



Luzenac America Inc.
Three Forks Operations
2150 Bench Road
Three Forks, MT 59752

February 7, 2011

Elmo Collins, Regional Administrator
NRC Region IV Office
612 E. Lamar Blvd, Ste. 400
Arlington, TX 76011

RE: Event #46466 – NRC Device Key 249725

EVENT DESCRIPTION:

On December 2, 2010, Personnel from Pacific Steel and Recycling, Bozeman, Montana (Pacific Steel), contacted NRC Region IV office and reported the discovery of a fixed gauge containing radioactive material in a pile of scrap metal. Pacific Steel provided the model and serial number but was unable to discern any other identifying information from the fixed gauge. The fixed gauge was identified during routine pre-shipment survey of scrap metal with Ludlum Model 192 survey meter. The survey revealed a surface exposure rate of 3-4 mR/hr. The shutter on the fixed gauge was in the closed position and secured with a padlock. The gauge was placed in a container and secured in a location away from Pacific Steel personnel and members of the public. It is not know when the gauge was received at Pacific steel.

Region IV Staff contacted the device manufacturer and determined that the device had been transferred under a general license to Cyprus Industrial Minerals in Ennis, Montana, in June 1984. The device contained a 50 millicurie sealed source of cesium-137 as of the assay date of January 11, 1984.

On December 3, a Region IV Inspector (Jason Razo) was dispatched to Bozeman, Montana, to initiate a reactive special inspection.

LUZENAC AMERICA INC. EVENT INVESTIGATION:

On December 3, 2010, Ron Hyatte, Senior Advisor, HSE, Luzenac America Inc., Montana Operations was contacted by Ms. Vivian Campbell and Mr. Anthony Gaines of the NRC Region IV Office concerning the event described above. Mr. Hyatte met with NRC Inspector, Jason Razo, later that day as part of the NRC's investigation of the event. They were able to determine that the four sealed source devices purchased by the previous operator of Luzenac's Yellowstone Mine and Three Forks Mill, Cyprus Minerals, were accounted for. Three of these were received for disposal by Amersham Corporation on November 16, 1995. The fourth was the device discovered at Pacific Steel.

Mr. Hyatte began an investigation and made arrangements for proper disposal of the device which had been secured as directed by Mr. Razo at Pacific Steel. Current and former employees were interviewed as part of the investigation. The results of the investigation are as follows:

1. Sealed Source Device Serial Number 17573 (50 mCi cesium-137) manufactured by Kay-Ray/Sensall, Inc. (NRC Device Key 249725) was purchased with a similar unit (SN

17572) and installed at the Yellowstone Mine as a weigh scale by Cyprus Minerals Corp, Ennis, MT.

2. These units were removed from service in 1988 upon the completion of a new ore sorting device.
3. Luzenac America Inc., a subsidiary of Rio Tinto, PLC, purchased the Three Forks Mill and Yellowstone Mine operations of Cyprus Minerals Corp. in 1992.
4. Device SN 17572 was properly disposed of along with two other sealed source units (SN 15146 & SN 17238) in 1995 – Amersham Corp., 2636 S. Clearbrook Drive, Arlington Heights, IL 60005-4692.
5. The whereabouts of the Kay Ray Device SN17573 was reported as unknown by former Luzenac Safety and Health Manager, Dean Wegleitner, on July 20, 2001.
6. Extensive clean-up and removal of portable storage building/trailers was conducted at the Yellowstone Mine during the summer of 2010. Metal items were sent for recycling to Pacific Steel.
7. Luzenac America Inc. was informed of the discovery of the missing device and made arrangements to dispose of the device properly.

EXPOSURES:

No known over exposures to the device are known nor anticipated due to the low-level of activity of the source.

DISPOSITION OF SOURCE:

1. A proposal to transfer ownership and dispose of the Kay Ray Device SN17573 was received and accepted from Thermo Fisher Scientific, 1410 Gillingham, Sugar Land, TX 77478-2890, on December 8, 2010.
2. Kay Ray Device SN 17573 was received (Disposal RMA# 31603) by Thermo Fisher Scientific on December 22, 2010. (copy enclosed)
3. Final disposition information will be forwarded once processed by Thermo Fisher Scientific.

PREVENTATIVE ACTIONS:

1. No known sources exist at this time.
2. Radiation sources to be included in Environmental Aspects and Impacts list and Risk Register
3. Employees to be trained on identification of radioactive materials (MSHA Annual Refresher Training, March 2011).
4. Purchase handheld scanner for radioactivity.
5. Implement scrap metal sampling procedure for radioactive materials prior to recycling.



Ron Hyatte, CSP
Sr. Advisor, HSE
Montana Operations

Cc: Jason Razo, NRC Region IV
Enclosures

Hyatte, Ron (RTM)

From: Green, La'Nette [lanette.green@thermofisher.com]
Sent: Wednesday, December 22, 2010 1:36 PM
To: Hyatte, Ron (RTM)
Subject: Sources Received RMA 31603

Importance: High

Good Afternoon Ron,

Thank you for doing business with Thermo Fisher Scientific. Your Disposal RMA # 31603 has been received and will be handled in sequence with other disposal orders.

Our goal is to process the sources and issue your Transfer of Ownership documents within 28 days of receipt.

If you would like any of your shipping material returned, please contact us immediately. If we do not hear from you it will be disposed of at the same time as your sources.

Unless we are advised otherwise your Transfer of Ownership document will be sent to the "ship to" address on the purchase order. If you would prefer the documents to be sent elsewhere please provide this information to us within the next 5 days.

If, for any reason, your request requires "immediate" attention please CALL the Thermo Fisher Scientific License department at: 1-800-437-7979

Thank you,

La' Nette Green

Please send your quotes or purchase orders to the service email address below

service.ps.houston@thermofisher.com

All Purchase Orders need to be made out to Thermo Process Instruments, L.P.

How Was My Service Today? (La'Nette Green)

La' Nette Green 
Service Support Specialist
Thermo Fisher Scientific
1410 Gillingham Lane
Sugar Land, Texas 77478
1-800-437-7979
713-272-2273 fax
lanette.green@thermofisher.com
www.thermoscientific.com



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