

**NORSHIPCO****NORFOLK SHIPBUILDING & DRYDOCK CORPORATION**

P.O. BOX 2100 • 750 WEST BERKLEY AVENUE
 NORFOLK, VIRGINIA 23501-2100
 Telephone 757/494-4000
 http://www.norshipco.com

JOHN W. HUMPHREYS
 Vice President, Administration
 and Assistant Secretary

September 9, 1997

U.S. Nuclear Regulatory Commission,
 Region II-Atlanta Federal Center
 Suite 23T85, Attn: DNMS
 61 Forsyth Street
 Atlanta, GA 30303

Reference: Amendment to License #45-12042-01

Subject: Changes of Source model number, Source changes,
 officers, and management

Gentlemen:

Enclosed, you will find a revised listing of company officers. In addition,
 the following changes have been made:

NAME	REPLACING	FOR POSITION
J. A. Raper, Jr., Foreperson	C. A. Cherry	Radiation Protection Program
David Moore	T. L. Beacham	Internal Auditor of Safety Phase Program
W. L. Copeland	C. A. Cherry	Internal Auditor of Safety Phase Program
Lloyd T. Eure, Jr.	McConnell Baker	Radiation Safety Officer
K. B. Edwards	A. L. Walker	Internal Auditor of Safety Phase Program
ADDED		
W. L. Copeland		Advisor of Industrial Radiography
A.P. Nelson, Sr.		General Supervisor

200018

fc. (Cherry
Mr. Parker
Control Files



NORSHIPCO

US Nuclear Regulatory Commission
September 10, 1997
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In addition to Mr. Lloyd T. Eure, Jr. replacing McConnell Baker as Personnel Radiation Exposure Evaluation Officer, his other duties will include instructing and training prospective radiographers and radiographer assistants.

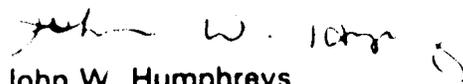
The internal inspection system for controlling the receipt, possession and use of radioactive material, will be performed semi-annually in lieu of quarterly.

Item #5A Radioactive Material, source model number CIS-US, Inc. #702 in lieu of RTS Tech #702 and the manufacturers CIS-US, Inc. in lieu of RTS Technology, Inc.

Item #5A Radiographic Exposure Device model number, Amersham 650 source changer is changed to Amersham 650L source changer and Technology source changer is changed to IR-50 source changer, and the manufacturer RTS Technology Inc. is changed to Industrial Nuclear Co. Also enclosed, are updates on radiographers and one (1) new radiographer added, one (1) radiographer and one (1) radiographer assistant deleted.

Sincerely,

NORFOLK SHIPBUILDING & DRYDOCK


John W. Humphreys
Vice President, Administration
and Assistant Secretary

Enclosures

2025-10

NRC FORM 313

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO 3150-0120
EXPIRES 6-30-86

(10-84)
10 CFR 30.32-33
34, 35, 36, 39 and 40

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 (76-F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (1-56-0120), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

APPLICATION FOR MATERIAL LICENSE

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 III
 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

US NRC RII, ATLANTA FEDERAL CENTER
 SUITE 23785, ATTN: DNMS
 61 FORSYTH STREET
 ATLANTA, GA 30303

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 IV
 801 WARRENVILLE RD
 LISLE, IL 60532-4351

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KA, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO

NUCLEAR MATERIALS LICENSING SECTION
 U.S. NUCLEAR REGULATORY COMMISSION, REGION V
 611 RYAN PLAZA DRIVE, SUITE 400
 ARLINGTON, TX 76010-6004

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 45-12042-01
 C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code):
 Norfolk Shipbuilding & Drydock Corp.
 P.O. Box 2100
 Norfolk, VA 23501-2100

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED:
 Norfolk Shipbuilding & Drydock Corporation of Temporary Jobsites in States subject to NRC's Regulatory Authority.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION:
 McConnell Baker
 TELEPHONE NUMBER:
 (757) 494-4388

SUBMIT ITEMS 5 THROUGH 12 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 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 171.23 and 171.24) FEE CATEGORY <u>3</u> , <u>(0)</u> AMOUNT LICENSED \$ <u>700.00</u>

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, NAME(S) BEING IDENTIFIED, THAT THIS APPLICATION WAS 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, 1949, MAKES IT A CRIMINAL OFFENSE TO MAKE A FALSE STATEMENT, OR MISREPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER: TYPED PRINTED NAME AND TITLE: John W. Humphreys, Vice President, Administrative
 and Assistant Secretary FOR NRC USE ONLY

SIGNATURE: _____

TYPE OF FEE	FEES	FEES CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	DATE
			\$		
APPROVED BY				DATE	

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

OFFICERS

JOHN L. ROPER, III
President and Chief Executive Officer

JOHN L. ROPER, IV
Executive Vice President, Operations, Secretary & Assistant Treasurer

CARLOS E. AGNESE
Executive Vice President, Business Development, Marketing, Estimating &
Contract Administration

RICHARD H. WINSLOW
Vice President, Chief Financial Officer, Controller & Treasurer

JOHN W. HUMPHREYS
Vice President, Administration and Assistant Secretary

ERNEST C. REILLY, JR.
Vice President, Estimating & Contract Administration

ROBERT D. TWINE, SR.
Vice President, Production

DIRECTORS

JOHN L. ROPER, III
CHARLES ZEIEN
O. RAYMOND YATES, JR.
FREDERICK V. MARTIN
CARLOS E. AGNESE
JOHN L. ROPER, IV

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

ITEM 5

Radioactive Material

ITEM #5A RADIOACTIVE MATERIAL

<u>BYPRODUCT MATERIAL ELEMENT AND MASS NO.</u>	<u>SOURCE MODEL NO.</u>	<u>NAME OF MANUFACTURER</u>
Iridium 192	Amersham A-424-9	Amersham Sentinel Div.
Cobalt 60	Amersham Sealed Source/Calibrator Mobil Kit	Technical OP
Iridium 192	CIS-US, Inc. #702	CIS US, Inc.

ITEM #5A RADIOGRAPHIC EXPOSURE DEVICE

<u>MODEL NUMBER</u>	<u>NAME OF MANUFACTURER</u>
Amersham 660B	Amersham Sentinel Div.
T.O. 571 Meter Calibration Kit	Technical Operation

ITEM #5A RADIOGRAPHIC SOURCE CHANGERS

Amersham 650L Source Changer	Amersham Sentinel Div.
IR-50 Source Changer	Industrial Nuclear Co.

ITEM #5B FORM

Physical - Iridium 192

Physical - Cobalt 60

ITEM #5C MAXIMUM ELEMENT OF RADIOACTIVE MATERIAL PER SOURCE

100 Curies - Iridium 192

15 Millicuries - Cobalt 60

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)
ENCLOSURE ONE
SECTION 1

DUTIES AND RESPONSIBILITIES

LIST OF PERSONNEL

OVERALL RESPONSIBILITIES FOR RADIATION PROGRAM

1.1 Foreperson

J.A. Raper, Jr.
Phone: 494-4629
Home Phone: 421-2306

ADVISOR OF INDUSTRIAL RADIOGRAPHY

2.1 F.W. Duvall

Phone: 494-4343
Home Phone: 482-4016

2.2 C.A. Cherry

Phone: 494-2951
Home Phone: 479-0730

2.3 W.L. Copeland

Phone: 494-4539
Home Phone: 482-3567

GENERAL SUPERVISOR OF WORK

3.1 Supervisor

Lloyd T. Eure, Jr.
Phone: 494-4387
Home Phone: 919-441-9316
A.P. Nelson, Sr.
Phone: 494-4387
Home Phone: 481-2438

INTERNAL AUDIT OF SAFETY PHASES OF PROGRAM

4.1 Subcontract Coordinator

W.L. Copeland
Phone: 494-4539
Home Phone: 482-3567

4.2 Interim Safety and Health Manager

David Moore
Phone: 494-4576
Home Phone: 483-9769

4.3 Radioactive Material Control Committee:

Resident Industrial Hygienist/Environmental
Safety & Health Engineer

T.L. Beacham
Phone: 494-4563
Home Phone: 420-8407

4.4 Quality Auditor

K.B. Edwards
Phone: 494-4509
Home Phone: 495-8568

PERSONNEL RADIATION EXPOSURE EVALUATION OF

5.1 Radiation Safety Officer

Lloyd T. Eure, Jr.
Phone: 494-4387
Home Phone: 919-441-9316

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

ENCLOSURE ONE

- Section 1:** Duties & Responsibilities: List of Personnel
- Section 2:** List of Qualified Radiographer, Radiographer Assistants and Experience and Certification of T.L. Beacham
- Section 3:** Outline of Training and Test for Radiographer Assistant
- Section 3A:** Outline of Training and Tests for Radiographer
- Section 4:** Definitions
- Section 5:** Operating Procedures for use of Pocket Dosimeter, Dosimeter Charger and Ratemeter
- Section 6:** Procedure for Leak Testing Radioactive Source
- Section 7:** Quarterly Internal Inspection System for Controlling the Receipt, Possession and Use of Radioactive Material
-
- Table 1:** Qualification of W.L. Copeland
- Table 2:** Qualification of K.B. Edwards
- Table 3:** Qualification of D. Moore
- Table 4:** Internal Inspection Form
- Table 5:** Deficiency Form

IDENTIFICATION OF INDIVIDUALS WHO WILL INSTRUCT AND TRAIN PROSPECTIVE RADIOGRAPHER & RADIOGRAPHER ASSISTANTS

Lloyd T. Eure

Radiation Safety Officer Level III Examiner
Supervisor and Radiographer

1. PRINCIPLES OF RADIATION AND RADIATION SAFETY

1.1	<u>WHERE TRAINED</u>	<u>WHEN</u>	<u>BY WHOM</u>
	NORSHIPCO	1981	M. Baker
	Thomas Nelson Community College	1982	L.S. Morris
	RTS Tech Inc.	1988	John J. Munro, III
	RTS Tech Inc.	1989	John J. Munro, II
	AMERSHAM	1993	Cathleen M. Roughan Robert L. Kelly
1.2	The actual performance of radiography:		
1.3	Where Trained:	Norshipco	
1.4	When:	1982 - 1984	
1.5	By:	M. Baker L.A. Stewart (Radiographer)	

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

ENCLOSURE ONE SECTION 2

L.T. Eure

Radiation Safety Officer, Level III Examiner
Supervisor & Radiographer

TYPE OF TRAINING

1. Principles of Practices of Radiation Protection:

- | | | |
|-----|-----------------------|-----------------|
| 1.1 | Where Trained: | NORSHIPCO |
| 1.2 | Duration of Training: | 15 years |
| 1.3 | On-The-Job: | Yes |
| 1.4 | Formal Training: | Yes - 330 hours |

EXPERIENCE WITH RADIATION

- | | | |
|-----|---|---|
| 2. | Isotopes: | Iridium 192 & Cobalt 60 |
| 2.1 | Maximum Amount: | Iridium 192 - 100 Curies
Cobalt 60 - 50 Curies |
| 2.2 | Where Experience was Gained: | NORSHIPCO |
| 2.3 | Duration of Experience: | 15 years |
| 2.4 | Type of Use: | Industrial Radiography |
| 3. | Personnel Training: | |
| 3.1 | B.S. Degree from East Carolina University in Biology & Computer Science. | |
| 3.2 | Attended Level I and Level II Ultrasonic Shear Wave course conducted by Krautkramer Branson, Inc. March 1986, 80 hours. | |
| 3.3 | Attended seminar on the administration of Isotope Radiography Safety Programs. RTS Technology, Inc; April 1988, 16 hours. | |
| 3.4 | Attended seminar on the administration of Isotope Radiography Safety Programs. RTS Technology, Inc; June 1989, 16 hours. | |
| 3.5 | Attended seminar on the administration of Isotope Radiography Safety Programs. AMERSHAM; Oct. 1993, 20 hours. | |

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

ENCLOSURE ONE SECTION 2

A.P. Nelson, Sr.

Supervisor/Radiographer

TYPE OF TRAINING

1. Principles of Practices of Radiation Protection:

- | | | |
|-----|-----------------------|-----------------|
| 1.1 | Where Trained: | NORSHIPCO |
| 1.2 | Duration of Training: | 17 years |
| 1.3 | On-The-Job: | Yes |
| 1.4 | Formal Training: | Yes - 390 hours |

EXPERIENCE WITH RADIATION

- | | | |
|-----|--|---|
| 2. | Isotopes: | Iridium 192 & Cobalt 60 |
| 2.1 | Maximum Amount: | Iridium 192 - 100 Curies
Cobalt 60 - 50 Curies |
| 2.2 | Where Experience was Gained: | NORSHIPCO |
| 2.3 | Duration of Experience: | 17 years |
| 2.4 | Type of Use: | Industrial Radiography |
| 3. | Personnel Training: | |
| 3.1 | Attended Level I and Level II Ultrasonic Ultrasonics Shear Wave Course Conducted by Krautkramer Branson, Inc. - 80 hours | |

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

ENCLOSURE ONE SECTION 2

D.E. Williams, Jr.

Radiographer

TYPE OF TRAINING

1. Principles of Practices of Radiation Protection:
 - 1.1 Where Trained: NORSHIPCO
 - 1.2 Duration of Training: 16 years
 - 1.3 On-The-Job: Yes
 - 1.4 Formal Training: Yes - 330 hours

EXPERIENCE WITH RADIATION

2. Isotopes: Iridium 192 & Cobalt 60
 - 2.1 Maximum Amount: Iridium 192 - 100 Curies
Cobalt 60 - 50 Curies
 - 2.2 Where Experience was Gained: NORSHIPCO
 - 2.3 Duration of Experience: 16 years
 - 2.4 Type of Use: Industrial Radiography
3. Personnel Training:
 - 3.1 Attended Level I and Level II by Krautkramer Branson, Inc. March 1986, 80 hours

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

ENCLOSURE ONE SECTION 2

L. Stewart

Radiographer

TYPE OF TRAINING

1. Principles of Practices of Radiation Protection:

- | | | |
|-----|-----------------------|-----------------|
| 1.1 | Where Trained: | NORSHIPCO |
| 1.2 | Duration of Training: | 22 years |
| 1.3 | On-The-Job: | Yes |
| 1.4 | Formal Training: | Yes - 390 hours |

EXPERIENCE WITH RADIATION

- | | | |
|-----|------------------------------|---|
| 2. | Isotopes: | Iridium 192 & Cobalt 60 |
| 2.1 | Maximum Amount: | Iridium 192 - 100 Curies
Cobalt 60 - 50 Curies |
| 2.2 | Where Experience was Gained: | NORSHIPCO |
| 2.3 | Duration of Experience: | 22 years |
| 2.4 | Type of Use: | Industrial Radiography |

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

ENCLOSURE ONE SECTION 2

John T. Sires

Radiographer

TYPE OF TRAINING

1. Principles of Practices of Radiation Protection:

- | | | |
|-----|-----------------------|-----------------|
| 1.1 | Where Trained: | NORSHIPCO |
| 1.2 | Duration of Training: | 22 years |
| 1.3 | On-The-Job: | Yes |
| 1.4 | Formal Training: | Yes - 390 hours |

EXPERIENCE WITH RADIATION

- | | | |
|-----|---|---|
| 2. | Isotopes: | Iridium 192 & Cobalt 60 |
| 2.1 | Maximum Amount: | Iridium 192 - 100 Curies
Cobalt 60 - 50 Curies |
| 2.2 | Where Experience was Gained: | NORSHIPCO |
| 2.3 | Duration of Experience: | 22 years |
| 2.4 | Type of Use: | Industrial Radiography |
| 3. | Personnel Training: | |
| 3.1 | Attended Level I Ultrasonic Course conducted by Krautkramer Branson, Inc. - April 1980, 40 hours. | |

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

ENCLOSURE ONE SECTION 2

W.G. Dunn

Radiographer

TYPE OF TRAINING

1. Principles of Practices of Radiation Protection:

- 1.1 Where Trained: NORSHIPCO / U.S. Navy
- 1.2 Duration of Training: 7 years
- 1.3 On-The-Job: Yes
- 1.4 Formal Training: Yes - 720 hours

EXPERIENCE WITH RADIATION

- 2. Isotopes: Iridium 192 & Cobalt 60
 - 2.1 Maximum Amount: Iridium 192 - 100 Curies
Cobalt 60 - 15 Milli Curies
 - 2.2 Where Experience was Gained: NORSHIPCO / U.S. Navy
 - 2.3 Duration of Experience: 7 years
 - 2.4 Type of Use: Industrial Radiography / Survey Meter Calibration
 - 3. Personnel Training:
 - 3.1 Attended Radiographic Operator Course, 400 hrs. U.S. Navy School S.D., Ca. (A-701-0033)
 - 3.2 Attended Radiographic Film Inspector Course, 200 hrs. U.S. Navy School S.D., Ca. (A-701-0035)
 - 3.3 Attended Radiographic Safety Training Course, 40 hrs.
 - 3.4 Attended Radiation Safety Officer Course, 80 hrs., Yorktown, VA (S-4J-0016)
-

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

ENCLOSURE ONE SECTION 2

Ronald Speight

Radiographer

TYPE OF TRAINING

1. Principles of Practices of Radiation Protection:

- | | | |
|-----|-----------------------|-----------------|
| 1.1 | Where Trained: | NORSHIPCO |
| 1.2 | Duration of Training: | 19 years |
| 1.3 | On-The-Job: | Yes |
| 1.4 | Formal Training: | Yes - 390 hours |

EXPERIENCE WITH RADIATION

- | | | |
|-----|------------------------------|---|
| 2. | Isotopes: | Iridium 192 & Cobalt 60 |
| 2.1 | Maximum Amount: | Iridium 192 - 100 Curies
Cobalt 60 - 50 Curies |
| 2.2 | Where Experience was Gained: | NORSHIPCO |
| 2.3 | Duration of Experience: | 19 years |
| 2.4 | Type of Use: | Industrial Radiography |

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

ENCLOSURE TWO SECTION 6

NAMES AND NUMBERS OF INDIVIDUALS TO CONTACT IN THE EVENT OF AN EMERGENCY.

DUTIES AND RESPONSIBILITIES

LIST OF PERSONNEL

1. OVERALL RESPONSIBILITIES FOR RADIATION PROGRAM

1.1 Foreperson

J.A. Raper, Jr.
Phone: 494-4629
Home Phone: 421-2306

2. ADVISOR OF INDUSTRIAL RADIOGRAPHY

2.1 F.W. Duvall

Phone: 494-4343
Home Phone: 482-4016

2.2 C.A. Cherry

Phone: 494-2951
Home Phone: 479-0730

2.3 W.L. Copeland

Phone: 494-4539
Home Phone: 482-3567

3. GENERAL SUPERVISOR OF WORK

3.1 Supervisor

Lloyd T. Eure, Jr.
Phone: 494-4387
Home Phone: 919-441-9316
A.P. Nelson, Sr.
Phone: 494-4387
Home Phone: 481-2438

4. INTERNAL AUDIT OF SAFETY PHASES OF PROGRAM

4.1 Interim Safety and Health Manager

David Moore
Phone: 494-4576
Home Phone: 483-9769

4.2 Radiation Safety Officer

Lloyd T. Eure, Jr.
Phone: 494-4387
Home Phone: 919-441-9316

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

ENCLOSURE ONE SECTION 7

0 Semi-annually Internal Inspection System for controlling the receipt, possession and use of Radioactive Material.

7.1 Qualifications and duties of personnel responsible for maintaining control;

7.1.1 William L. Copeland - Subcontract Coordinator and Advisor of Industrial Radiography has the responsibility of seeing that this procedure is adhered to and the following:

- 7.1.1.1 Inspect survey meters for calibration and condition;
- 7.1.1.2 Review daily production card and utilization log to insure records are complete;
- 7.1.1.3 Review daily reports on inspections and maintenance or radiographic exposure devices and storage containers;
- 7.1.1.4 Review radiation dosimetry report from R.S. Landau, Jr. and Co. to insure permissible accumulated dosage has not been exceeded;
- 7.1.1.5 Review daily dosimeter reading chart and compare with report in 7.1.1.4;
- 7.1.1.6 Review quarterly inventory report to account for all sealed sources received and possessed;
- 7.1.1.7 See Table #1 for qualifications

7.1.2 Ken B. Edwards - Quality Auditor has the following responsibilities:

- 7.1.2.1 Inspect shipping containers for proper tagging and any visible defects;
- 7.1.2.2 Review records of receipts for proper identification from the supplier;
- 7.1.2.3 Review records of disposal of licensed materials;
- 7.1.2.4 Inspect storage area for exposure devices as designated in section 1.3.2.5;
- 7.1.2.5 See Table #2 for qualifications

7.1.3 David Moore - Interim Safety and Health Manager has the following responsibilities:

- 7.1.3.1 Inspect locking mechanism to insure proper working order;
- 7.1.3.2 Inspect source label;
- 7.1.3.3 Inspect drive cables and housing wear and defects;
- 7.1.3.4 Inspect cable connector for wear and defects;
- 7.1.3.5 Inspect crank mechanism, housing wall and drive cable for wear and defects;
- 7.1.3.6 Inspect source tube for signs of wear and damage;
- 7.1.3.7 Inspect the on-off indicator for weakness and damage;
- 7.1.3.8 Inspect source exposure switch for wear and defects;
- 7.1.3.9 Inspect collimator for damage;
- 7.1.3.10 See Table #3 for qualifications.

CLOSURE ONE
SECTION 7 (Cont'd.)

7.2 Control of use of Radioactive Material:

7.2.1 The Subcontract Coordinator will monitor the use of radioactive material to ensure that the Commission regulations and Norshipco's operating and emergency procedures are being adhered to by the radiographer and radiographer's assistants.

7.3 Procedure for recording and reporting deficiencies to appropriate management personnel;

7.3.1 After the audit team has conducted its internal audit, they will compile all deficiencies found;

7.3.2 The inspections shall be recorded on the internal inspection form (See Table #4).

7.3.3 The deficiencies shall be recorded on the internal inspection form (See Table #5).

7.3.4 All deficiencies shall be reported to Mr. J. L. Roper, IV, Executive Vice President, Operations and Mr. R. D. Twine, Sr., Vice President of Production along with the recommendations from the audit team on corrective action.

7.4 Education and follow-up program to be used in correcting deficiencies:

7.4.1 Education

7.4.1.1 Individuals who are found to be deficient in certain areas will be retrained and retested in the areas of those deficiencies;

7.4.1.2 Individuals will not be allowed on field operations until they have been retrained and have full knowledge and understanding of method of operation.

7.4.2 Follow-up program

7.4.2.1 The audit team will follow-up the retraining and retesting of individuals to see that paragraph 7.4.1 is being adhered to;

7.4.2.2 Individuals will be spot checked on field operations for use of equipment and/or record keeping when they are found to be deficient.

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

TABLE 1

W. L. Copeland

Subcontract Coordinator

- PRESENT** Subcontract Coordinator
- 1980 - 97** Promoted to Lead Ship Superintendent
- 1979 - 80** Promoted to Assistant Ship Superintendent
- 1975 - 79** Passed all tests for Level II Inspector, including: RT, MT, and PT. Promoted to NDT Supervisor the same year.
- 1974** Hired into the Non-Destructive Testing Dept.
- 1965 - 69** Four (4) year apprenticeship with Norshipco
- 1965** Completed School

TRAINING AND EXPERIENCE WITH RADIATION

1. Principles and Practices of Radiation Protection:

- | | | |
|-----|-----------------------|-----------------|
| 1.1 | Where Trained: | NORSHIPCO |
| 1.2 | Duration of Training: | 4 1/2 years |
| 1.3 | On-The-Job: | Yes |
| 1.4 | Formal Training: | Yes - 320 hours |

2. Experience with Radiation:

- | | | |
|-----|------------------------------|-------------------------|
| 2.1 | Isotopes: | Iridium 192 & Cobalt 60 |
| 2.2 | Where Experience was Gained: | NORSHIPCO |
| 2.3 | Duration of Experience: | 4 1/2 years |
| 2.4 | Type of Use: | Industrial Radiography |

3. Personal Training:

- | | |
|-----|---|
| 3.1 | Bear Grass High School, Graduate - 1965 |
| 3.2 | Norshipco Apprentice Shipfitter - 1969 |
| 3.3 | Film Interpretation course at Magnaflux Corp., Chicago, Illinois - Classroom and Lab time = 40 hours. |

4. Affiliations

- | | |
|-----|--|
| 4.1 | American Society for Non-Destructive Testing |
|-----|--|

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

TABLE 2

Kenneth B. Edwards

Quality Auditor

1995 to Present	Quality Auditor - Responsible for maintaining ISO Quality System through internal audits in addition to developing and maintaining procedures required by the customer.
1989 - 1995	Pipe Shop Supervisor
1988 - 1989	Pipe Shop Quarterperson - Norshipco
1987 - 1988	Pipe Shop Supervisor - Norshipco
1980 - 1987	Pipe Shop Quarterperson - Norshipco
1979 - 1980	Pipe Shop Supervisor - Norshipco
1978 - 1979	First Class Pipefitter - Norshipco
1975 - 1978	Three (3) year apprenticeship with Norshipco

EDUCATION

1978 -	Norshipco Graduate Apprentice
1974 -	Graduate of Kempsville High School

PROFESSIONAL ACTIVITIES

- American Management Association Business Course
- ANSI/ASQC Q9002 Quality System Training Course

STANDARD PROCEDURES NORSHIPCO/RT (REV 8)

TABLE 3

David W. Moore

Interim Safety and Health Manager

SUMMARY OF PROFESSIONAL EXPERIENCE:

1997 - Present Interim Safety and Health Manager - Responsibilities Include:

- ◆ To Maintain Current Safety Initiative;
- ◆ Continue work with OSHA Compliance Program;
 - Fall Protection Program
 - Respirators
 - Asbestos
 - Lock out / Tag out
 - Confined Space
 - Hazard Communication
- ◆ Monthly Safety Reporting
- ◆ Standardization of Safety Equipment
- ◆ Advise Center Safety Committee
- ◆ Maintain Union / Management Safety Meetings

1996 Supervisor of Safety

1987 Safety Inspector

1978 First Class Machinist - Norshipco

EDUCATION:

1997 Health - Contractor Safety Management

1996 North Carolina Occupation Safety and Health - OSHA Compliance

1990 NFPA Certified Competent Person

1978 - 1979 Tidewater Community College - Emergency Medicine

1975 Cradock High School - Graduate

AFFILIATIONS:

1979 - 1997 Nansemond Suffolk Rescue Squad - Paramedic