



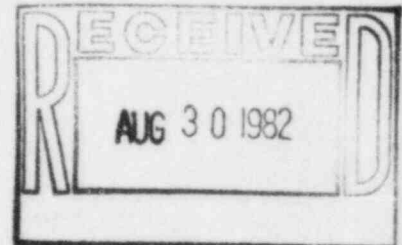
**Pittsburgh-Des Moines Corporation**

580 East 600 South (P.O. Box 1447)  
Provo, UT 84601  
801-373-8150

LICENSE: 43-19915-01

August 24, 1982

USNRC  
ATTN: Mr. Glen D. Brown  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76012



Gentlemen:

In response to the violations that Mr. R. C. Brown found in his routine safety inspection on June 24, 1982. The following corrective steps were taken.

Violation #1            We have had Quarterly Internal Inspections on  
                                 16-17 July 1981  
                                 22-23 Oct 1981  
                                 We missed the Quarterly Internal Inspections on  
                                 22 Jan 1982  
                                 22 Apr 1982  
                                 22 July 1982  
                                 To correct this violation an Internal Inspection was  
                                 performed on 10-11 Aug 1982.  
                                 See Attached Pages # 1A, 1B, 1C, 1D,  
                                 1E, 1F, 1G, 1H.  
                                 To avoid further violations, I made a Quarterly Internal  
                                 Inspection Index Sheet to control and to remind us of  
                                 future inspections.  
                                 See Attached Page # 1I

Violation #2            We had four Radiographer Assistants during the period  
                                 June 1981 to June 1982. I obtained a signed statement  
                                 attesting to prior occupational dose from these Radio-  
                                 grapher Assistants, except from Paul B. Heideman, he was  
                                 trained but did not work as an Assistant.  
                                 See Attached Pages # 2A, 2B, 2C.  
                                 To avoid further violation to 10 CFR 20.102 (a), a  
                                 training session was held on Aug 24, 1982 about this  
                                 violation and our responsibility of obtaining signed  
                                 statements from the people we hire attesting to their  
                                 prior occupational dose.  
                                 See Attached Page #2D

8210220324 820928  
NMS LIC30  
43-19915-01        PDR

USNRC

Violation #3 (a) We requested from Gamma Industries the Certificates of Compliance to meet the requirements of Paragraph 49 CFR 173.398 (a).

See Attached Pages #3aA, 3aB  
A copy of these forms are included in our files for future receiving & shipping of Radioactive Materials.

Violation #3 (b) We requested on July 1, 1981 to be registered in accordance with provisions of paragraph 71.12(b) of 10 CFR Part 71.

See Attached Page #3bA  
To avoid further violation to these provisions we had a training session on Aug 24, 1982.

See Attached Page #3bB

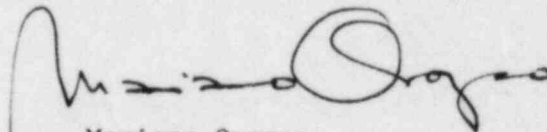
Violation #3 (c) We acquired a specification 7A package certification for type A material from Gamma Industries.

See Attached Pages #3cA, 3cB, 3cC  
A copy of this certification is in our files for future receiving & shipping of Radioactive materials.

Violation #4 Our Quality Assurance Program was approved on May 12, 1981.

See Attached Pages #4A, 4B

If you have any questions pertaining to this violation response please contact us at (801) 373-8150 Ext. 238.



Mariano Orozco  
Asst. Radiation Safety  
Officer

HO:mp

RADIATION SAFETY

\*\*\* QUARTERLY AUDIT CHECKLIST \*\*\*

	Current	Deficient	COMMENTS
1. Eye examinations	(X)	( )	
2. Survey meter cal.	(X)	( )	
3. Dosimeter check	(X)	( )	
4. Film badge (date)	(X)	( )	
5. Dosimeter log	(X)	( )	
6. Quarterly invent.	(X)	( )	
7. Source wipe test	(X)	( )	
8. Film badge record	(X)	( )	
9. Rad. safety train.:			
a. annual RSTP 1&2	(X)	( )	
b. quarterly	( )	(X)	LAST SAFETY TRAINING SESSION WAS HELD ON FEB. 15, 1982
10. Training & Qual.			
a. level I	(X)	( )	
b. level II	(X)	( )	
11. Radiographer review	( )	(X)	CRAIG CHILD & MARIANO CROZCO SHOULD BE REVIEWED
12. Assistant review	( )	(X)	SAME →
13. Source usage log	( )	(X)	RADIOGRAPHERS <del>PROCESSED</del> ARE NOT USING THE <del>LOG</del> . USAGE LOG.
14. Receiving reports	(X)	( )	
15. Transfer reports	(X)	( )	
16. Shipping reports	(X)	( )	
17. Exposure notification (annual)			
a. Individual	(X)	( )	
b. N.R.C.	(X)	( )	
18. Termination reports:			
a. Individual	(X)	( )	
b. N.R.C.	(X)	( )	
19. Previous audits	(X)	( )	

RADIATION SAFETY  
QUARTERLY AUDIT REPORT

#9

AUDIT FINDING: THE LAST QUARTERLY RADIATION SAFETY  
REVIEW WAS HELD ON FEB. 15 1982

BY: MARIANO OROZCO DATE: 8/2/82

SUGGESTED CORRECTIVE ACTION:

YOU SHOULD HAVE A RADIATION SAFETY REVIEW AS SOON AS  
POSSIBLE AND KEEP A BETTER RECORD OF THE  
REVIEWS.

CORRECTIVE ACTION TAKEN: Radiation Safety review was held  
on 8/24/82

A Master Index is being made to  
document all quarterly Radiation Safety reviews  
and to prevent this problem from reoccurring  
in the future

Thomas Robinson Radiation Supervisor

ACTION APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

RADIATION SAFETY  
QUARTERLY AUDIT REPORT

#13

AUDIT FINDING: RADIOGRAPHERS ARE NOT USING THE  
SOURCE USAGE LOG (AEC LOG) EVERY TIME THEY PERFORMED  
RADIOGRAPHY.

BY: Manis Digo DATE: AUG 11 1982

SUGGESTED CORRECTIVE ACTION: HAVE A TRAINING SESSION TO  
REMINDE THE RADIOGRAPHERS OF THE IMPORTANCE AND  
RESPONSABILITIES OF USING THE USAGE LOG.

CORRECTIVE ACTION TAKEN: on 8/24/82 An radiation safety  
review was held dealing with the importance of  
keeping accurate records dealing with the  
Source usage log (AEC log)

Thomas Robinson Radiation Supervisor

ACTION APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

COMMENTS: \_\_\_\_\_





**Pittsburgh-Des Moines Corporation**

580 East 600 South (P.O. Box 1447)

Provo, UT 84601

801-373-8150

---

Aug 24 1982

Subject: Quaterly Radiation Safety Review

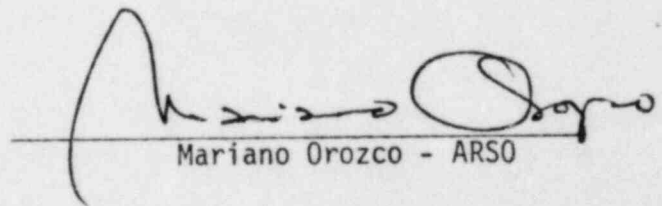
To comply with NRC regulations, a Radiation Safety Review was held on Tuesday August 24, 1982 for all Quality Assurance Personnel who are involved with radiographic operations at the PDM Provo plant.

Signatures of those attending

Thomas Robinson

Mariano Orozco

---

  
Mariano Orozco - ARSO

RADIATION SAFETY  
QUARTERLY AUDIT REPORT

AUDIT FINDING: #11 THE RADIOGRAPHER PERFORMANCE REVIEW FOR EACH RADIOGRAPHER IS NOT DONE QUARTERLY (IT SHOULD BE DONE QUARTERLY)

BY: MARIANO GROZCO DATE: 9/12/82

SUGGESTED CORRECTIVE ACTION: REVIEW THE PERFORMANCE OF THE RADIOGRAPHERS NEXT TIME YOU X-RAY OR GAMMA-RAY. KEEP BETTER RECORDS OF YOUR REVIEWS.

CORRECTIVE ACTION TAKEN: An unannounced performance review of Radiographer was made on 8/18/82 Master Index has been created to avoid this problem from occurring in the future.

Thomas Robinson Radiation Supervisor

ACTION APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

COMMENTS: \_\_\_\_\_





ANNOUNCED ( )  
UNANNOUNCED

"RADIOGRAPHER'S PERFORMANCE REVIEW"

LOCATION: provo Utah DATE 8/18/82

ADDRESS: \_\_\_\_\_

USNRC REGION: I II III  IV V STATE Utah

RADIOGRAPHER Mariano Orozco ASSISTANT RADIOGRAPHER Thomas Robinson

PROJECTOR SERIAL NO. 1696 RADIOACTIVE CONTENT Ie<sup>192</sup> 5.5 curies

PROJECTOR SERIAL NO. \_\_\_\_\_ RADIOACTIVE CONTENT \_\_\_\_\_

"SURVEY COMMENTS"

1. DOSIMETERS CHARGED DAILY S/N 12760 COMMENT: α  
AND READINGS RECORDED S/N \_\_\_\_\_
2. RADIATION SURVEY METER IN COMMENT: α  
PROPER WORKING ORDER IN-  
CLUDING CALIBRATION DATE S/N GC-3 calibration due 11-10-82  
AND PROPERLY USED.
3. FILM BADGES PROPERLY WORN AND COMMENT: α  
STORED.
4. COPY OF RADIOGRAPHIC OPERATIONS COMMENT: Copy on hand α  
MANUAL AVAILABLE-COPY OF USNRC OR  
APPLICABLE STATE LICENSE.
5. COPY OF THE APPLICABLE USNRC/OR COMMENT: Copy on hand α  
STATE RULES AND REGULATIONS  
AVAILABLE.
6. COPIES OF USNRC FORM NO. 3 OR COMMENT: Several posted thru out shop α  
APPLICABLE STATE FORM PROPERLY  
POSTED.
7. PROJECTORS POSTED TO INDICATE COMMENT: α  
CONTENTS.
8. RADIOISOTOPE STORAGE BUILDING COMMENT: α  
OR MOBILE LAB PROPERLY POSTED TO  
INDICATE RADIOACTIVE MATERIAL
9. RECORDS OF SOURCE STORAGE, EQUIP- COMMENT: α  
MENT MAINTENANCE AND UTILIZATION
10. RECORDS OF VEHICLE SURVEY COMMENT: N/A  
(WHEN APPL.)
11. RADIATION AREA POSTING. COMMENT: Ropes, signs, & flashing lights plus visual surveillance α

REMARKS:  
NAME: Thomas Robinson  
ASSISTANT RADIATION  
SAFETY OFFICER

Mariano Orozco  
RADIOGRAPHERS ACKNOWLEDGEMENT

PAGE # 1 H

RADIATION SAFETY

QUATERLY AUDIT SCHEDULE

Date Performed	Date Due
16-17 JULY, 1981	16 OCT 1981
22-23 OCT, 1981	22 JAN 1982
	22 APRIL 1982
	22 JULY 1982
10-11 AUG 1982	10 NOV 1982

# OCCUPATIONAL EXTERNAL RADIATION EXPOSURE HISTORY

See Instructions on the Back

## IDENTIFICATION

1. NAME (PRINT - LAST, FIRST, AND MIDDLE) <i>EDWIN SCOTT HILL, -SCOTT E. 2 em 8/13/82</i>	2. SOCIAL SECURITY NO. <i>528-72-6414</i>
3. DATE OF BIRTH (MONTH, DAY, YEAR) <i>MARCH 20, 1955</i>	4. AGE IN FULL YEARS (N) <i>27</i>

## OCCUPATIONAL EXPOSURE - PREVIOUS HISTORY

5. PREVIOUS EMPLOYMENTS INVOLVING RADIATION EXPOSURE - LIST NAME AND ADDRESS OF EMPLOYER	6. DATES OF EMPLOYMENT (FROM-TO)	7. PERIODS OF EXPOSURE	8. WHOLE BODY (REM)	9. RECORD OR CALCULATED (INSERT ONE)
<i>NONE</i> →				
10. REMARKS  <i>NONE</i>		11. ACCUMULATED OCCUPATIONAL DOSE - TOTAL <i>NONE</i>		

### 13 CALCULATIONS - PERMISSIBLE DOSE WHOLE BODY:

- (A) PERMISSIBLE ACCUMULATED DOSE = 5(N-18) \_\_\_\_\_ REM
- (B) TOTAL EXPOSURE TO DATE (FROM ITEM 11) \_\_\_\_\_ REM
- (C) UNUSED PART OF PERMISSIBLE ACCUMULATED DOSE (A-B) \_\_\_\_\_ REM

12. CERTIFICATION: I CERTIFY THAT THE EXPOSURE HISTORY LISTED IN COLUMNS 5, 6, AND 7 IS CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Edwin Scott Hill* *8/13/82*  
EMPLOYEE'S SIGNATURE DATE  
*Pittsburgh Des Moines Corporation*  
16. NAME OF LICENSEE

# OCCUPATIONAL EXTERNAL RADIATION EXPOSURE HISTORY

See Instructions on the Back

### IDENTIFICATION:

1. NAME (PRINT - LAST, FIRST, AND MIDDLE)  WINDER , HARMON	2. SOCIAL SECURITY NO.  529-48-2286
3. DATE OF BIRTH (MONTH, DAY, YEAR)  3/30/82	4. AGE IN FULL YEARS (N)

### OCCUPATIONAL EXPOSURE - PREVIOUS HISTORY

5. PREVIOUS EMPLOYMENTS INVOLVING RADIATION EXPOSURE - LIST NAME AND ADDRESS OF EMPLOYER	6. DATES OF EMPLOYMENT (FROM-TO)	7. PERIODS OF EXPOSURE	8. WHOLE BODY (REM)	9. RECORD OR CALCULATED (INSERT ONE)
<i>None</i>				
10. REMARKS			11. ACCUMULATED OCCUPATIONAL DOSE - TOTAL	
<i>None</i>			<i>None</i>	

### 13. CALCULATIONS - PERMISSIBLE DOSE WHOLE BODY:

- (A) PERMISSIBLE ACCUMULATED DOSE = 5(N-18) \_\_\_\_\_ REM
- (B) TOTAL EXPOSURE TO DATE (FROM ITEM 11) \_\_\_\_\_ REM
- (C) UNUSED PART OF PERMISSIBLE ACCUMULATED DOSE (A-B) \_\_\_\_\_ REM

12. CERTIFICATION: I CERTIFY THAT THE EXPOSURE HISTORY LISTED IN COLUMNS 5, 6, AND 7 IS CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Harmon Winder* 8-13-82  
EMPLOYER'S SIGNATURE DATE  
*Pittsburgh Des Moines Corp*  
14. NAME OF LICENSEE

# OCCUPATIONAL EXTERNAL RADIATION EXPOSURE HISTORY

See Instructions on the Back

## IDENTIFICATION

1. NAME (PRINT - LAST, FIRST, AND MIDDLE)  LINDSAY, GEORGE W.	2. SOCIAL SECURITY NO.  544-46-6037
3. DATE OF BIRTH (MONTH, DAY, YEAR)  APRIL 4, 1942	4. AGE IN FULL YEARS (N)  40

## OCCUPATIONAL EXPOSURE - PREVIOUS HISTORY

5. PREVIOUS EMPLOYMENTS INVOLVING RADIATION EXPOSURE - LIST NAME AND ADDRESS OF EMPLOYER	6. DATES OF EMPLOYMENT (FROM-TO)	7. PERIODS OF EXPOSURE	8. WHOLE BODY (REM)	9. RECORD OR CALCULATED (INSERT ONE)
NA	NA	0	0	0
10. REMARKS		11. ACCUMULATED OCCUPATIONAL DOSE - TOTAL		0

13. CALCULATIONS - PERMISSIBLE DOSE WHOLE BODY:

(A) PERMISSIBLE ACCUMULATED DOSE = 5(N-18) \_\_\_\_\_ REM

(B) TOTAL EXPOSURE TO DATE (FROM ITEM 11) \_\_\_\_\_ REM

(C) UNUSED PART OF PERMISSIBLE ACCUMULATED DOSE (A-B) \_\_\_\_\_ REM

12. CERTIFICATION: I CERTIFY THAT THE EXPOSURE HISTORY LISTED IN COLUMNS 5, 6, AND 7 IS CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*George W. Lindsay*      8-16-1982

EMPLOYEE'S SIGNATURE      DATE

14. NAME OF LICENSEE



**Pittsburgh-Des Moines Corporation**

580 East 600 South (P.O. Box 1447)

Provo, UT 84601

801-373-8150

---

AUG 24, 1982

Subject: Safety Review (10 CFR 20.102 (a))

To comply with NRC (10 CFR 20.102 (a)) a safety review was held to talk about our responsibilities in obtaining a sign statement from the people we hire attesting to prior occupational dose.

Signature of those attending

Thomas Robinson  
Mariano Orozco

Mariano Orozco  
Mariano Orozco - ARSO

PAGE # 2D



US Department  
of Transportation

Research and  
Special Programs  
Administration

400 Seventh Street, S.W.  
Washington, D.C. 20590

IAEA CERTIFICATE OF COMPETENT AUTHORITY

Special Form Radioactive Material Encapsulation

Certificate Number USA/0166/S  
(Revision 3)

This certifies that the encapsulated sources, as described, when loaded with the authorized radioactive contents, have been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in IAEA 1/ and USA 2/ Regulations for the transport of radioactive materials.

I. Source Description - The sources described by this certificate are identified as the following Gamma Industries models which are constructed according to the listed drawing numbers:

<u>Model No.</u>	<u>Drawing No.</u>
VD and VD(HP)	602-7001-004
NB, NBG and NB(HP)	602-7001-005
Single Encapsulation Universal Source	602-7001-006
Double Encapsulation Universal Source	602-7001-007
Single Encapsulation Side Weld	602-7001-008

All models are welded encapsulations constructed of 300 series of ARMCO Type 17-4PH stainless steel.

II. Radioactive Contents - The authorized radioactive contents of these sources consist of not more than:

<u>Model No.</u>	<u>Contents</u>
VD and VD(HP)	300 curies of:
	Barium-131      Manganese-54
	Cadmium-109    Phosphorus-32
	Calcium-45      Rubidium-86
	Calcium-47      Selenium-75
	Cesium-137     Strontium-85
	Chlorine-36     Thallium-204
	Chromium-51    Thulium-170
	Iridium-192     Tin-113
	Cobalt-60       Ytterbium-169
	Iron-59          Zinc-65

PAGE # 3a A




## II. Radioactive Contents (continued)

<u>Model No. (con'd)</u>	<u>Contents (cont'd)</u>
NB, NBG and NB(HP)	25 Curies Americium-241 30 millicuries Ra-226 500 millicuries Americium-241 and Cesium-137 mixture
Single Encapsulation Universal Source	500 curies Iridium-192 20 curies Cobalt-60
Double Encapsulation Universal Source	5000 curies Iridium-192 2000 curies Cobalt-60
Single Encapsulation Side Weld	500 curies Iridium-192 20 curies Cobalt-60

III. This certificate, unless renewed, expires July 30, 1987.

This certificate is issued in accordance with paragraph 803 of the IAEA Regulations and in response to the June 7, 1982 petition by Gamma Industries, Baton Rouge, Louisiana, and in consideration of the associated information therein.

Certified by:

  
 R. R. RAWL  
 Chief, Radioactive Materials Branch  
 Office of Hazardous Materials Regulations  
 Materials Transportation Bureau

August 10, 1982  
 (DATE)

1/ "Safety Series No. 6, Regulations for the Safe Transport of Radioactive Materials, 1973 Revised Edition," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

2/ Title 49, Code of Federal Regulations, Part 170-178, USA

Revision 0 issued in response to the September 7, 1979, petition by Gamma Industries, Baton Rouge, Louisiana.  
 Revision 1 issued to add Cesium-137 to Models VD and VD(HP)  
 Revision 2 issued to list alternate stainless steel type.  
 Revision 3 issued to extend expiration date.

PAGE # 3a B



FCTC:ZDM  
71-6717

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SEP 21 1981

Pittsburgh-Des Moines Corporation  
ATTN: Mr. C. D. Robertson  
580 E. 600 South  
P.O. Box 1447  
Providence, UT 84601

Gentlemen:

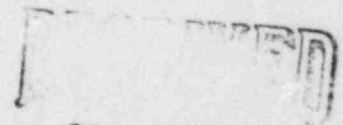
As requested in your letter dated July 1, 1981, we have registered you in accordance with the provisions of Paragraph 71.12(b) of 10 CFR Part 71 as a user of the following:

<u>Model</u>	<u>Package Identification Number</u>
6717-B	USA/6717/B

Sincerely,

*Charles E. MacDonald*  
Charles E. MacDonald, Chief  
Transportation Certification Branch  
Division of Fuel Cycle and  
Material Safety, NMSS

cc: Gamma Industries  
ATTN: Mr. Harry D. Richardson  
P.O. Box 2543  
Baton Rouge, LA 70821



SEP 23 1981

PR  
W.D.O.A.

PAGE # 36A

8110080513



**Pittsburgh-Des Moines Corporation**

580 East 600 South (P.O. Box 1447)

Provo, UT 84601

801-373-8150

---

Aug 24, 1982

Subject: Review of Paragraph 71.12(b) of 10CFR Part 71

To comply with Paragraph 49 CFR 173.393a(a)(1) a training session was held to remind us of our responsibilities to register with the USNRC.

Signature of those attending

Thomas Robinson  
Mariano Orozco

Mariano Orozco  
Mariano Orozco - ARSO

PAGE # 36B



ENCLOSURE 3.

# G A M M A I N D U S T R I E S

*A Division of Nuclear Systems, Inc.*

BATON ROUGE

HOUSTON

P. O. BOX 2543

P. O. BOX 34526

2255 TED DUNHAM AVENUE

HOUSTON, TEXAS 77034

BATON ROUGE, LOUISIANA 70821

TELEPHONE 713/944-7676

TELEPHONE 504/342-7791

## CERTIFICATE OF COMPLIANCE

TO: Pittsburgh-Des Moines Steel Co.

P. O. Box 1447

Provo Utah, 84601

REFERENCE: USA DOT 7A TYPE A

Gamma Century S, SA

Gamma 35, S, SA

C-10

Pipeliners Model 1, 201, Mariner

This is to certify that the referenced device has been tested and complies with all requirements of DOT regulations pertaining to this device when used in accordance with DOT regulations. Documentation of all tests are on file at Gamma Industries, Baton Rouge, Louisiana.

Don Riddle

Quality Assurance Manager

PAGE # 3c A

U.S. NUCLEAR REGULATORY COMMISSION  
CERTIFICATE OF COMPLIANCE  
For Radioactive Materials Packages

1.(a) Certificate Number	1.(b) Revision No.	1.(c) Package Identification No.	1.(d) Pages No.	1.(e) Total No. Pages
6717	4	USA/6717/B	1	2

2. PREAMBLE

- 2.(a) This certificate is issued to satisfy Sections 173.393a, 173.394, 173.395, and 173.396 of the Department of Transportation, Hazardous Materials Regulations (49 CFR 170-189 and 14 CFR 103) and Sections 146-19-10a and 146-19-100 of the Department of Transportation Dangerous Cargoes Regulations (46 CFR 146-149), as amended.
- 2.(b) The packaging and contents described in item 5 below, meets the safety standards set forth in Subpart C of Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Materials for Transport and Transportation of Radioactive Material Under Certain Conditions."
- 2.(c) This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.

3. This certificate is issued on the basis of a safety analysis report of the package design or application--

3.(a) Prepared by (Name and address):

3.(b) Title and identification of report or application:

Gamma Industries  
P.O. Box 2543  
Baton Rouge, LA 70821

Nuclear Packaging, Inc. application dated  
June 20, 1975, as supplemented

3.(c) Docket No. 71-6717

4. CONDITIONS

This certificate is conditional upon the fulfilling of the requirements of Subpart D of 10 CFR 71, as applicable, and the conditions specified in item 5 below.

5. Description of Packaging and Authorized Contents, Model Number, Fissile Class, Other Conditions, and References:

(a) Packaging

(1) Model No.: 6717-B

(2) Description

Radiographic device within a protective overpack. The overpack consists of an outer container which is a 10-gallon open head steel drum having a minimum 20-gauge body and cover, welded seams and a clamp-ring type head closure. The void space between the inner and outer container is filled with 1-1/2" thick molded asbestos free liner on sides, top and bottom, plus molded polyurethane filler to position and secure the radiographic device within the drum. Maximum gross weight of the package not to exceed 75 pounds.

(3) Drawing

The packaging is constructed in accordance with Nuclear Packaging Inc. Drawing No. SK-D-1, Rev. 2.

PAGE # 3c B

8008 180012

5. (b) Contents

(1) Type and form of material

Iridium-192 as sealed sources which meet the requirements of special form as defined in 10 CFR §71.4(o).

(2) Maximum quantity of material per package

200 curies.

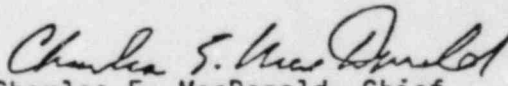
6. The contents must be secured in a single snug-fitting inner radiographic device which has a metal outer wall and meets the requirements of 49 CFR §178.350 (DOT Specification 7A).
7. The source shall be secured in the shielded position of the radiographic device by the shipping plug, source assembly, and locking device. The shipping plug and source assembly used must be fabricated of materials capable of resisting a 1475°F fire environment for one-half hour and maintaining their positioning function. The ball stop of the source assembly must engage the locking device. The flexible cable of the source assembly and shipping plug must be of sufficient length and diameter to provide positive positioning of the source in the shielded position.
8. The packaging authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b).
9. Expiration date: July 31, 1985.

REFERENCES

Nuclear Packaging, Inc. application dated June 20, 1975.

Supplements dated: August 8, 1975; and February 26, 1980.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

  
Charles E. MacDonald, Chief  
Transportation Certification Branch  
Division of Fuel Cycle and  
Material Safety

Date: AUG 04 1980

PAGE # 3cC



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

JUN 25 1981

FCTC:LLG  
71-0452

Pittsburgh-Des Moines Corp.  
ATTN: Mr. C. D. Robertson  
Radiation Safety Officer  
580 East 600 South Street  
Provo, UT 84601

Gentlemen:

Enclosed is Quality Assurance Program Approval for radioactive material packages No. 0452, Revision No. 0.

Please note the conditions included in the approval.

Sincerely,

A handwritten signature in cursive script that reads "Charles E. MacDonald".

Charles E. MacDonald, Chief  
Transportation Certification Branch  
Division of Fuel Cycle and  
Material Safety, NMSS

Enclosure: As stated



JUN 25 1981

PROV  
W.D.Q.A.

PAGE # 4A

8107130076

QUALITY ASSURANCE PROGRAM APPROVAL  
FOR RADIOACTIVE MATERIAL PACKAGES

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 71, and in reliance on statements and representations heretofore made in Item 5 by the person named in Item 2, the Quality Assurance Program identified in Item 5 is hereby approved. This approval is issued to satisfy the requirements of Section 71.51 of 10 CFR Part 71. This approval is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

2. NAME Pittsburgh-Des Moines Corp.			3. EXPIRATION DATE July 31, 1986	
STREET ADDRESS 580 East 600 South Street			4. DOCKET NUMBER 71-0452	
CITY Provo	STATE UT	ZIP CODE 84601		

5. QUALITY ASSURANCE PROGRAM APPLICATION DATE(S)  
May 12, 1981

6. CONDITIONS

- A. The shipping activities authorized by this approval are procurement, maintenance, repair, and use of packages for licensed material in special form. All other shipping activities (i.e., design, fabrication, assembly, testing, and modification) shall be satisfied by obtaining certifications from package suppliers that these activities were conducted in accordance with an NRC-approved QA program. It shall remain the responsibility of the licensee-user that all transportation activities meet the requirements of 10 CFR §71.51.
- B. Activities conducted under applicable criteria of Appendix E of 10 CFR Part 71 to be executed with regard to transportation packages by July 31, 1981.

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 FOR THE U.S. NUCLEAR REGULATORY COMMISSION SIGNATURE Charles E. MacDonald, Chief, Transportation Certification Branch Division of Fuel Cycle and Material Safety, NMSS		DATE JUN 25 1981
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