

Commonwealth of Pennsylvania  
Department of Environmental Protection  
Bureau of Radiation Protection  
Southwest Regional Office  
January 10, 2000

Subject : MSR Investigation  
Zelmore Brothers Scrap Metals

To : RP MSR Files; RI & A Files

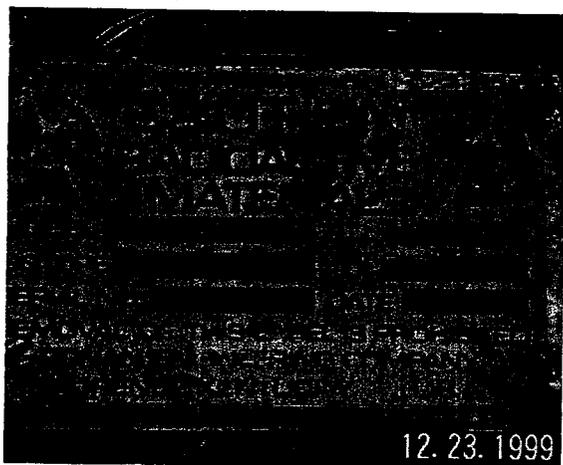
From : Steve Bostjancic  
Radiation Health Physicist II  
Radiation Protection  
(412)442-5824

Through : James G. Yusko, CHP  
Regional Manager  
Radiation Protection

On December 23, 1999 I received a call from Mr. Eugene Zelmore of Zelmore Brothers Scrap who said they had a radioactive device that set off the radiation alarm at Riverside Scrap in Monongahela, Pa. on 12/20/99 and had been returned to them. Zelmore Brothers Scrap is located at RD 6 Box 2216 (Rt. 31 East) Mt. Pleasant, Pa. 15666 and their phone number is (724) 696-4860. I asked Mr. Zelmore if there were any markings on the object and he began giving me model and serial numbers and then spelled out the word 'isotope' and Cs-137. I told him I would be out to look at the object in an hour and asked him to leave the immediate area of the gauge and wash his hands.

When I arrived, Mr. Zelmore took me to the object which was located on a pile of scrap alongside an access road leading to the back of the yard. The device appeared to be an industrial gauge, probably for a density application. The label on the device indicated an activity of 300 mCi (11.1 GBq) on 11/86. Using an Eberline Instruments Corp. E-120 (serial # 11367, DEP # 803310) with a HP-270 detector, I measured a maximum exposure rate of about 30 mR/hr (300 uSv/hr) near the surface of the gauge by the shutter lever. I then performed a leak test on the gauge using an Eberline E-140N (serial # 2182, DEP # 220842) with a HP-210L detector. The background and gross count rates were about 60 cpm indicating no removable contamination. I also took a spectrum with the Exploranium miniSpec (serial #9655) which confirmed that the gauge contained <sup>137</sup>Cs. I took the following digital photographs of the gauge.

W



I didn't attempt to move the shutter as it appeared to be corroded. I then asked Mr. Zelmore if there was somewhere we could secure the gauge temporarily. He had his son put it in a nearby unused shed which was then padlocked.

I then asked Mr. Zelmore to tell me how he received the gauge. He stated that he found the gauge on one of various loads of scrap that were brought to the yard in early Dec. 99 by a Mr. Maynard Brubacher, telephone number : . Brubacher had been cleaning out a building at 208 Market St. Scottsdale, Pa. 15683, that he had purchased from an elderly gentleman named R.W. Beck. Mr. Zelmore said that the building used to be some sort of automotive business, so it seemed unlikely that the gauge had been in use at this location. I mentioned this and Zelmore said that Beck had a penchant for buying junk at auctions and may have unknowingly purchased the gauge.

On Dec. 30<sup>th</sup>, I contacted Bon Cahill with the Ronan Engineering Co., the manufacturer of the gauge. Their phone number is (606) 342-8500. Based on the information on the label, they were able to tell me that the gauge was licensed to the Solstat Coal Co. 72 Cederdale Dr. N. Huntingdon, Pa. 15642. Also, they had leak test reports that were signed by a Mr. Fred Crack. After reviewing the pictures I e-mailed them, they told me that the shutter mechanism was not fully closed and that the gauge should not be transported until the shutter was closed and locked.

I queried the PA DEP e-FACTS database for the Solstat Coal Co. The company was listed as being out of business but a Mr. Samuel Babich was listed as the company president. Using the internet white pages, I was able to contact Mr. Babich. He knew exactly what I was talking about when I told him about the gauge. However, he told me that Mr. Crack had been the president of the defunct company. (Babich had various environmental duties when he was employed there and that's why his name was in our database.)

I found Mr. Crack's phone number , and left a message on his answering machine. He called me back later the same day. He also knew about the gauge. He said it had been used briefly in one of their processes but had been disconnected and put into storage because it didn't function as intended. The gauge was then stolen from a locked equipment storage trailer along with some other items about ten years ago. The theft was reported to the state police, but the case

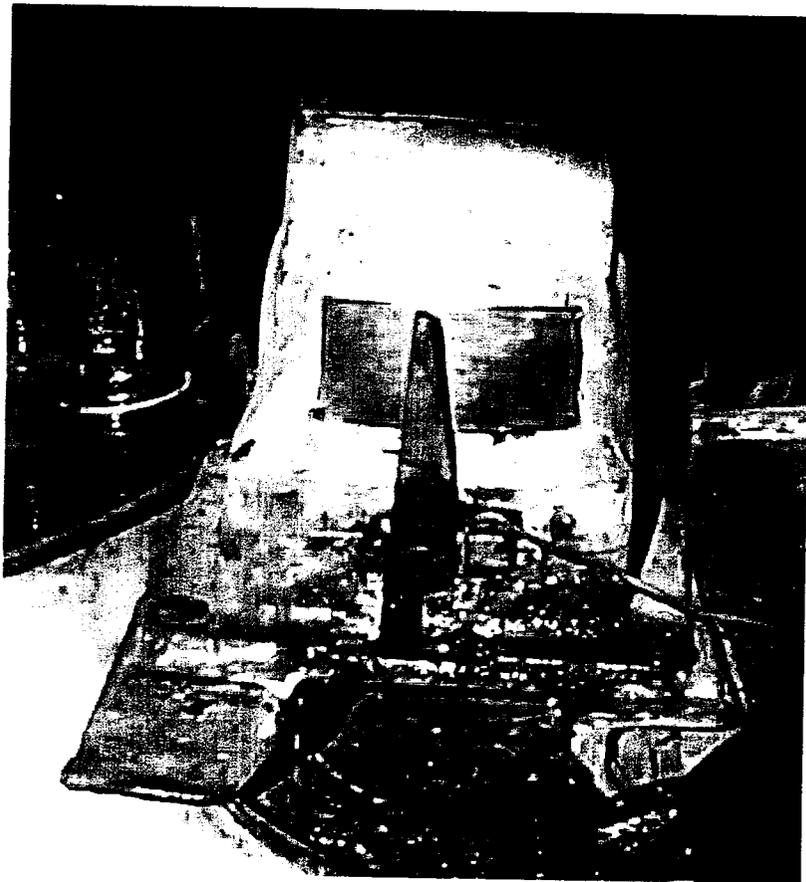
was dropped due to lack of evidence. However, the primary suspect was a Mr. Steven Beck, a watchman who sometimes worked for Solstat. It is unknown if he is related to R.W. Beck, but if the gauge did come from the Scottsdale building, this may explain how it got there. Mr. Crack seemed willing to accept responsibility for the gauge, but felt that it was unfair for him to have to pay for disposal since the Zelmores Bros. scrap yard probably profited from the other items taken in the theft.

After obtaining the above information, I contacted John Kinneman of the U.S. NRC via phone and e-mail and provided him with a current status report and the photos of the gauge.

On January 4, 2000, Mr. Crack phoned me with some additional information regarding the theft. He revised the date of the theft to July 10, 1994, since he had been able to locate two state police theft report documents, one of which was dated July 11, 1994. I requested that he fax me this information, which he did. I asked him if he had reported the theft of the gauge to the NRC and he said he hadn't because at the time, the gauge had been in storage for 2 to 3 years and he wasn't aware it was one of the items that had been taken. I was able to get the complete theft report from the state police. The report does not list an inventory of the items taken in the theft. Mr. Crack brought up the idea of shipping the gauge to an associate in Mexico who would be able to use it but he dropped this idea when I told him that the detector portion of the gauge had not been found.

On January 5, 2000, I spoke to Mr. Brubacher on the phone. He confirmed that he took scrap to Zelmores Bros. in early Dec. 99, but felt certain that the gauge was not among the items sold. He stated that all of the material taken out of the building had been hand loaded, except for some heavy auto parts such as axles and transmissions. No one who performed this work remembered lifting anything so unusually heavy or seeing the obviously visible radiation trefoil symbol. He felt that someone probably put the gauge on his pile of scrap at Zelmores Bros.

On January 6, 2000, Jim Yusko, Ed Andresky and I went to Zelmores Brothers to examine the gauge more closely and attempt to move the shutter to the fully closed position. Using some penetrating oil and a hammer, we were able to rotate the shutter lever to the off position and secure it in place with a piece of wire. (See picture below.)



The exposure rates measured in the 'off' position were 35 mR/hr (350 uSv/hr) on the shutter lever side, 20 mR/hr (200 uSv/hr) on the opposite side and 4 mR/hr (40 uSv/hr) between the brackets. With the shutter in the 'on' position, the exposure rate between the brackets exceeded 50 mR/hr (> 500 uSv/hr). Jim Yusko assured Mr. Zeltman that we were doing everything we could to transfer the gauge to its rightful owner.

We then drove by the Scottdale building to confirm its location. The lower level of the building appeared to be where the formerly mentioned scrap materials had been located. There was a 'For Rent' sign on the building.

We also visited Riverside Scrap in Monongahela to confirm their part in the incident. We left them a DOT E-10656 shipment approval form and instructed their personnel on the proper procedure to follow when their radiation alarm sounds.

Further action regarding this incident is pending until the NRC investigates and decides upon a course of action.

FREDERICK G. CRACK  
10380 Center Highway  
North Huntingdon, PA 15642

Fax No: 610-337-5208 Date: 7-19-2000  
Attention: NRE  
Company: ERIC REBER  
No. of Pages: 4 (including this page)

MESSAGE:

ERIC

ENCLOSED IS INFORMATION FOR  
YOUR FILE CONFIRMING DISPOSAL  
OF THE DENSITY GAUGE TO AN  
APPROVED FACILITY

Yours Sincerely

Fred Crick

(Any problems receiving this fax - contact the above)

West Star Industries, Inc.

**Revised Quotation**

P. O. Box 861  
St. Peters, MO 63376

Date: 06/26/2000

Notes: This estimate is good for 30 days from the date shown above. Prices quoted are for quantities shown.

Ph: (636) 928-9720  
Fax: (636) 928-9857

Date of Service Request: 06/2000

Quote Sent By: Tjaden L. Meyer

Terms Offered: See attached terms & conditions

Accepted By: *[Signature]*

Purchase Order Number: *VER 802*

Date: *7-10-00*

To

Fred Crack

10380 Center Highway

North Huntington PA 15642

Attn:

Ph: 724-861-0935/FAX 724-861-9206

I have read the entire agreement and accept the agreement in its entirety, including the attached terms and conditions, and I have a true copy thereof. A fully executed copy of this quotation must be returned to initiate service or delivery.

Project Description: Disposal of one (1) Cesium 137, 300 millicurie density source, Model #SA8 Ronan. Ronan to ship F.O.B. St. Peters, Missouri.

Scope of Work: Source disposal.

Term of Contract: See Terms

Start Date: TBD

Completion Date: TBD

Assignment: \_\_\_\_\_

Rate(s): \_\_\_\_\_

**Materials Required**

Item	Description	Quantity	Unit Price	Amount
1	Packaging, Manifesting, Shipping and Disposal of One (1) Cs137 300 millicurie Density Source*	one	\$1,342.66	\$1,342.66
	*NOTE: 7% increase in disposal cost			
	11% increase in fuel cost to disposal facility			
NOTE: Source to be shipped to R.M. Wester & Associates, Inc. Transportation F.O.B. St. Peters, Missouri.			Total Amount	\$1,342.66
			Tax	
			Shipping	
<b>Will need tax exempt number if applicable.</b>			<b>Total Estimate</b>	

Estimate authorized by

Name: Tjaden L. Meyer

Date: 06/26/2000

Title: Project Development Manager

Signature: *[Signature]*

*JUE Woye*



WILLOW GLENN  
 DEVELOPMENT COMPANY  
 10380 CENTER HIGHWAY 724-861-0935  
 NORTH HUNTINGDON, PA 15642

60-1625/433  
 0143204

2028

DATE 7-10-00

PAY TO THE  
 ORDER OF

WEST STAR INDUSTRIES INC \$ 1,342 <sup>66</sup>/<sub>100</sub>

ONE THOUSAND THREE HUNDRED + FORTY TWO DOLLARS



Irwin Bank & Trust Company

Main Office

5662

*[Signature]*

MEMO

⑆043316256⑆ 01 4320 4 2028



RONAN ENGINEERING COMPANY  
8050 PRODUCTION DRIVE  
FLORENCE, KY. 41042

LEAK TEST CERTIFICATE

10380 CENTER HWY.  
NORTH HUNTINGTON, PA  
15692

CUSTOMER: SOLSTAT COAL CO. C/O FRED CRACK

*At 31*

ADDRESS: JUNK YARD 3 MILES WEST OF MT. PLEASANT, PA

ATTN: MR. FRED CRACK TELEPHONE: \_\_\_\_\_ PO #: 27787

THIS IS TO CERTIFY THAT THE FOLLOWING SEALED SOURCE  
HAS BEEN LEAK TESTED AND FOUND TO BE:

- ACCEPTABLE
- UNACCEPTABLE
- NEEDING RETEST

ISOTOPE: CS-137 SOURCE ACTIVITY: (mCi) 300mCi

SOURCE SERIAL NO.: M0932 SHOP ORDER NUMBER: \_\_\_\_\_

GAUGE MODEL SA8-C10 MANUFACTURER: RONAN ENGINEERING

TEST DATE: 03-16-00 TESTED BY: FRED CRACK

ANALYSIS DATE: 03-17-00 ANALYZED BY: BOB CANTLI

TEST RESULTS: <0.001 MICROCURIE OF REMOVABLE  
CONTAMINATION

NEXT REQUIRED LEAK TEST DATE: NO LATER THAN APRIL 3, 2003

ATTENTION SHIPPERS!

FREIGHT CHARGES ARE PREPAID ON THIS BILL OF LADING UNLESS MARKED COLLECT.

STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

Shipper No. \_\_\_\_\_

Carrier No. \_\_\_\_\_

Page 1 of 1

(NAME of owner)

(ICAC)

Date \_\_\_\_\_

TO: Congress R. M. WESTER & ASSOCIATES INC  
215 INDA COM DRIVE  
CH ST PETERS State MO Zip Code 63576

FROM: FRED CRACK  
JAKE ZELMORE  
ROUTE #1  
MT. PLEASANT State PA Zip Code  
124-861-0935

No. of Units & Container Type	HAIR	BASIC DESCRIPTION Proper Shipping Name, Hazard Class, Identification Number (UN or NA), Packing Group, per 172.101, 172.202, 172.203	TOTAL QUANTITY (Weight, Volume, Cubic Meters, etc.)	WEIGHT (Units to Carrier)	RATE	CHARGES (If Carrier Use Only)
1 SKID	X	RADIOACTIVE MATERIAL, SPECIAL FORM, UN 2974 N.O.S. CLASS 7, CS-137, GROUP III, SOLID FORM, 1 TYPE A PACKAGE X 0.3 CURIES EACH, RADIOACTIVE II, YELLOW LABEL, 0.6 TI	UN 2974	0.3 CURIES 150 LBS.		



PD/CH # 2026 \$110.49

167-312062 XSL  
 FLE 29002-1H LDI/SPCL # DEST SIC  
 CCX

PLACARDS TENDERED: YES  NO

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.  
 The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \_\_\_\_\_

I hereby accept full and complete responsibility for the safe and proper handling, packing, marking and labeling, and for all charges in proper connection herewith, up to and including the time of delivery to the carrier, and for the safe and proper handling, packing, marking and labeling, and for all charges in proper connection herewith, up to and including the time of delivery to the carrier, and for the safe and proper handling, packing, marking and labeling, and for all charges in proper connection herewith, up to and including the time of delivery to the carrier.

RECEIVED, SUBJECT TO THE CONDITIONS AND LIABILITY LIMITS HEREIN SET FORTH ON THE BACK OF THIS BILL OF LADING, THE PROPERTY DESCRIBED ABOVE IS ACCEPTED GOOD ORDER, UNLESS AS NOTED OTHERWISE AND WITHOUT ANY RESERVATION OF ANY KIND (INCLUDING BUT NOT LIMITED TO THE RIGHT OF REFUSAL TO ACCEPT OR TO ACCEPT UNDER RESERVATION) BY THE CARRIER AT THE PLACE AND TIME OF DELIVERY TO THE CARRIER AS STATED ON THE FRONT OF THIS BILL OF LADING. IF AN AT-RISK REFERENCE IS MADE TO ANOTHER PARTY ON THE FRONT OF THIS BILL OF LADING, IT IS HEREBY AGREED TO BY THE CARRIER AS STATED ON THE FRONT OF THIS BILL OF LADING.

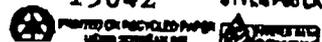
SHIPPER'S CERTIFICATE: I hereby certify that the above is a true and correct copy of the bill of lading and contents as shown to me by the shipper and that I am not aware of any fraud or deception in the bill of lading and contents as shown to me by the shipper.

SHIPPER'S CERTIFICATE: I hereby certify that the above is a true and correct copy of the bill of lading and contents as shown to me by the shipper and that I am not aware of any fraud or deception in the bill of lading and contents as shown to me by the shipper.

SHIPPER: FRED CRACK CARRIER: \_\_\_\_\_  
 PER: FRED CRACK PER: \_\_\_\_\_  
10380 CENTER HIGHWAY, N. HUNTINGTON, PA DATE: \_\_\_\_\_

15642

STYLE F80 LABELMASTER, An American Labelmark Co., Chicago, IL 60648 800821-5808



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