles North Highway 6 Brush Wellman Road Delta, Utah 84624

And one in use at the laboratory at:

Brush Wellman Inc. 14710 Portage River Road South Elmore, Ohio 43416

Since each instrument requires two castles (shield body), there are a total of 6 castles in use. These units have, however, been modified under different licensing, beyond the purview of Boulder Scientific.

3. Boulder Scientific will not provide any further servicing or source replacement for any Model 200 instrument. This cessation is effective Sept. 15, 2007

4. Boulder Scientific will not commercially distribute the Model 200 instrument.

Boulder Scientific will provide to the last active users of the Model 200 instrument (namely the two Brush sites noted above) a statement that:

BSC will no longer provide any radioactive sources for any Model 200 instrument; and that any source replacement must be conducted in accordance with Inactive SSD evaluation NR-837-D-801-U.

BSC requests that the BSC license be amended to delete references to the servicing and distribution of the Model 200 devices.

Boulder Scientific appreciates the Radiation Unit's patience and help in clearing up this matter.

Sincerely,

Boulder Scientific Company

Urma By:

John M. Birmingham Chairman, and Radiation Safety Officer

Cc: Steve Tarlton

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES SAFETY EVALUATION OF DEVICE

NO. :	NR837D801U	DATE:	July 13,	1960	PAGE 1 OF 2
DEVICE	TYPE: Beryllium	Analyzer			
MODEL:	200				
MANUFAC	CTURER/DISTRIBUTOR:	Boulder Boulder,	Scientific CO	Co.	
MANUFAC	CTURER/DISTRIBUTOR:				

.

SEALED SOURCE MODEL DESIGNATION:

Isotopes Specialties Type 1032

ISOTOPE: Antimony-124

MAXIMUM ACTIVITY: 100 millicuries

LEAK TEST FREQUENCY:

PRINCIPAL USE: Other

CUSTOM DEVICE: YES X NO

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES SAFETY EVALUATION OF DEVICE

NO.: NR837D801U

DATE:

July 13, 1960

PAGE 2 OF 2

DEVICE TYPE: Beryllium Analyzer

DESCRIPTION:

Heavy lead shield approximately 9" in diameter and 8" high, containing up to 100 millicuries Antimony-124 - Isotopes Specialties Type 1032. Source mounted essentially in the center of the shield, directly beneath a sample slide. A detector is mounted in the top of the shield when the device is to be used; a lead plug can be exchanged for the detector; both of these can be locked in place, as can the sample slide.

LABELING:

As described in Section 20.203(f)(1) & (f)(4) of Part 20.

EXTERNAL RADIATION LEVELS:

Less than 5 mr/hr at 1 foot during use or storage. Radiation levels up to 50 mr/hr may be encountered when exchanging detector and plug.

LIMITATIONS AND/OR OTHER CONSIDERATIONS OF USE:

- 1. Source exchange by the manufacturer.
- 2. Exchange of detector and cap plug by manufacturer unless licensee has competence and equipment.
- 3. Usually limited to one location, rather than field work.
- 4. Exchange of sample slides O.K., if done properly.

<u>Comments</u>: Needed is a detailed instruction manual and description of training which each customer will receive.

ISSUING AGENCY:

U.S. Atomic Energy Commission

STATE OF COLORADO

Colorado Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, Colorado 80246-1530

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