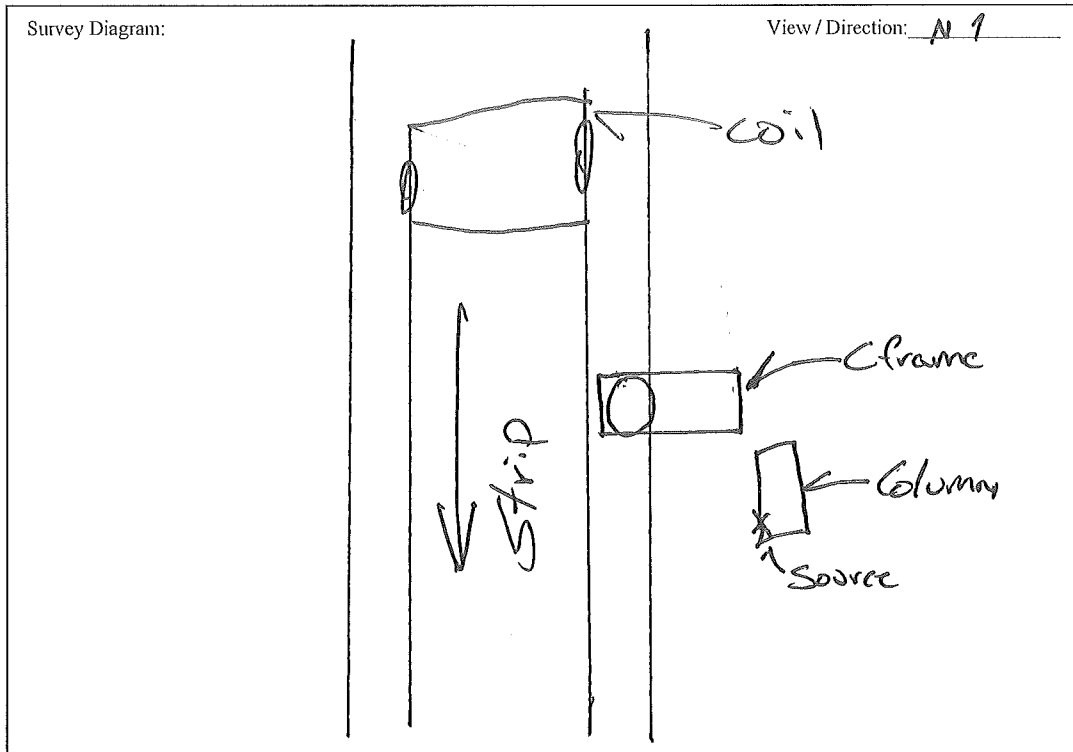


Company	Section	Title	Part	Rev. Date	Page #
Nucor - Crawfordsville Mill	2.A	Radiological Instrumentation	Portable Survey Meters	10/3/17	3 of 3

**General Radiation Survey Form**

Kind of Survey: <i>Post Incident Survey</i>	Location: <i>Galuline Entry</i>	Item: <i>DMC Gauge</i>
Purpose of Surveys: <i>Determine post incident radiological conditions of saw</i>		
Company Name / Address: <i>Nucor Steel Indiana 47933</i>		RM License #: <i>XN000400</i>



Device Make: <i>DMC</i>	Model: <i>AM-5A</i>	Serial #: <i>BS10303</i>	Source Model: <i>AMERSHAMAMC19</i>	Serial #: <i>24212V</i>	Manf. Date: <i>11-20-92</i>
Manufacturer Name / Address: <i>Data Measurement Corp. Gaithersburg, MA</i>				Manf. License #: <i>N/A</i>	

Supporting Details:  
*See attached email*

---



---



---



---



---

Survey By: <i>Becky Mumper</i>		Survey Date/Time: <i>9/10/18 8:15</i>		Housing Type: <i>C-Frame</i>		Process Type: <i>Gauge</i>	
Meter Make: <i>LMI</i>	Model: <i>19+3</i>	Serial #: <i>89414</i> <i>157156</i>	Probe Make: <del><i>AMERSHAM</i></del> <i>LMI</i>	Model: <i>44-9</i>	Serial #: <i>PR169170</i>	Calibration Date: <i>Dec 8/28/19</i> <i>Dec 3/1/19</i>	

## Aker, Shawn (NSIN)

---

**From:** Becky Mumper <rmumper@chaseenv.com>  
**Sent:** Monday, September 10, 2018 10:00 AM  
**To:** 'Craig Eisenberg'; 'Daniel G Hoover'; Aker, Shawn (NSIN)  
**Subject:** Galv Line Gauge Incident  
**Attachments:** IMG\_8069.jpg; IMG\_8070.jpg; IMG\_8071.jpg; IMG\_8073.jpg; IMG\_8074.jpg; IMG\_8075.jpg; IMG\_8076.jpg; IMG\_8077.jpg; IMG\_8078.jpg; IMG\_8079.jpg; IMG\_8080.jpg

All,

Here are some brief details from me that may be needed when notifying the NRC. Just sending this quick email so I can get started training. Let me know if I'm missing any info and I'll address it when I can.

Instruments used for surveys:

LMI 19 # 89414, cal due 8/28/19

LMI 3 #157156 w/ 44-9 PR169170, cal due 3/1/19

The gauge label is in one of the attached pictures for that info.

Bkgd reading: 4 microR/hr

Highest reading on contact with gauge: 420 microR/hr (0.42 mR/hr)

1 ft reading: 35 microR/hr

Performed leak test and took a reading of the swab with the LMI 3 - all readings were at background (40 cpm).

Transported the gauge from the pillar next to the galv line to a cabinet in a nearby electrical room. Placed the gauge in the bottom shelf of the cabinet and secured cabinet with a lock. Posted "Caution Radioactive Materials" sign on cabinet and wrote highest reading on contact with cabinet (20 microR/hr) on sign. Photos of all of these things are attached.

Shawn and Rick Newcomer can hopefully fill in the rest of the details.

Thanks!

-----Original Message-----

From: Becky Mumper [<mailto:rmumper@chaseenv.com>]

Sent: Monday, September 10, 2018 9:40 AM

To: Work E-mail <[rmumper@chaseenv.com](mailto:rmumper@chaseenv.com)>

Subject:



NRC FORM 241 (10-2017)	U.S. NUCLEAR REGULATORY COMMISSION  <b>REPORT OF PROPOSED ACTIVITIES IN NON-AGREEMENT STATES, AREAS OF EXCLUSIVE FEDERAL JURISDICTION, OR OFFSHORE WATERS</b> <i>(Please read the instructions before completing this form)</i>	APPROVED BY OMB: NO. 3160-0013      EXPIRES: 10/31/2020  <small>Estimated burden per response to comply with this mandatory collection request 30 minutes. This notification is required so that NRC may schedule inspection of the activities to ensure that they are conducted in accordance with requirements for protection of the public health and safety. Send comments regarding burden estimate to the Information Services Branch (F-2/F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to <a href="mailto:InfoCollects.Resource@nrc.gov">InfoCollects.Resource@nrc.gov</a>, and to the Desk Officer, Office of Information and Regulatory Affairs, HEOB-10202, (3160-0013), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.</small>								
1. Name of Licensee (Person or firm proposing to conduct the activities described below) Chase Environmental Group, Inc		2. Type of Report <input type="checkbox"/> Initial <input checked="" type="checkbox"/> Change								
3. Address of Licensee (Mailing address or other location where licensee may be located) 200 Sam Rayburn Parkway Lenoir City, TN 37771		4. Licensee Contact and Title Becky Mumper, Radiation Safety Consultant								
		5. Office Number      6a. Work Cell Number      6. Facsimile Number (865) 816-6015           (865) 816-6251								
7. E-mail Address rmumper@chaseenv.com										
8. Activities to be conducted under the general license given in 10 CFR 150.20 <input type="checkbox"/> Well Logging <input checked="" type="checkbox"/> Leak Testing and/or Calibrations <input checked="" type="checkbox"/> Type of Service: post-incident gauge evaluation <input type="checkbox"/> Portable Gauge <input type="checkbox"/> Other (Specify) _____ <input type="checkbox"/> Radiography										
9. Client Name and Address (Include county, city, state and zip code) Shawn Aker Nucor Steel Crawfordsville 4537 South Nucor Road Crawfordsville, IN 47933		10. Actual physical addr. work location (Street, Number or other location, GPS Coordinates if known) same								
		11. Client Work Telephone Number      12. Work Location Telephone Number <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Office</td> <td style="width:50%;">Work Cell</td> <td style="width:50%;">Office</td> <td style="width:50%;">Work Cell</td> </tr> <tr> <td>(765) 364-1323</td> <td></td> <td></td> <td></td> </tr> </table>	Office	Work Cell	Office	Work Cell	(765) 364-1323			
Office	Work Cell	Office	Work Cell							
(765) 364-1323										
13. Dates Scheduled From: 9/10/2018      To: 9/10/2018      Weekends: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		14. Number of Work Days: 1      15. Add:      16. Delete:      17. Location Refer. Num. (Assigned by NRC): 147542								
LIST ADDITIONAL WORK SITES ON SEPARATE SHEET(S) TO INCLUDE ALL INFORMATION IN ITEMS 10-17 ABOVE.										
18. List Radioactive Material, which will be possessed, used, installed, serviced, or tested. (Include description of type and quantity of radioactive material, sealed sources, or devices to be used.) DMC AM-5A, Serial 2421LV, 1 Curie Am-241		Model Number      Device Type / Sealed Sources								
19. Agreement State Specific License which authorizes the undersigned to conduct activities which are the same, except for location of use, as specified in Item 10 above. (One copy of the specific license must accompany the Initial NRC Form 241.)		License Number: R-53008-E19      State: TN      Expiration Date: 5/31/2019								
20. CERTIFICATION (Must be completed by applicant)										
I, THE UNDERSIGNED, HEREBY CERTIFY THAT: a. All information in this report is true and complete. b. I have read and understand the provision of the general license 10 CFR 150.20 reprinted on the instructions of this form; and I understand that I am required to comply with these provisions as to all byproduct, source, or special nuclear material which I possess and use in Non-agreement States or offshore waters under the general license for which this report is filed with the U. S. Nuclear Regulatory Commission. c. I understand that activities, including storage, conducted in non-Agreement States under general license 10 CFR 150.20 are limited to a total of 180 days in calendar year. With the exception of work conducted in off-shore waters, which is authorized for an unlimited period of time in the calendar year. d. I understand that I may be inspected by NRC at the above listed work site locations and at the Licensee home office address for activities performed in non-Agreement States or offshore waters. e. I understand that conduct of any activities not described above, including conduct of activities on dates or locations different from those described above or without NRC authorization, may subject me to enforcement action, including civil or criminal penalties.										
Approved by RSO or Management Representative (Printed Name and Title) Chris Echterling, RSO		Signature: <i>Chris Echterling</i> Date: 9/10/18      Total Usage - Days to Date: 9								
WARNING: False statements in this certificate may be subject to civil and/or criminal penalties. NRC regulations require that submissions to the NRC be complete and accurate in all material respects. 18 U.S.C. Section 1001 makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.										
FOR NRC USE ONLY <input checked="" type="checkbox"/> Non-Public <input type="checkbox"/> Sensitive-Security Related MD 3.4 Non-Public a.3		Approved by (Typed/Printed Name and Title): Michael Reichard, M.P.      Signature: <i>Michael Reichard</i> Date: 9/10/18      Total Usage - Days to Date: 10 ADAMS ML #								

Call-IN  
 Rec # 520290  
 #1144 66670000  
 9-11-18

# ADVANCED GAUGING

TECHNOLOGIES, L.L.C.  
 QUALITY INDUSTRIAL INSTRUMENTATION

## Customer Service Report

P.O. #: \_\_\_\_\_ Date(s): 9/10/2018 Invoice: \_\_\_\_\_

Billing Address: Accounts Payable Department  
NUCOR STEEL - INDIANA  
4537 South NUCOR ROAD  
CRAWFORDSVILLE, INDIANA  
47933

Equipment Location:  Same

Contact Name: Rick Newcomer Title: C.M. ELECTRICAL MAINTENANCE

As Found Condition: CUSTOMER REPORTS SOURCE HOUSING DAMAGED BY COIL.

Corrective Action Taken: REPLACED SOURCE HOUSING FROM CUSTOMER'S SPARES.  
VERIFIED OPERATION OF GAUGE AND PERFORMED LEAK TEST  
WITH SATISFACTORY PRELIMINARY RESULTS.

Remaining Actions: NONE REQUIRED

QTY	P/N	DESCRIPTION	PRICE	EXTENSION

	BILLABLE	WARRANTY
On-Site	2.0H	
Other Service		
Pro-Rated <input type="checkbox"/> Travel	8.0H	
Total Hours	10.0H	
Total Parts	—	
Laboratory Fees	\$ 79.00	
Air Fare or Shipping		

[Signature] Service Technician  
[Signature] Customer

Total \$ 2,069.00 U.S.

Date: 8/10/2018

Line #1 GALVANIZE LINE ENTRY

Gauge Model/Serial IRM/11215CC BOTTOM

Source Model/Serial AM-5A/2421LV

Isotope AM-241

Activity 1 CURIE

Line \_\_\_\_\_

Gauge Model/Serial \_\_\_\_\_

Source Model/Serial \_\_\_\_\_

Isotope \_\_\_\_\_

Activity \_\_\_\_\_

Line \_\_\_\_\_

Gauge Model/Serial \_\_\_\_\_

Source Model/Serial \_\_\_\_\_

Isotope \_\_\_\_\_

Activity \_\_\_\_\_

- System Startup
  - Dose Rate Survey
  - Site Survey
  - Training

- System Startup
  - Dose Rate Survey
  - Site Survey
  - Training

- System Startup
  - Dose Rate Survey
  - Site Survey
  - Training

- Semi-Annual Inspection
  - Shutter Operation:
    - Normal
    - Not Normal
    - Not Applicable
    - Source in Storage

- Semi-Annual Inspection
  - Shutter Operation:
    - Normal
    - Not Normal
    - Not Applicable
    - Source in Storage

- Semi-Annual Inspection
  - Shutter Operation:
    - Normal
    - Not Normal
    - Not Applicable
    - Source in Storage

- Shutter Indicator Operation:
  - Normal
  - Not Normal
  - Not Applicable
  - Source in Storage

- Shutter Indicator Operation:
  - Normal
  - Not Normal
  - Not Applicable
  - Source in Storage

- Shutter Indicator Operation:
  - Normal
  - Not Normal
  - Not Applicable
  - Source in Storage

- Sealed Source Integrity
  - Test In Accordance With:
    - U.S.N.R.C.
    - Agreement State
    - C.N.S.C.
    - Mexico

- Sealed Source Integrity
  - Test In Accordance With:
    - U.S.N.R.C.
    - Agreement State
    - C.N.S.C.
    - Mexico

- Sealed Source Integrity
  - Test In Accordance With:
    - U.S.N.R.C.
    - Agreement State
    - C.N.S.C.
    - Mexico

- Preliminary Test Results:
  - Satisfactory
  - Not Satisfactory
  - Sent to Lab for Final Analysis

- Preliminary Test Results:
  - Satisfactory
  - Not Satisfactory
  - Sent to Lab for Final Analysis

- Preliminary Test Results:
  - Satisfactory
  - Not Satisfactory
  - Sent to Lab for Final Analysis

- Calibration
  - N.I.S.T. Traceable External
  - External Samples
  - Internal Samples
  - Zero and Infinity

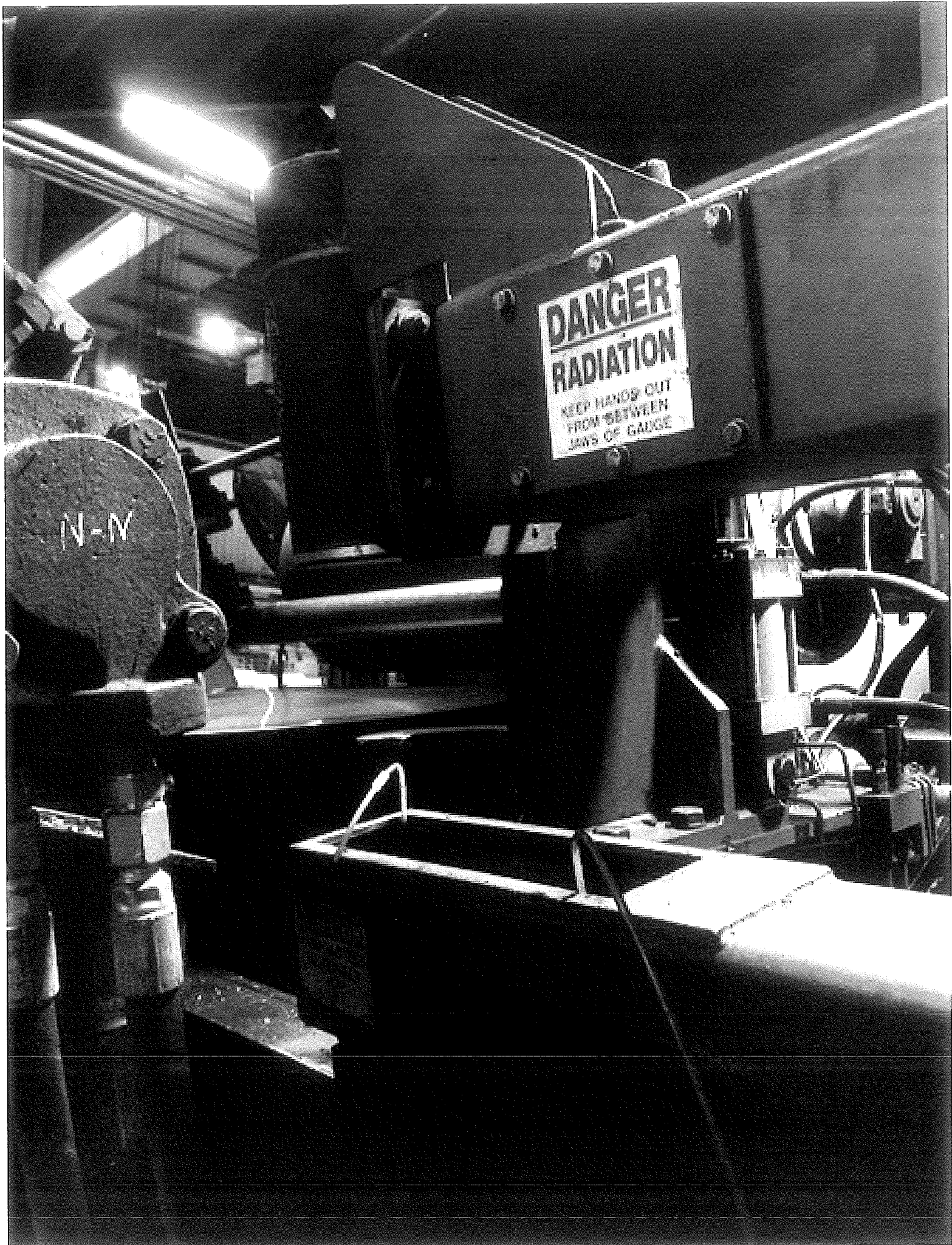
- Calibration
  - N.I.S.T. Traceable External
  - External Samples
  - Internal Samples
  - Zero and Infinity

- Calibration
  - N.I.S.T. Traceable External
  - External Samples
  - Internal Samples
  - Zero and Infinity

- Preventive Maintenance Checks
  - System Performance Satisfactory

- Preventive Maintenance Checks
  - System Performance Satisfactory

- Preventive Maintenance Checks
  - System Performance Satisfactory





**CAUTION - CONTAINS RADIOACTIVE MATERIAL**  
DATA MEASUREMENT CORPORATION  
GAITHERSBURG, MD USA

ISOTOPE: AM241      ACTIVITY: 1 CURIE  
SERIAL #: 2421LV      MODEL #: AM-5A

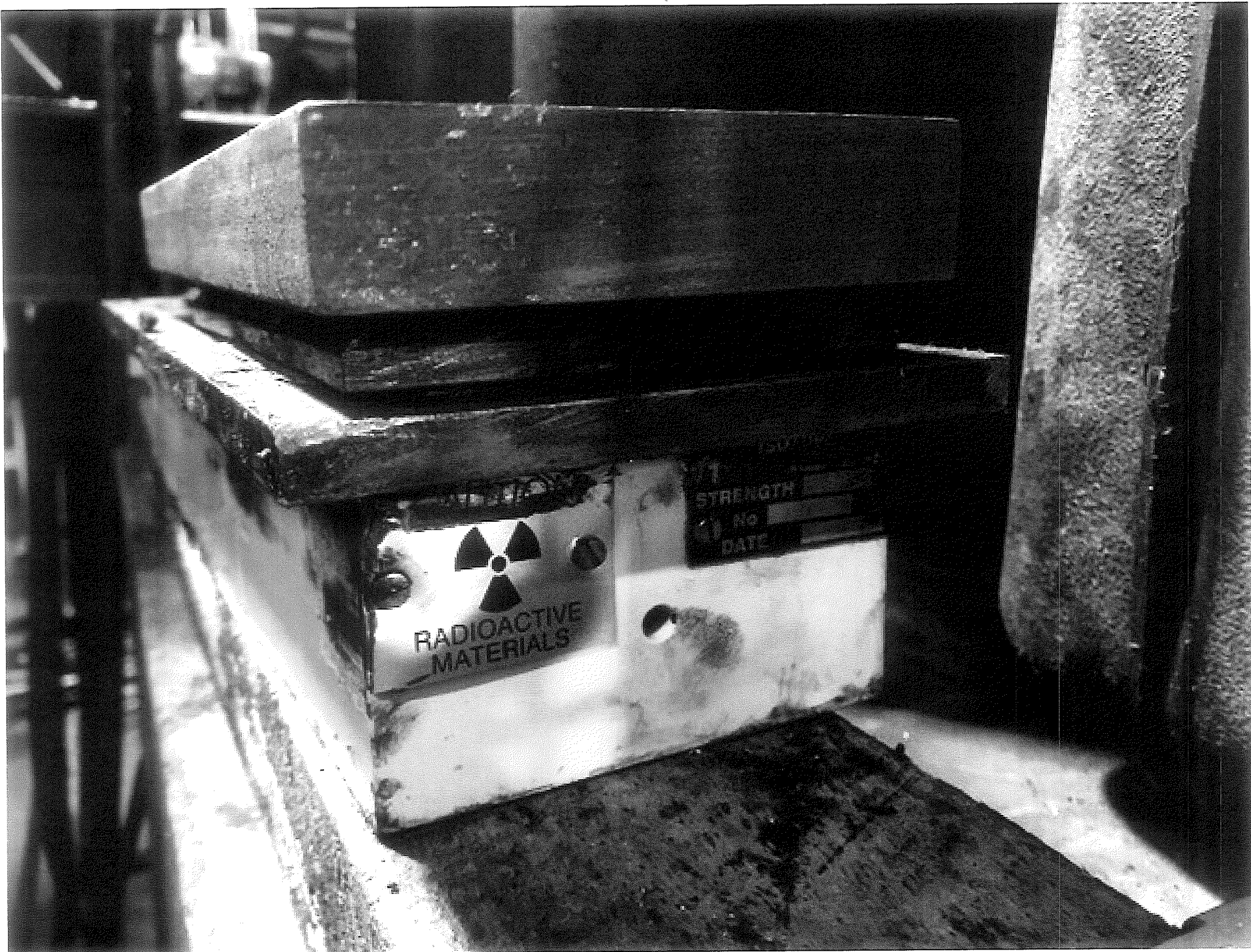
RECEIPT, POSSESSION, USE, AND TRANSFER ARE SUBJECT TO  
GENERAL LICENSE OR EQUIVALENT AND REGULATIONS OF AN  
AGREEMENT STATE OR THE U.S. NRC.

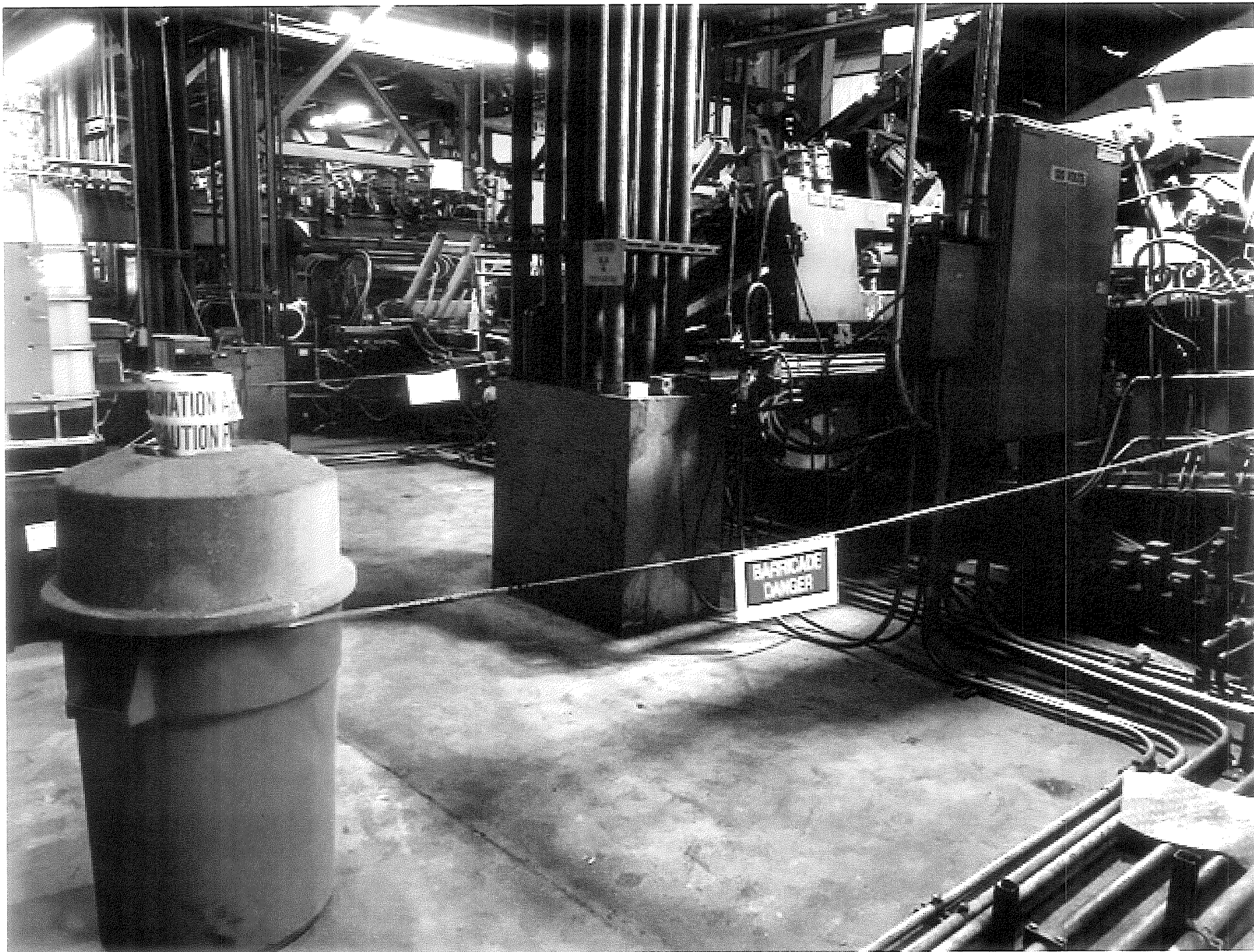
ABANDONMENT/DISPOSAL PROHIBITED UNLESS TRANSFERRED  
TO AGREEMENT STATE OR U.S. NRC SPECIFIC LICENSEES

OPERATION PROHIBITED IF ANY INDICATION OF  
FAILURE OR LEAKAGE TO SHIELDING SOURCE CONTAINMENT OR O

RELOCATION MAINTENANCE  
BY AGREEMENT STATE  
CRUISES  
RADIOACTIVE LEAKAGE  
MEDICAL







AMERICA  
WENT TO PLANT

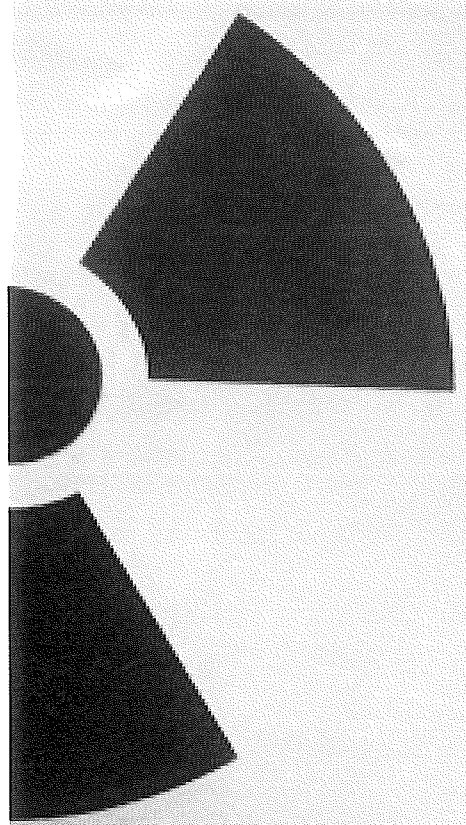
Steamboat

CAUTION  
RADIOACTIVITY  
OUT OF RANGE

CAUTION RADIOACTIVITY OUT OF RANGE



**TION**



Highest on-  
contact  
reading:  
20  $\mu$ R/hr  
(0.02 mR/hr)

RAM  
9/10/18

**ACTIVE**

**RIALS**

**From:** [Aker, Shawn \(NSIN\)](#)  
**To:** [Draper, Jason](#)  
**Subject:** [External\_Sender] FW: Nucor  
**Date:** Monday, March 30, 2020 1:05:43 PM  
**Attachments:** [20180917152610238.pdf](#)

---

**From:** Aker, Shawn (NSIN)  
**Sent:** Monday, September 17, 2018 4:37 PM  
**To:** kevin.null@nrc.gov  
**Subject:** Nucor

Hello Kevin,

Please see the attached information regarding our incident on 9/10/18. Included is our leak test certification from Chase received today, this was the last piece of information I was waiting on. If you have any questions, please contact me for any additional information.

Regards,

Shawn

