

VOID SHEET

TO: License Fee Management Branch

FROM: RIII - CHARLES GILL

SUBJECT: VOIDED APPLICATION

Control Number: 398120

Applicant: LEIGH PORTLAND CEMENT COMPANY

License Number: 37-09813-01

Docket Number: 030-06215

Date Voided: JANUARY 23, 1997

Reason for Void: ACTION VOIDED AFTER REVIEW DUE TO CHANGE IN MAILING  
ADDRESS, FROM PENNSYLVANIA TO INDIANA. PLEASE APPLY FEE FROM (398120) TO NEW  
LICENSE APPLICATION CONTROL (#302235) Cont'd.

Charles F. Gill  
Signature

January 23, 1997  
Date

Attachment:  
Official Record Copy of  
Voided Action

FOR LFMB USE ONLY

- ☐ Refund Authorized and processed  
☒ No Refund Due  
☐ Fee Exempt or Fee Not Required

Comments: \_\_\_\_\_

Log completed ☒

Processed by: SAC 2/24/97

260046

9702260118 970123  
PDR ADOCK 03006215  
C PDR

0/1 ml 3d SD

```

      (FOR LFMS USE)
      INFORMATION FROM LTS
      ***

PROGRAM CODE: 03120
STATUS CODE: 0
FEE CATEGORY: 3P
EXP. DATE: 19950331
FEE COMMENTS: REG III - USE IN INDI
DECOM FIN ASSUR REQ:

```

LICENSE FEE MANAGEMENT BRANCH, ARM  
AND  
REGIONAL LICENSING SECTIONS

### A. REGION

1. APPLICATION ATTACHED  
APPLICANT/LICENSEE: LEHIGH PORTLAND CEMENT COMPANY  
RECEIVED DATE: 950202  
DOCKET NO: 3006215  
CONTROL NO.: 398120  
LICENSE NO.: 37-09813-01  
ACTION TYPE: RENEWAL

2. FEE ATTACHED  
AMOUNT: 680.00  
CHECK NO.: 73278

### 3. COMMENTS

SIGNED  
DATE

S. Hershey

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED) ☒

1. FEE CATEGORY AND AMOUNT: 34
2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:  
AMENDMENT  
RENEWAL  
LICENSE

3. OTHER

SIGNED  
DATE

SC 2/6/95

1997 JUN 28 AM 2:19

1995 FEB -6 AM 10:52

RECEIVED  
FEB 15 1995  
REGION III

## APPLICATION FOR MATERIAL LICENSE

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 9 HOURS. SUBMITTAL OF THE APPLICATION IS NECESSARY TO DETERMINE THAT THE APPLICANT IS QUALIFIED AND THAT ADEQUATE PROCEDURES EXIST TO PROTECT THE PUBLIC HEALTH AND SAFETY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNRB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0120), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

## APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY  
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555-0001

## ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

## IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION  
NUCLEAR MATERIALS SAFETY BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION II  
101 MARIETTA STREET, NW, SUITE 2900  
ATLANTA, GA 30323-0199

## IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
801 WARRENVILLE RD.  
Lisle, IL 60532-4351

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TX 76011-8064

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

RADIOACTIVE MATERIALS SAFETY BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION V  
1450 MARIA LANE  
WALNUT CREEK, CA 94596-5368

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

## 1. THIS IS AN APPLICATION FOR (Check appropriate item)

- ☐ A. NEW LICENSE  
☐ B. AMENDMENT TO LICENSE NUMBER \_\_\_\_\_

## 2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code)

Lehigh Portland Cement Company  
121 N. First Street, P.O. Box 97  
Mitchell, IN 47446

## 3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Lehigh Portland Cement Company  
121 North First Street, P.O. Box 97  
Mtichell, IN 47446

## 4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Danny J. Blackwell

TELEPHONE NUMBER  
(812)849-2191 Ext. 203

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time	6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED
7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE	8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS
9. FACILITIES AND EQUIPMENT	10. RADIATION SAFETY PROGRAM
11. WASTE MANAGEMENT	12. LICENSEE FEES (See 10 CFR 170 and Section 170.31) FEE CATEGORY 3P AMOUNT ENCLOSURE \$ 680.00
13. CERTIFICATION (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39 AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF. WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 82 STAT. 749 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.	

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

Jerry A. Miller, Asst. Plant Manager

SIGNATURE

[Signature]

DATE

01/30/95

## FOR NRC USE ONLY

TYPE OF FEE Renewal	FEE LOG Feb 5	FEE CATEGORY 3P	AMOUNT RECEIVED \$680.00	CHECK NUMBER 13278	COMMENTS
APPROVED BY SC	DATE 2/6/95				

RECEIVED

FEB 02 1995

LEHIGH PORTLAND CEMENT COMPANY

MITCHELL OPERATIONS

January 31, 1995

Materials Licensing Section  
U.S. Nuclear Regulatory Commission, Region III  
801 Warrenville Rd.  
Lisle, IL 60532-4351

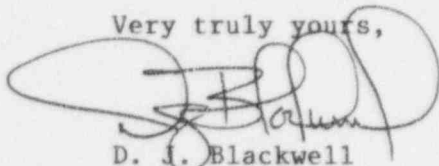
SUBJECT: Application for Renewal of Byproduct Material License  
No. 37-09813-01 - Mitchell, Indiana Cement Plant

Gentlemen:

Enclosed are two (2) copies of completed Form 313 along with  
our check no. 13278 dated January 31, 1995, in the amount of  
\$680.00 to cover our renewal application for our Mitchell, Indiana  
Cement Plant.

Please forward the new license to the attention of the writer at  
our Mitchell, Indiana address.

Very truly yours,



D. J. Blackwell  
Manager-Administration & Control

DJB/jp

Enclosures

FEB 2 1995 RECEIVED

FEB 02 1995

**5. RADIOACTIVE MATERIAL**

BY PRODUCTS, SOURCE AND/OR SPECIAL NUCLEAR MATERIAL	CHEMICAL AND/OR PHYSICAL FORM	MAXIMUM AMOUNT THAT LICENSEE MAY POSSESS AT ANY ONE TIME
A. CESIUM - 137	Sealed Sources (Ohmart Corporation Model A-2102)	No single source to exceed 150 Millicuries
B. CESIUM - 137	Sealed Sources (Ohmart Corporation Model A-2102)	No single source to exceed 10 Millicuries
C. CESIUM - 137	Sealed Sources (Ohmart Corporation Model A-2102)	No single source to exceed 100 Millicuries
D. CESIUM - 137	Sealed Sources (Ohmart Corporation Model A-2102)	No single source to exceed 130 Millicuries

**6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.**

**AUTHORIZED USE**

- A. To be used in Ohmart Corporation Model SHRM source holder for level measurements.
- B. To be used in an Ohmart Corporation Model SHGS-2 source holder to level/density measurements.
- C. To be used in an Ohmart Corporation Model SH-100 source holder for level measurements.
- D. To be used in an Ohmart Corporation Model SR-A source holder for level measurements.



**7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.**

Robert F. Whiteside

Completed June 14, 1989

Ohmart Training Course including: Principles and practices of radiation protection, radioactivity measurement and monitoring, mathematics and calculations, biological effects of radiation, common U.S.N.R.C. Regulations, waste disposal and emergency procedures.

Instructor: George H. Ellis

Final Exam Consisted of: 100 written questions

January 31, 1995

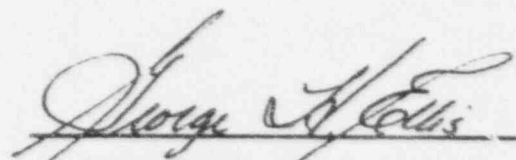
# CERTIFICATE OF PROFICIENCY

THIS IS TO CERTIFY THAT

ROBERT WHITESIDE

HAS SUCCESSFULLY COMPLETED AN OHMART TRAINING COURSE INCLUDING:  
PRINCIPLES AND PRACTICES OF RADIATION PROTECTION, RADIOACTIVITY  
MEASUREMENT AND MONITORING, MATHEMATICS AND CALCULATIONS, BIOLOGICAL  
EFFECTS OF RADIATION, COMMON U.S.N.R.C. REGULATIONS, WASTE DISPOSAL  
AND EMERGENCY PROCEDURES.



  
TRAINING DIRECTOR

Date: 6-14-89





# ohmart<sup>™</sup> radiation<sup>™</sup>

## SAFETY SCHOOL

### AGENDA

#### RADIATION SAFETY

Twenty Hours

TIME	TOPIC	MANUAL SECTION
0830	Welcome and Introduction	-----
0900	Origin of Radiation	1
	A. Basic Atomic Theory	
	B. Radiation and Radioactivity	
	C. Radiation effects	
10:30	Radioactivity Measurement Standardization *	2
	A. Terms and Definitions	
11:00	Monitoring Techniques and Instruments *	2
	A. Detection Instruments	
	B. Personnel Dosimetry	
12:00	Mathematics and Calculations Basic to the Use and Measurement of Radioactivity *	3
1:00	LUNCH	
2:00	Mathematics and Calculations - Work Sheet - PA *	3
3:00	Biological Effects of Radiation and Principles * and Practices of Radiation Protection	4
	A. Internal Radiation Hazard	
	B. Protection from Internal Radiation Hazard	
	C. External Radiation Hazard	
	D. Protection from External Radiation Hazard	
4:00	Basic Tests to be Performed on Nuclear Gages - PA	9
	A. Wipe Test	
	B. Radiation Surveys	
	C. Shutter Operation Checks	
4:45	Plant Tour	
5:00	Session Ends for the Day	
	PA - Practical Application	
	*These items are listed in Item 16 of USNRC Form 313I, Formal Training in Radiation Safety.	



# ohmart radiation

## SAFETY SCHOOL

## AGENDA

## RADIATION SAFETY

Twenty Hours

TIME	TOPIC	MANUAL SECTION
0830	Review, Question and Answer Period	
0900	Waste Disposal and Shipping Requirements - PA <ul style="list-style-type: none"> <li>A. Definitions</li> <li>B. Labeling</li> <li>C. Bill of Lading Completion</li> </ul>	6
10:00	Removal and Reinstallation of Sourceholders - PA <ul style="list-style-type: none"> <li>A. Safe Handling Procedures</li> <li>B. Storage</li> <li>C. Preparation for Shipment</li> <li>D. Recovery</li> <li>E. Installation</li> <li>F. Radiation Survey</li> <li>G. Wipe Test</li> <li>H. Occupancy Evaluation</li> <li>I. Lock Out Procedures</li> </ul>	8
12:00	NRC Rules and Regulations *	5
1:00	LUNCH	
2:00	Emergency Procedures	7
2:45	Removal and Reinstallation of BAL Sourceholders	8
3:15	BREAK	
3:30	Removal of a Sourceholder with an Open Shutter - PA <ul style="list-style-type: none"> <li>A. Establishing a barricade</li> <li>B. Selecting shielding material</li> <li>C. Procedure <ol style="list-style-type: none"> <li>1. Develop plan</li> <li>2. Personnel Monitoring</li> <li>3. Survey</li> <li>4. Packaging</li> </ol> </li> </ul>	8
5:00	Session Ends for the Day	
	PA - Practical Application	



## AGENDA

## RADIATION SAFETY

Twenty Hours

TIME	TOPIC	MANUAL SECTION
0830	Review, Question and Answer Period	
0845	Customer Service Department	
0930	NRC By Product Material License A. License Completion B. License Limitations C. License Additions	10
10:30	Program Outline for Employee Training	10
11:00	Test	
1:00	End of Session	

**8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS**

Robert F. Whiteside

Will be responsible for training. (See Attachment 1)

ATTACHMENT 1

TRAINING PROGRAM OUTLINE  
FOR EMPLOYEES

1. TYPE OF RADIATION EMITTED FROM OHMART SOURCES
  - A. GAMMA
  - B. BETA
  - C. NEUTRON
2. BIOLOGICAL EFFECTS FROM OCCUPATIONAL EXPOSURE BASED UPON OCCUPANCY EVALUATION
  - A. GAMMA - NORMAL DOSAGE
  - B. BETA - NORMAL DOSAGE
  - C. NEUTRON - NORMAL DOSAGE
3. NORMAL HANDLING PROCEDURES
  - A. SHUTTER MECHANISM OPERATIONS
  - B. RADIATION SURVEYS
  - C. WIPE TESTS
  - D. RECORD KEEPING REQUIREMENTS
4. LIMITATIONS OF SOURCE HOLDER HANDLING

UNLESS THE INDIVIDUAL IS SPECIFICALLY LICENSED THE FOLLOWING ACTIONS ARE NOT ALLOWED.

  - A. SOURCE HOLDER REMOVAL
  - B. SOURCE HOLDER RELOCATION
  - C. SOURCE HOLDER REINSTALLATION
  - D. SOURCE HOLDER SHIPPING AND DISPOSAL
5. SPECIAL OPERATING PROCEDURES
  - A. LOCK OUT PROCEDURES FOR HIGH RADIATION AREAS
  - B. SPECIAL SHIELDING REQUIREMENTS WHEN REQUIRED
  - C. SOURCE HANDLING PROCEDURES WHEN AUTHORIZED BY NRC OR AGREEMENT STATES
  - D. POSTING REQUIREMENTS
  - E. PERSONNEL MONITORING
6. NRC RULES AND REGULATIONS
  - A. LOST OR MISSING SOURCEHOLDERS
  - B. RADIATION OVEREXPOSURE
  - C. DAMAGED SOURCEHOLDERS
    - 1 SHIELDING
    - 2 SHUTTER MECHANISMS
  - D. EMERGENCY SITUATIONS
    - 1 FIRES
    - 2 CONTAMINATION

## **9. FACILITIES AND EQUIPMENT**

### **9. A.**

Location: Quarry stone surge bin, high bin and low bin

See Figure 1.

Conditions: Low vibration and ambient temperature 80 deg.

Maintenance: Six months: Wipe test, shutter test, physical inventory and physical inspection.

Emergency Procedures: Cordon off and mark the area with radiation hazard tape at the 2MR/HR radiation level. 17 ft.

See attached emergency procedures.

### **9. B.**

Location: #3 Kiln Coal Cyclone

See Figure 2.

Conditions: Low vibration and ambient temperature 100 deg.

Maintenance: Six months: Wipe test, shutter test, physical inventory and physical inspection.

Emergency Procedure: Cordon off and mark the area with radiation hazard tape at the 2 MR/HR radiation level. 5 ft.

See attached emergency procedures.

### **9. C.**

Location: Roll Crusher Clinker Bin

See Figure 3.

Conditions: Low vibration and ambient temperature 80 deg.

Maintenance: Six months: Wipe test, shutter test, physical inventory and physical inspection.

Emergency Procedure: Cordon off and mark the area with radiation tape at the 2 MR/HR radiation level. 12 ft.

See attached emergency procedures.



9. D.

Location: Roll Crusher Bin Chute High Level

See Figure 4.

Conditions: Low vibration and ambient temperature 120 deg.

Maintenance: Six months: Wipe test, shutter test, physical inventory and physical inspection.

Emergency Procedure: Cordon off and mark the area with radiation tape at the 2 MR/HR radiation level. 6 ft.

See attached emergency procedures.

9. E.

Location: Clinker Outhaul System - South Clinker Outhaul Elevator Discharge Chute to Roll Crusher

See Figure 5.

Conditions: Low vibration and ambient temperature 120 deg.

Maintenance: Six months: Wipe test, shutter test, physical inventory and physical inspection.

Emergency Procedure: Cordon off and mark the area with radiation tape at the 2 MR/HR radiation level. 3 ft.

See attached emergency procedures.

9. F.

Location: #1 Finish Mill Clinker Bin

See Figure 6.

Conditions: Low vibration and ambient temperature 80 deg.

Maintenance: Six months: Wipe test, shutter test, physical inventory and physical inspection.

Emergency Procedure: Cordon off and mark the area with radiation tape at the 2 MR/HR radiation level. 6 ft.

See attached emergency procedures.

9. G.

Location: #2 Finish Mill Clinker bin

See Figure 7.

Conditions: Low vibration and ambient temperature 80 deg.

Maintenance: Six months: Wipe test, shutter test, physical inventory and physical inspection.

Emergency Procedure: Cordon off and mark the area with radiation tape at the 2 MR/HR radiation level. 6 ft.

See attached emergency procedures.

9. H.

Location: #3 Finish Mill Clinker Bin

See Figure 8.

Conditions: Low vibration and ambient temperature 80 deg.

Maintenance: Six months: Wipe test, shutter test, physical inventory and physical inspection.

Emergency Procedure: Cordon off and mark the area with radiation tape at the 2 MR/HR radiation level. 6 ft.

See attached emergency procedures.

9. I.

Location: #4 Finish Mill Clinker Bin

See Figure 9.

Conditions: Low vibration and ambient temperature 80 deg.

Maintenance: Six months: Wipe test, shutter test, physical inventory and physical inspection.

Emergency Procedure: Cordon off and mark the area with radiation tape at the 2 MR/HR radiation level. 6 ft.

See attached emergency procedures.

9. J.

Location: Finish Mill's Clinker Overflow Bin

See Figure 10.

Conditions: Low vibration and ambient temperature 80 deg.

Maintenance: Six months: Wipe test, shutter test, physical inventory and physical inspection.

Emergency Procedure: Cordon off and mark the area with radiation tape at the 2 MR/HR radiation level. 6 ft.

See attached emergency procedures.

9. K.

Location: Roll Crusher Feed Elevator

See Figure 11.

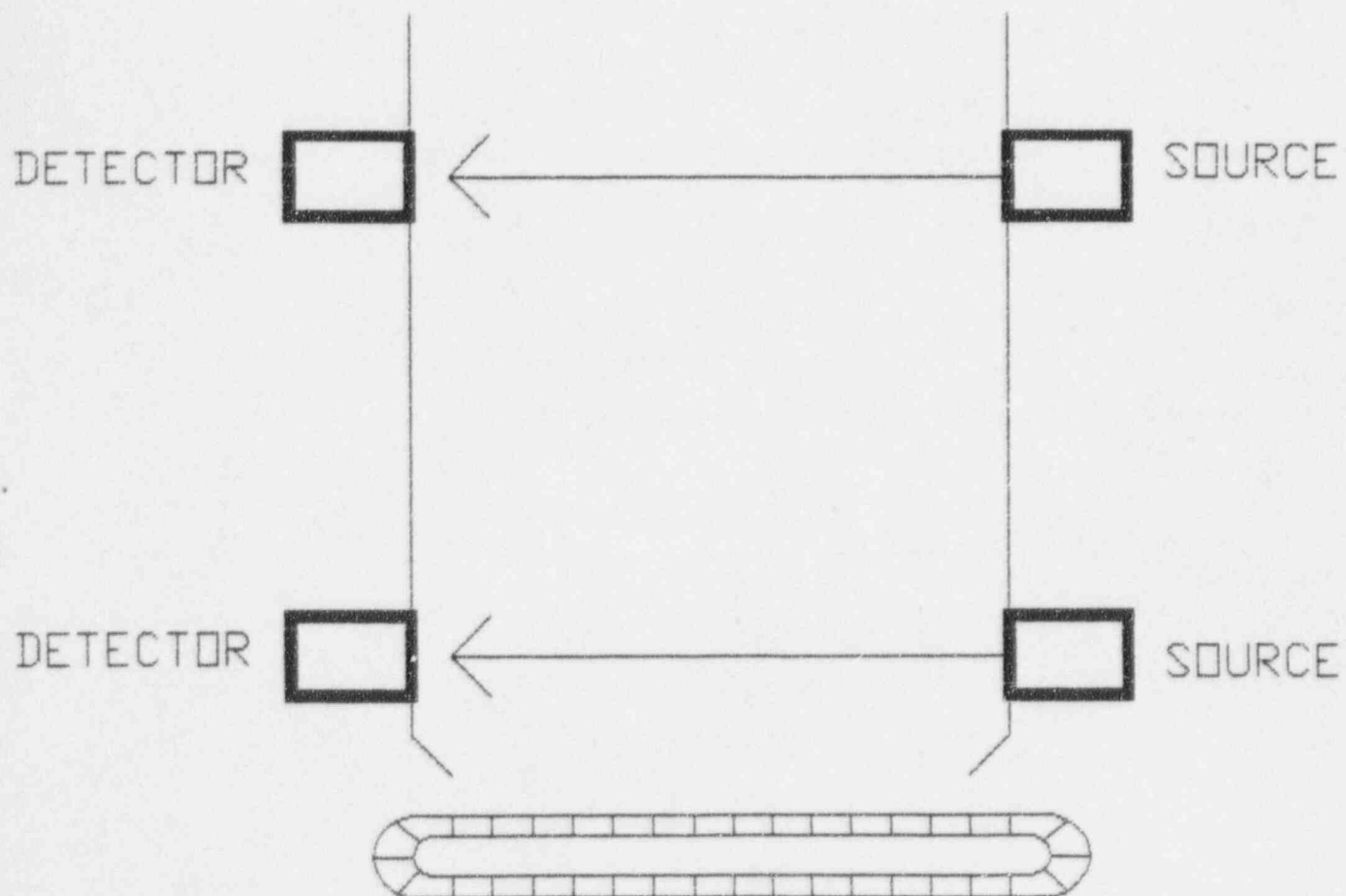
Conditions: Low vibration and ambient temperature 90 deg.

Maintenance: Six months: Wipe test, shutter test, physical inventory and physical inspection.

Emergency Procedure: Cordon off and mark the area with radiation tape at the 2 MR/HR radiation level. 6 ft.

See attached emergency procedures.

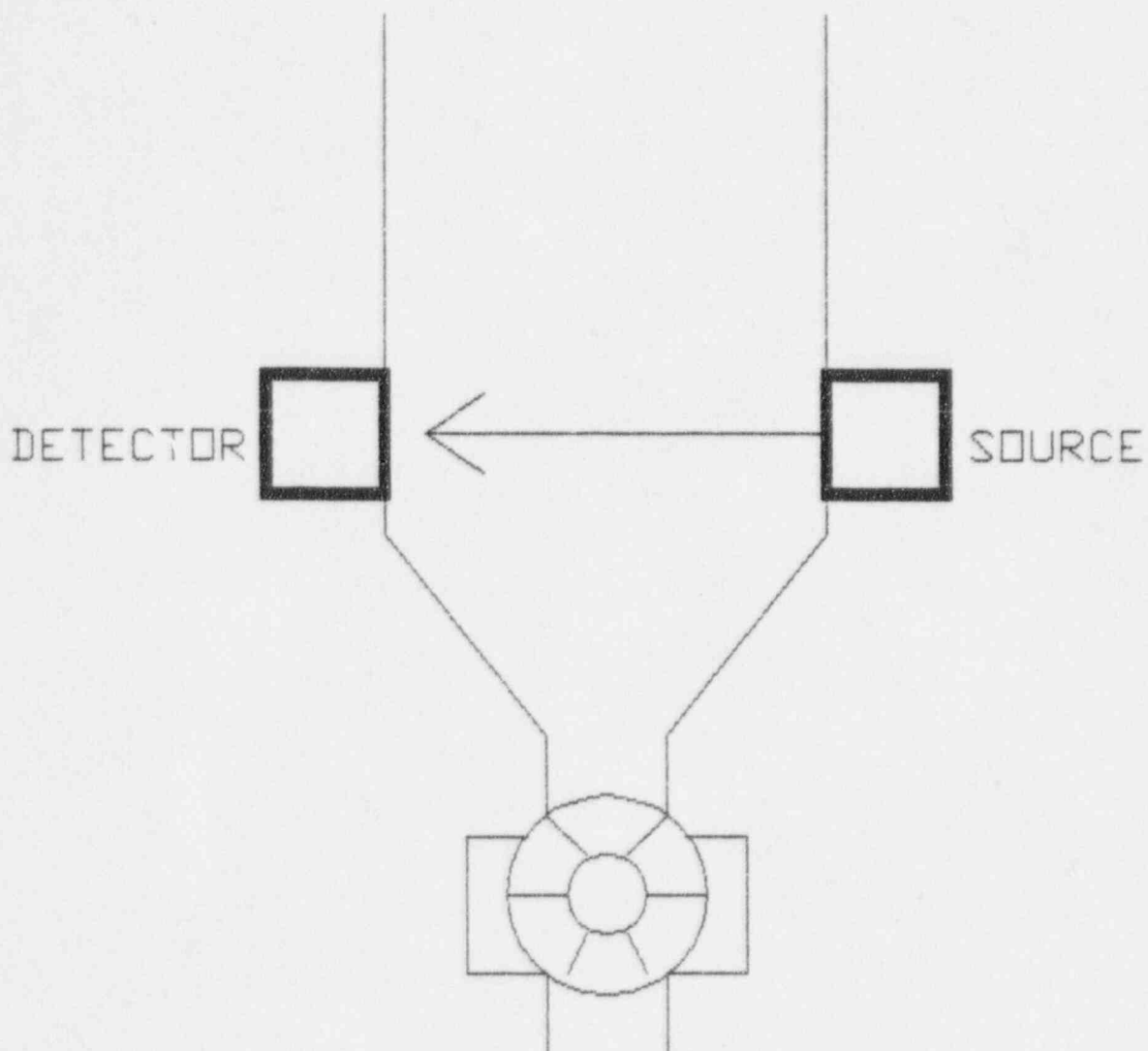
# QUARRY SURGE BIN HI AND LOW BIN



RADIOACTIVE MATERIAL  
AHOP ORDER #D541006036  
MODEL # SHRM  
ISOTOPE CISIUM 137  
mci 150

FIG. 1

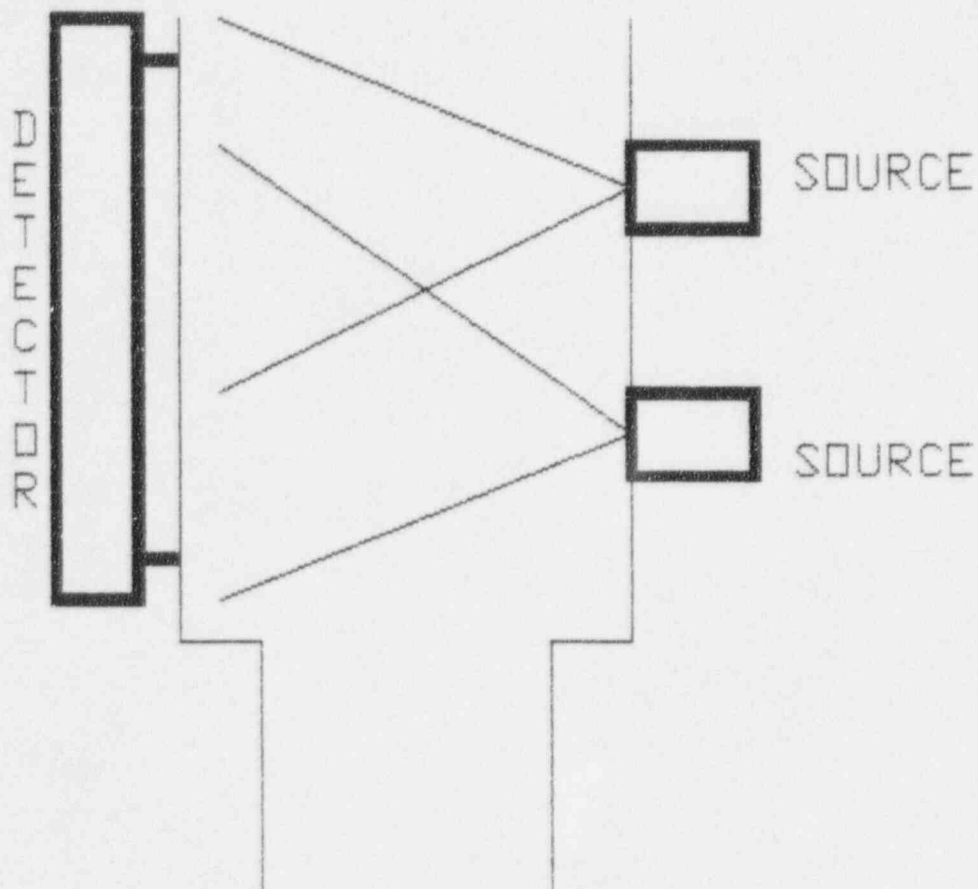
# 3 KILN COAL CYCLONE



RADIOACTIVE MATERIAL  
SHOP ORDER # 8910050  
MODEL # SHGS-2  
ISOTOPE CESIUM 137  
mci 10

FIG. 2

# ROLL CRUSHER SURGE BIN

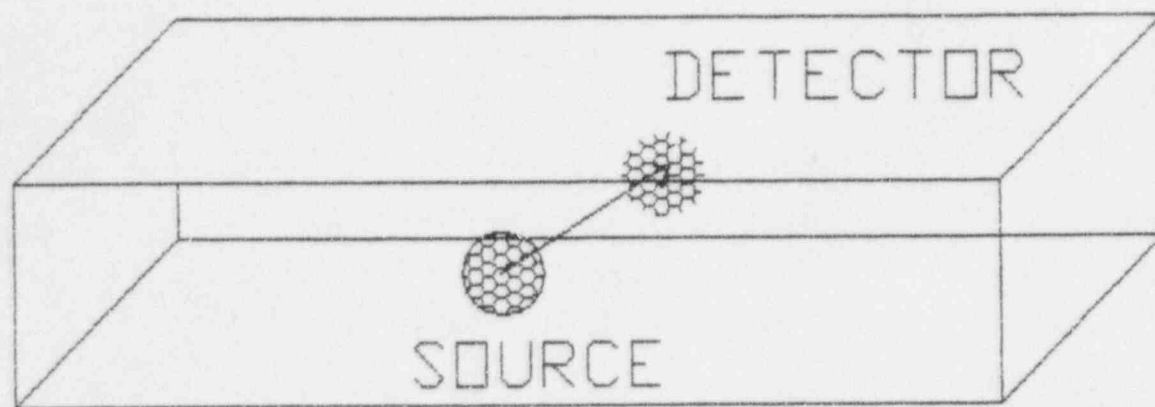


RADIOACTIVE MATERIAL  
SHOP ORDER # A702003016  
MODEL # SH-100  
ISOTOPE CESIUM 137  
mci 80

FIG 3



# ROLL CRUSHER CLINKER SLIDE CHUTE

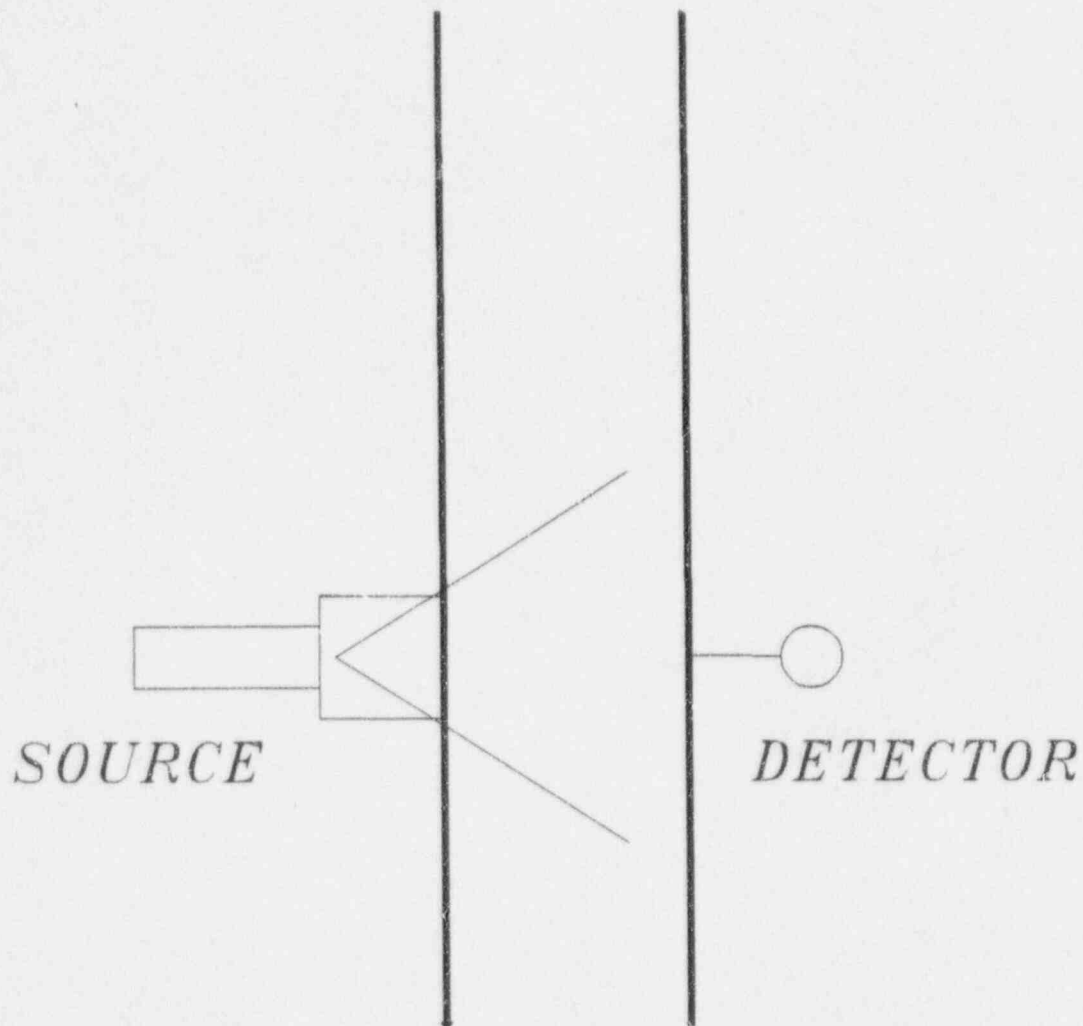


CLINKER SLIDE

RADIOACTIVE MATERIAL  
SHOP ORDER # W801007050  
MODEL # SR-A  
ISOTOPE CISIUM 137  
mci 20

FIG. 4

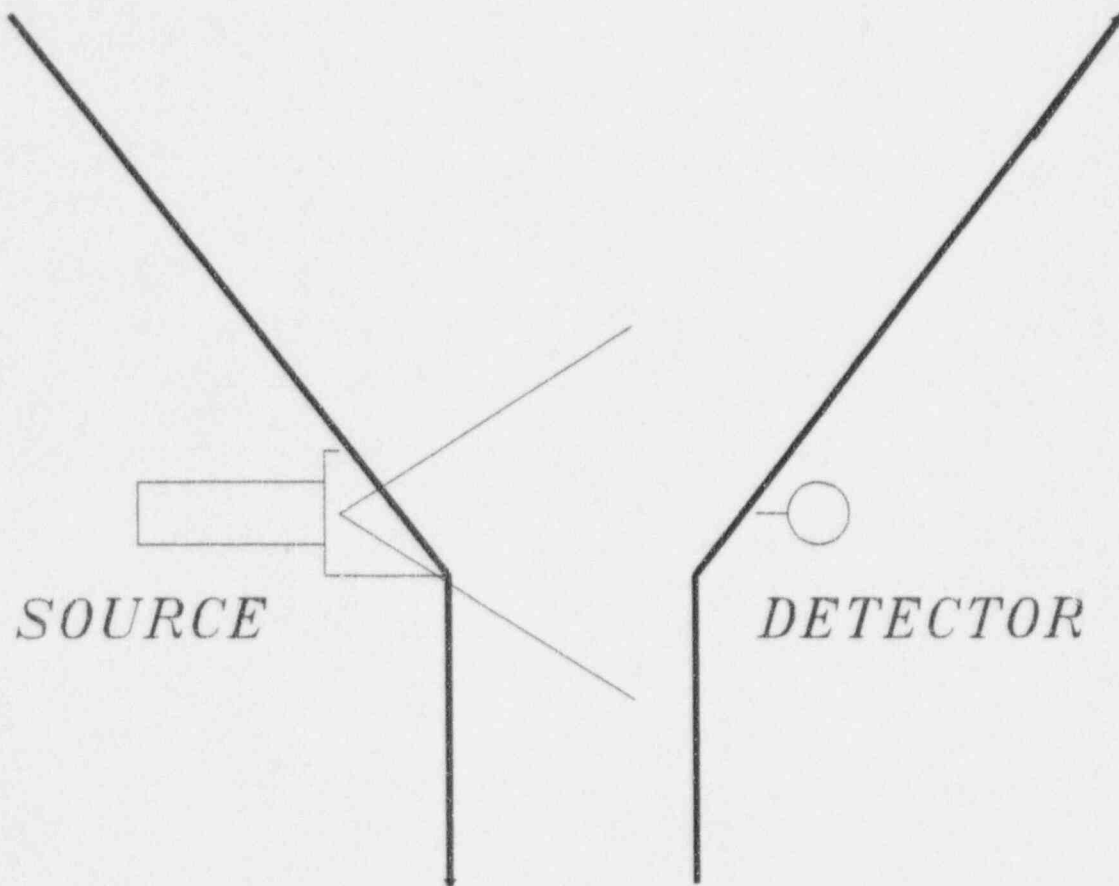
*CHUTE FROM H132 TO G2 GATE*



*RADIOACTIVE MATERIAL*  
*SHOP ORDER # IN94-010-1448*  
*MODEL # SR-A*  
*ISOTOPE CS-137*  
*mCi 20*

FIGURE 5

# #1 FINISH MILL CLINKER BIN



*RADIOACTIVE MATERIAL*

*SHOP ORDER # W901010063D*

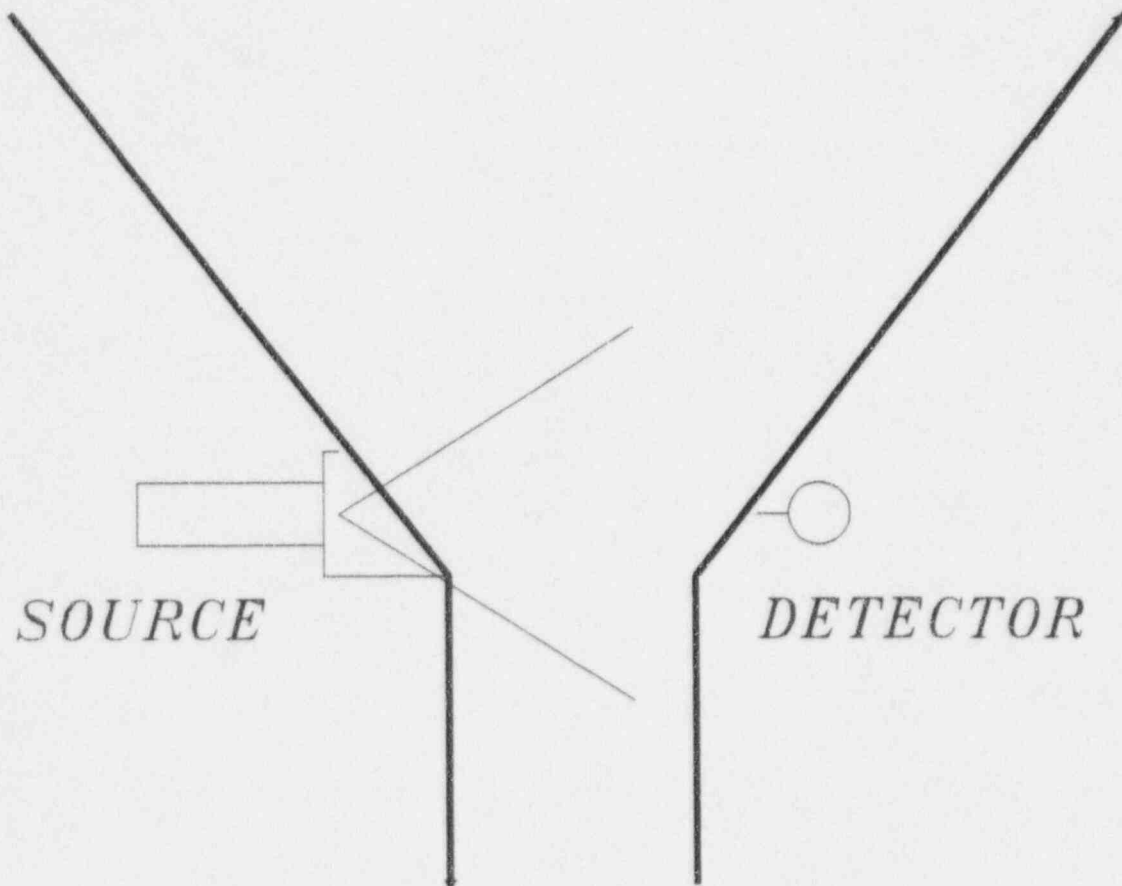
*MODEL # SR-A*

*ISOTOPE CS-137*

*mCi 10*

FIGURE 6

# *#2 FINISH MILL CLINKER BIN*



*RADIOACTIVE MATERIAL*

*SHOP ORDER # W901010063A*

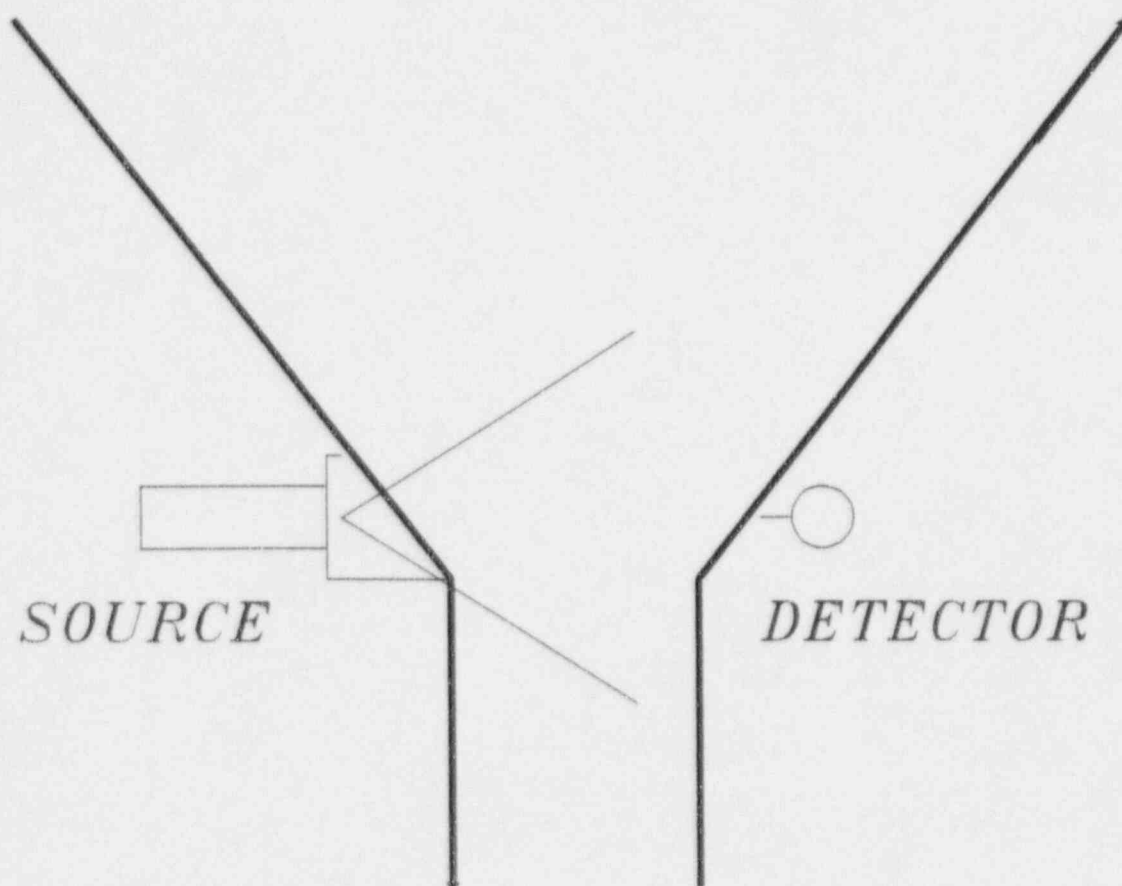
*MODEL # SR-A*

*ISOTOPE CS-137*

*mCi 10*

FIGURE 7

# *#3 FINISH MILL CLINKER BIN*



*RADIOACTIVE MATERIAL*

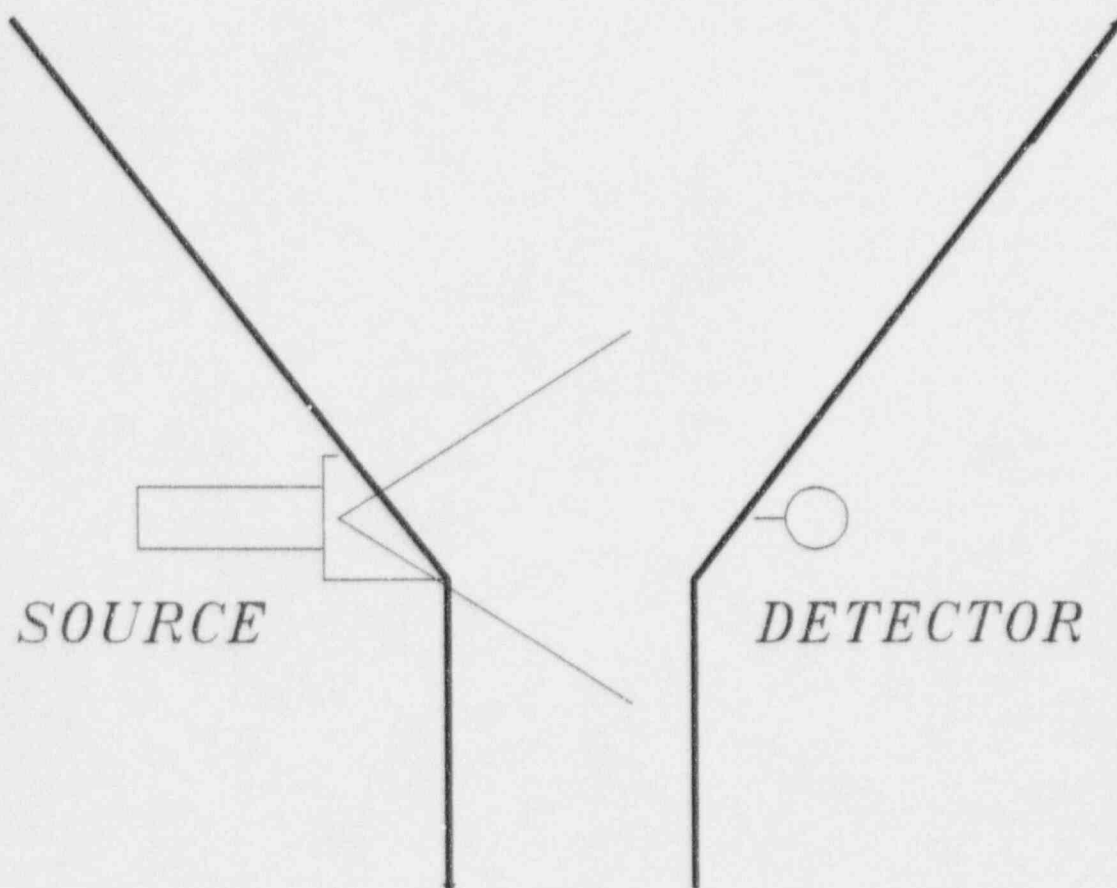
*SHOP ORDER # W901010063C*

*MODEL # SR-A*

*ISOTOPE CS-137*

*mCi 10*

# *#4 FINISH MILL CLINKER BIN*

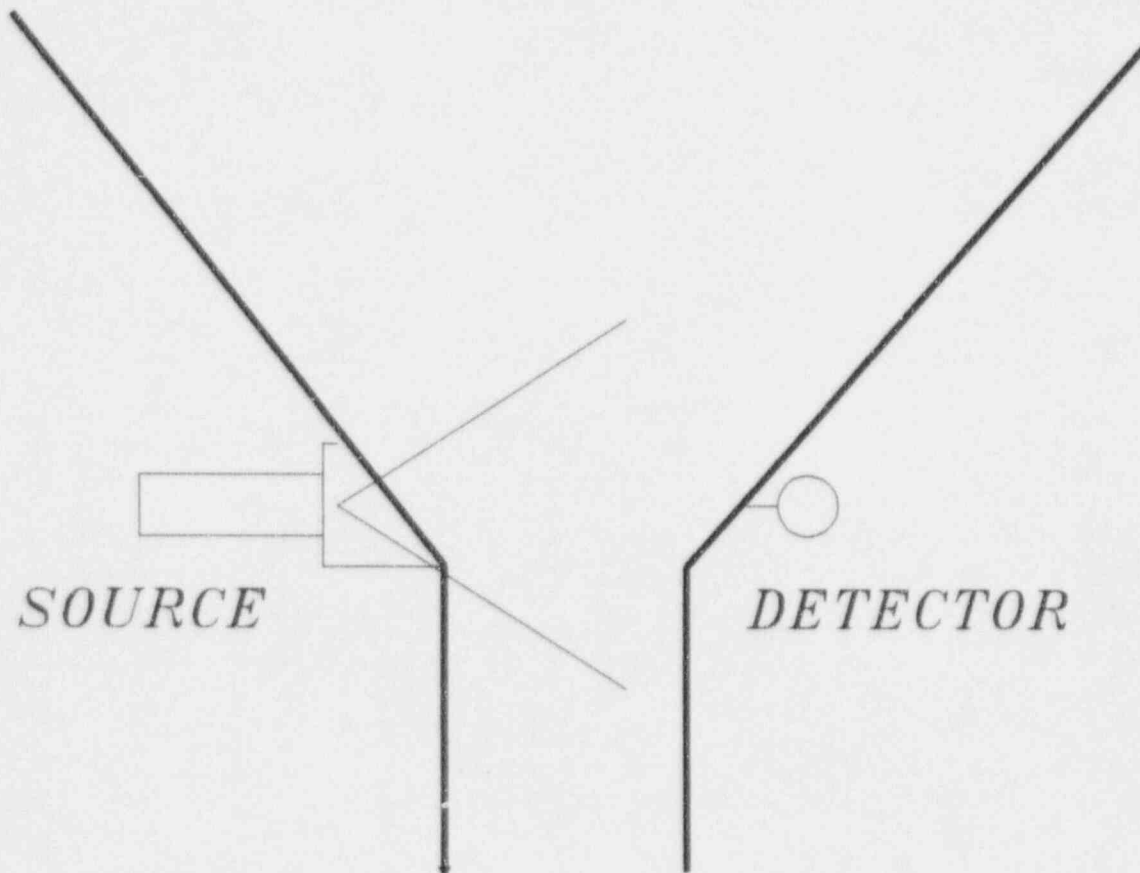


*RADIOACTIVE MATERIAL  
SHOP ORDER # W901010063E  
MODEL # SR-A  
ISOTOPE CS-137  
mCi 10*

FIGURE 9



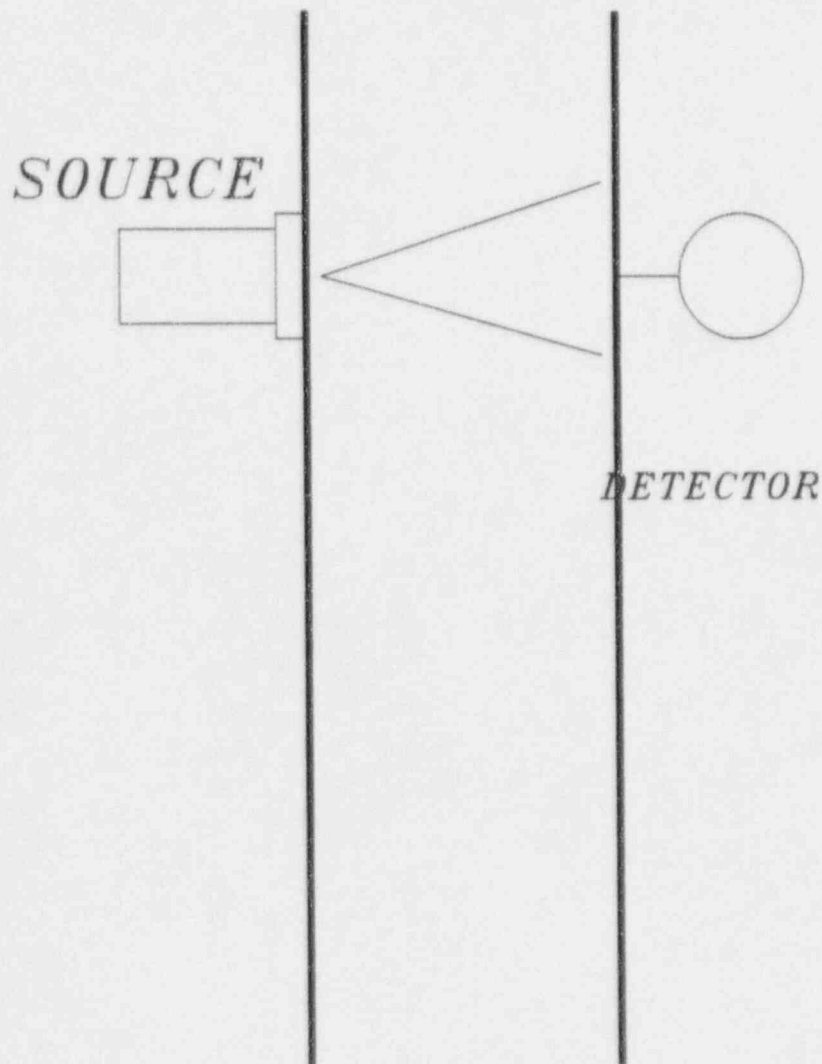
# *FINISH MILL'S CLINKER OVERFLOW BIN*



*RADIOACTIVE MATERIAL*  
*SHOP ORDER # W901010063B*  
*MODEL # SR-A*  
*ISOTOPE CS-137*  
*mCi 10*

FIGURE 10

# ROLL CRUSHER FEED ELEVATOR



RADIOACTIVE MATERIAL  
SHOP ORDER # W901010062  
MODEL# SR-A  
ISOTOPE CISIUM 137  
mCi 10

FIGURE 11

**EMERGENCY PROCEDURES**

- A. In all emergency procedures taken, **priority should be given to human safety.**
- B. **Evacuate** the immediate area while simultaneously ensuring that the radiation field and the extent of the spread of contaminating radioactive materials are kept to an absolute minimum.
- C. **Identify** and immediately **isolate** all persons who might have received high exposures or who could have been contaminated. In such cases, arrange for immediate decontamination, if necessary, evaluation of personnel devices, and sample collections of body fluids (blood, urine, etc.) for further analysis.
- D. **Regulate entry** to the scene of the accident by placing a cordon at the 2 MR/HR level and marking it with radiation hazard signs, so as to minimize all subsequent exposures and contamination incidents. Contain the contamination at the site of the accident. With gloves and tongs, place plastic bags over anything you suspect to be contaminated. Also, place contaminated gloves, tongs and clothing inside plastic bags, wash immediately, and shower as soon as possible. If there is any possibility of airborne contamination, masks should be worn (if possible, a self-contained oxygen mask). **BE SURE TO SHUT OFF ALL FANS AND AIR-CONDITIONING.**
- E. **Notify the appropriate authorities** promptly through suitable media such as telephone, telegraph, etc., and seek immediate advice on further steps to be taken. Arrange for the immediate advice on further steps to be taken. Arrange for the immediate availability of experts who are trained to deal with such accidental conditions. (Persons responsible for radiation protection should have prior information regarding experts and organizations to be contacted to deal with radiation emergencies.
- F. **Maintain complete records of the accident and follow-up procedures.** This simple instruction is often forgotten, resulting in enormous complications during incident investigation and in adoption of subsequent remedial measures.

These are some of the most probable problems involving radioactive sources.

**Fall or Collision.**

1. Survey the source holder to insure that the radiation pattern is normal. Radiation profile should measure less than 5 MR/HR at one foot from the unit with the shutter closed.
2. Insure that the shutter on/off mechanism is functioning properly.
3. Check for possible radioactive material leakage by wipe testing the unit. This is required by regulation, although, with doubly encapsulated sources this is very unlikely.
4. If the radiation pattern is within prescribed limits, the source shutter mechanism is operating properly and there is no evidence of radioactive material leakage then the unit may be returned to service.

However, if it appears that the lead shielding has been damaged, regard the unit as having a radiation field present above allowable limits.

1. Cordon off and mark the area with radiation hazard signs at the MR/HR level by calculation.
2. Obtain names of individuals who may have been overexposed. (Medical examination may be required if exposure has exceeded 5 rems whole body dose.)
3. Call the NRC or Agreement State agency immediately and notify them.
4. Contact the gase manufacturer so that arrangements can be made for safe removal, packaging and shipment of the source holder. If permitted, shielding materials may be placed around the source holder to decrease radiation levels.

**FIRES**

In case of fire, handle the immediate emergency first, however, inform firefighting personnel that there are radioactive sources in the area. As soon as the immediate emergency is taken care of:

1. **Assume** that the **lead shielding** has **melted** and approach the source holder with caution. Place the survey meter on the lowest scale and approach the unit, if radiation profiles are as previously measured in initial installation surveys, then proceed.
2. **Check** the **shutter mechanism** for proper functioning.
3. **Wipe test** the unit.

However, if the radiation field is above normal limits:

1. **Cordon** off and **mark** the **area** with radiation hazards signs at the 2 MR/HR level.
2. **Note names** of all personnel who may have received an exposure dosage. (Dosage above normal limits will require medical examination.)
3. **Call** and **notify the NRC or Agreement State** immediately and implement any safe procedures they may prescribe.
4. **Contact** the **gase manufacturer** for assistance in removal, packaging and disposal of the unit.
5. **Wipe test** the unit for possible contamination. (The source capsule should withstand 1475 degree F before distorting and, possibly, leaking of radioactive material.)
6. If tests indicate that the unit exhibits leakage, then utilize plastic gloves and tongs. Place plastic bags over the unit to prevent spreading the radioactive material.

10. Lehigh Portland Cement Company personnel will:
- A. Perform wipe test
  - B. Shutter test
  - C. Remove and reinstall sources in original locations

According to procedures outlined by Ohmart Corporation.

All other services will be performed by:

Ohmart Corporation  
4241 Allendorf Drive  
Cincinnati, Ohio 45209

License #34-00639-01 (NRC Specific)  
#201-487-95 (Kentucky Specific)

513-272-0131

Leak Testing:

Ohmart Corporation wipe test kit No. 724

Ohmart Corporation  
4241 Allendorf Drive  
Cincinnati, Ohio 45209

License #34-00639-01 (NRC Specific)  
#201-487-95 (Kentucky Specific)

513-272-0131

Lockout Procedure:

Lehigh Portland Cement Company has prepared safety lockout procedures using job safety analysis. Mr. Robert F. Whiteside will be responsible for enforcement of lockout procedures and distribution of information on same.

Training:

As required by individuals working on equipment.

11. Ohmart will be responsible to:

Contain, package, ship and dispose of all radioactive material.

Address:

Ohmart Corporation  
4241 Allendorf Drive  
Cincinnati, Ohio 45209

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