



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931**

June 2, 2000

Worldwide Inspection Service
ATTN: Mr. Boris A. Bernstein
Radiation Safety Officer
HC-80, Box 6785
Dorado, Puerto Rico 00646-9505

SUBJECT: NRC INSPECTION REPORT 52-25461-01/00-01

Dear Mr. Bernstein:

As a result of the Nuclear Regulatory Commission (NRC) inspection conducted on May 4, 2000, an NRC Form 591, SAFETY INSPECTION, is issued for your NRC license. The enclosed form indicates that no items of non-compliance were found during the above described inspection of your licensed activities. Please retain the form in your files. No acknowledgment of this letter is required. However, should you have any questions, we shall be pleased to discuss them with you. In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this NRC Form 591 will be placed in the Public Document Room.

Thank you for your cooperation.

Sincerely,

/RA by J. Pelchat Acting for/

Mark S. Lesser, Chief
Materials Licensing/Inspection Branch 2
Division of Nuclear Materials Safety

Docket No. 030-34909
License No. 52-25461-01

Enclosure: NRC Form 591

Distribution w/o encl :
PUBLIC

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|--------------|----------|----------|----------|----------|----------|----------|----------|
| OFFICE | RII:DNMS | | | | | | |
| SIGNATURE | /RA/ | | | | | | |
| NAME | JDiaz | | | | | | |
| DATE | 6/1/2000 | 6/ /2000 | 6/ /2000 | 6/ /2000 | 6/ /2000 | 6/ /2000 | 6/ /2000 |
| E-MAIL COPY? | YES NO | YES NO | YES NO | YES NO | YES NO | YES NO | YES NO |

OFFICIAL RECORD COPY

DOCUMENT NAME: C:\Worldwide Inspection Servic~.wpd

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|---|
| <p>APPENDIX A INDUSTRIAL RADIOGRAPHY INSPECTION RECORD (IP 87120)</p> |
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| REGION II | | | | | | | | | |
|---|---|---|-------------|----------------------|-------------------------|---|-----------|--|--|
| Insp. Record # | 00-01 | License # | 52-25461-01 | | | Docket # | 030-34909 | | |
| Licensee Name | Worldwide Inspection Service | | | | | | | | |
| Street Address | HC-80, Box 6785 | | | | | | | | |
| City, State, Zip | Dorado, Puerto Rico 00646-9505 | | | | | | | | |
| Location (Authorized Site) Being Inspected | Temporary Job Site at: PREPA, Costa Sur Power Station, Guayanilla, Puerto Rico. | | | | | | | | |
| Licensee Contact Name | Boris Bernstein, RSO | | | | Phone # | 787.270.3434 | | | |
| Priority | 1 | Program Code | 3320 | | Description | Industrial Radiography @ Temporary Job Sites | | | |
| Date of Last Inspection: | | 8/18/99 | | | Date of This Inspection | | 5/4/00 | | |
| Type of Insp. | Announced | | Routine | | Initial | | | | |
| | Unannounced | X | Special | X | | | | | |
| Next Insp. Date | 05/2001 | Normal | X | Reduced | | Extended | | | |
| Justification for change in normal inspection frequency: | | | | | | | | | |
| Summary of Findings and Actions | | | | | | | | | |
| No violations, Clear 591 or letter issued | | | X | Non-cited violations | | | | | |
| Violation(s), 591 issued | | Violation(s), letter issued | | | | | | | |
| Follow up on previous violations: | | | Closed | | | | | | |
| Inspector - Printed Name | | José M. Díaz Vélez, Health Physicist Materials Licensing/Inspection Branch 2 | | | | | | | |
| - Signature | | J.Diaz /RA/ | | | Date | 5/31/00 | | | |
| Approved - Printed Name | | Mark S. Lesser, Chief Materials Licensing/Inspection Branch 2 | | | | | | | |
| - Signature | | /RA by J. Pelchat Acting for/ | | | Date | 6/2/00 | | | |

| PART I-LICENSE, INSPECTION, INCIDENT/EVENT, AND ENFORCEMENT HISTORY | | |
|---|---------------------------------------|---------|
| 1. | AMENDMENTS AND PROGRAM CHANGES | |
| License amendments issued since last inspection, or program changes noted in the license. | | |
| Amendment No. | Date | Subject |
| None | | |

| | | |
|---|---|--|
| 2. | INSPECTION AND ENFORCEMENT HISTORY | |
| Unresolved issues; previous and repeat violations; Confirmatory Action Letters; and orders. | | |
| 11/18/99 (initial inspection) | | |
| <ul style="list-style-type: none"> - 10 CFR 34.49 (c) Survey when storage of camera - 10 CFR 34.20 (b)(v) Camera label with licensee's name, address and telephone number - 10 CFR 19.11 (a) Copies of the license and the regulations | | |

| | | |
|--|-------------------------------|--|
| 3. | INCIDENT/EVENT HISTORY | |
| List any incidents or events reported to NRC since the last inspection. Citing "None" indicates that regional event logs, event files, and the licensing file have no evidence of any incidents or events since the last inspection. | | |
| None | | |

| PART II - INSPECTION DOCUMENTATION | |
|--|--|
| NOTE: References that correspond to each inspection documentation topic are in Inspection Procedure 87120, Appendix B, "Industrial Radiography Inspection References." | |

The inspection documentation part is to be used by the inspector to assist with the performance of the inspection. Note that not all areas indicated in this part are required to be addressed during each inspection. However, for those areas not covered during the inspection, a notation ("Not Reviewed" or "Not Applicable") should be made in each section, where applicable.

All areas covered during the inspection should be documented in sufficient detail to describe what activities and procedures were observed and/or demonstrated. In addition, the types of records that were reviewed and the time periods covered by those records should be noted. If the licensee demonstrated any practices at your request, describe those demonstrations. The observations and demonstrations you describe in this report, along with measurements and some records review, should substantiate your inspection findings. Attach copies of all licensee documents and records needed to support violations.

1. **ORGANIZATION AND SCOPE OF PROGRAM** - Management organization; authorities and responsibilities; authorized locations of use; type, quantity, and frequency of byproduct material use; staff size; delegation of Radiation Safety Officer (RSO) functions; reporting chain-of-command; multiple field offices and temporary job sites.

The inspector did not review this area, the scope of this inspection is limited to operations in the field, however, the licensee's representatives at the field indicated that administratively there have been no changes since the last inspection.

2. **MANAGEMENT OVERSIGHT** - Management support to radiation safety; RSO; program audits or inspections; authorized individuals; as low as is reasonably achievable (ALARA) reviews.

The inspector did not review this area, the scope of this inspection is limited to operations in the field, however, direct observations of operations on the field appear to indicate that management oversight was adequate. The inspection did not identify issues of concern related to poor management oversight.

3. **FACILITIES** - Facilities as described; uses; control of access; engineering controls; separation of materials and explosives; containers labeled.

The inspection occurred at temporary Job Site at: PREPA, Costa Sur Power Station, Guayanilla, Puerto Rico, while performing industrial radiography of a valve.

4. **EQUIPMENT AND INSTRUMENTATION** - Radiography devices, source assemblies, source changers, special equipment meet performance requirements; appropriate survey instruments, dosimeters, alarming ratemeters.

The inspector observed the equipment used by the licensee at the temporary job site and determined that the licensee used the following radiography equipment:

| Radiography Device (Camera) | | |
|-----------------------------|-------|---------------|
| Make | Model | Serial Number |
| Sentinel | 660B | B3937 |

| Sealed Source (Pill) | | | | | |
|----------------------|-------|---------|---------------|-----------|---------------|
| Make | Model | Isotope | Activity (Ci) | Cal. Date | Serial Number |
| AEA Tech. | 424-9 | Ir-192 | 113 | 1/28/00 | D2771 |

5. **MATERIAL USE, CONTROL, AND TRANSFER** - Materials and uses authorized; security and control of licensed materials; and procedures for receipt and transfer of licensed material; inventories; utilization logs.

The inspector observed licensee personnel while performing radiographic operations. Based on direct observations the inspector determined that the licensee used materials and equipment for which the licensee received authorization under the current license, in addition the inspector determined that the uses performed by the licensee were in

accordance with uses authorized. The inspector arrived to the job site after the radiography crew had arrived to the project, and observed the individuals establishing boundaries and posting the High Radiation Area (HRA) as well as the Radiation Area (RA). Based on those observations, the inspector determined that the licensee properly posted the HRAs and the RAs. The inspector also determined that the licensee used a radiography system in good operating condition. The inspector determined that the licensee coordinated with PREPA staff so that no PREPA personnel were in the area. The inspector observed the licensee personnel and determined that radiography operations were conducted in accordance with standard operating procedures and the licensee specific procedures. The licensee used a camera with a self-locking mechanism, and the inspector noted that the camera locked properly after each exposure. The inspector also observed that the radiographer constantly supervised the activities of the radiographer's assistant, providing the individual with additional instructions when necessary.

6. **INSPECTION AND MAINTENANCE** - Maintenance program; daily and quarterly inspections; records of defects; source modifications; Type B packages; 10 CFR Part 21 reports.

Did not review.

7. **FIELD STATIONS AND TEMPORARY JOB SITES** - Documents and records at field stations and temporary job sites; operating and emergency procedures; Agreement State licenses.

At the end of the radiographic operations the inspector proceeded to the dark-room vehicle and reviewed documents at the field station. Based on that review, the inspector determined that the licensee possessed copies of the operating and emergency procedures (in English and Spanish), the license, and the regulations, and NRC form 3 at the temporary job site.

8. **AREA RADIATION SURVEYS AND CONTAMINATION CONTROL** - Radiological surveys (instruments, perimeter, storage devices, post-exposure, post-source exchange, storage area); leak tests (frequency, sealed sources, depleted uranium devices); handling of radioactive materials; records; and public doses.

The inspector observed the licensee performing area radiation surveys during the exposure times and surveys of the camera at the end every shot and before storing the device in its transport box (located within the dark-room vehicle). Based on those direct observations, the inspector determined that surveys at the boundaries were adequate. The inspector performed a comparison of licensee survey instrument readings with his instrument and determined that both devices were in agreement. The inspector determined that instruments used by the licensee to perform surveys were adequate in that they were of the proper range, within calibration and fully operational. The inspector also observed that the licensee performed surveys of the camera and the guide tube in an adequate manner, specifically, the camera and guide tube were safely approached and surveyed. The inspector observed a radiographer while getting ready to store the camera and observed the performance of the final survey. Based on those observations, the inspector determined that the licensee performed necessary surveys while conducting licensed activities at temporary job sites.

9. **TRAINING AND INSTRUCTIONS TO WORKERS** - Interviews and observations of routine work; staff knowledge of all routine activities; Parts 19, 20, and 34 requirements; training programs, including written tests; supervisor, assistant training.

Did not inspect. Note: The Radiographer on site was Certified by the State of Georgia.

| Individual | Certifying Entity | Certification No. | Expiration Date |
|-------------------|-------------------|-------------------|-----------------|
| Victor O. Morales | State of Georgia | 252A | 07/31/2004 |

10. **RADIATION PROTECTION** - Radiation protection program with ALARA provisions; external dosimetry (dosimeters, direct reading dosimeters, alarming ratemeters); exposure evaluations; planned special exposures; dose and survey records and reports; annual notifications to workers; bulletins and other generic communications.

The inspector observed that licensee personnel wore Landauer's Luxell, optically stimulated luminescence dosimeters. Based on direct observations, the inspector determined that the dosimeters were specifically issued to the individuals, were worn properly and for the current period. The inspector also determined that the crew wore pocket dosimeters. The inspector reviewed the pocket dosimeters and determined that they were within calibration, and that they were of the proper range (0-200 mRem). Based on those observations, the inspector determined that pocket dosimeters were properly zeroed before beginning to work. The inspector also determined that the individuals wore alarm ratemeters, and that they were fully operational and within calibration.

11. **RADIOACTIVE WASTE MANAGEMENT** - Storage areas; transfer; packaging; control, and tracking procedures; records.

Not Inspected

12. **DECOMMISSIONING** - Records relevant to decommissioning; decommissioning plan/schedule; notification requirements; cost estimates; funding methods; financial assurance; and Timeliness Rule requirements; changes in radiological conditions since decommissioning plan was submitted.

Not Inspected

13. **TRANSPORTATION** - Quantities and types of licensed material shipped; packaging design requirements; shipping papers; hazardous materials (HAZMAT) communication procedures; return of sources; procedures for monitoring radiation and contamination levels of packages; HAZMAT training; and records and reports.

The inspector reviewed the shipping paper used by the licensee while transporting licensed materials from the licensee's office to the job site. Based on direct observations the inspector determined that the licensee maintained the shipping papers within reach and that information contained was adequate. The inspector determined that the transportation package contained all necessary labels and markings. The inspector also noted that the device was well blocked and braced to the vehicle. The vehicle did not required placarding (a Yellow II package was used).

14. **NOTIFICATIONS AND REPORTS** - Reporting and followup of theft; loss; incidents; overexposures; radiation exposure reports to individuals; reporting Part 21 defects and certain equipment failures.

The inspector did not review this area.

15. **POSTING AND LABELING** - Notices; license documents; regulations; bulletins and generic information; area postings; and labeling of containers of licensed material; markings.

See Section 7 for information on this area.

16. **INDEPENDENT AND CONFIRMATORY MEASUREMENTS** - Areas surveyed and measurements made; comparison of data with licensee's results and regulations; and instrument type and calibration date.

The inspector performed surveys while radiography operations were performed at the temporary job site and determined that the highest radiation level was 10.0 mR/hr, and of a duration of 6 minutes (two shots of 6 minutes each). The inspector used a Ludlum Model 2401-P Serial No. 142732, NRC Tag No. 065628, calibrated 3/17/00, to perform these measurements.

17. **VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES** - State requirement and how and when licensee violated the requirement. For NCVs, indicate why the violation was not cited. Attach copies of all licensee documents needed to support violations.

None.

| 18 | PERSONNEL CONTACTED | | |
|---|-------------------------|-----------|-----------------------|
| Identify licensee personnel contacted during the inspection (including those individuals contacted by telephone). Use # to indicate individual present at entrance meeting. Use * to indicate individual present at exit meeting. | | | |
| Name | Title | Phone No. | In Person or By phone |
| Victor O. Morales# | Radiographer | | In Person |
| David Bernstein | Radiographer's Assitant | | In Person |
| Boris Bernstein* | RSO | | By Phone |
| David Alvarado | Dark Room Assistant | | In Person |

| | | | | | | |
|-----------|---|-----|---|---|--|-----|
| 19 | PERFORMANCE EVALUATION FACTORS | | | | | |
| A. | Lack of senior management involvement with the radiation safety program and/or RSO oversight. | | | Y | | N X |
| B. | RSO too busy with other assignments. | | | Y | | N X |
| C. | Insufficient staffing. | | | Y | | N X |
| D. | RSC fails to meet or functions inadequately. | N/A | X | Y | | N |
| E. | Inadequate consulting services or inadequate audits conducted. | N/A | X | Y | | N |

REMARKS :(Consider the above assessment and/or other pertinent Performance Evaluation Factors (PEFs) with regard to the licensee's oversight of the radiation safety program)

| | | |
|-----------------|-------------------------------------|--|
| 20 | SPECIAL CONDITIONS OR ISSUES | |
| NONE | | Special license conditions; year-2000 effects of computer software and embedded systems. |
| None identified | | |

| | |
|---|------------------------------------|
| PART III - POST- INSPECTION ACTIVITIES | |
| 1 | REGIONAL FOLLOWUP ON PEFs |
| None required | |
| 2. | DEBRIEF WITH REGIONAL STAFF |
| Post-inspection communication with supervisor, regional licensing staff, Agreement State Officer; and/or State Liaison Officer. | |
| Routine brief of Branch Chief. | |
| 3. | YEAR-2000 ISSUES |
| Convey, to the NMSS Year-2000 Coordinator, all year-2000 licensee-identified problems and corrective actions taken. | |
| None Identified | |

TO ADVANCE TO NEXT SECTION OF FORM - PUSH PAGE DOWN KEY

**APPENDIX A - ATTACHMENT A
DECOMMISSIONING TIMELINESS INSPECTION ATTACHMENT**

| | | | |
|-----------|------------------------------|---------------------|--------|
| Licensee: | Worldwide Inspection Service | Date of Inspection: | 5/4/00 |
|-----------|------------------------------|---------------------|--------|

1. COMPLIANCE WITH DECOMMISSIONING TIMELINESS RULE

(NOTE: Repeat the answers given in Section 12 of the main body of the inspection record. The issues in subsequent sections are dependent on the answers to these questions.)

| | | | | | |
|----|--|---|--|---|---|
| A. | License to conduct a <i>principal activity</i> <u>has</u> expired or been revoked: | Y | | N | X |
| B. | Licensee <u>has</u> made a decision to permanently cease <i>principal activities</i> at the entire site, or any separate buildings, or any outdoor areas, including inactive burial grounds: | Y | | N | X |
| C. | A 24-month duration has passed in which no <i>principal activities</i> have been conducted under the license at the site, or at any separate buildings, or any outdoor areas, including inactive burial grounds: | Y | | N | X |
| D. | If "Yes" to either A or B or C above: | | | | |
| | -1 Identify Site/Bldg./Area: | | | | |
| | -2 Date of occurrence of A, B, or C: | | | | |

2. NOTIFICATION REQUIREMENTS

| | | | | | |
|----|---|-----|--|---|---|
| A. | Licensee has provided written notification to U.S. NRC within 60 days of the occurrence of 1.A., 1.B., or 1.C. above. | Y | | N | |
| | If "Yes," date of notification: | | | | |
| B. | If the licensee is requesting to delay initiation of the decommissioning process, the licensee <u>has</u> provided written notification to NRC within 30 days of occurrence of 1.A., 1.B., or 1.C. above: | N/A | | Y | N |
| | If "Yes," date of notification: | | | | |

Basis for Findings:

3. DECOMMISSIONING PLAN/SCHEDULE REQUIREMENTS

| | | | | | | |
|----|---|-----|--|---|--|---|
| A. | Licensee is required to submit a decommissioning plan per 10 CFR 30.36(g), 40.42(g), 70.38(g), or 10 CFR Part 72? | N/A | | Y | | N |
| | If "No" to 3.A., answer the following items B - F: | | | | | |

| | | | | | |
|---|---|-----|---|---|--|
| B. | The decommissioning work scope is covered by current license conditions. | Y | | N | |
| C. | Decommissioning has been initiated within 60 days of notification to NRC, or NRC has granted a delay. | Y | | N | |
| D. | If licensee has initiated decommissioning, give date the decommissioning was initiated: | | | | |
| E. | If decommissioning has been completed, it was completed within 24 months of notification to NRC. | N/A | Y | N | |
| F. | If decommissioning is still scheduled to be completed, it is on schedule to be completed within 24 months of notification to NRC. | | | | |
| | | N/A | Y | N | |
| Basis for Findings: | | | | | |
| If "Yes" to 3.A., answer the following items G - J: | | | | | |
| G. | The decommissioning plan has been submitted to NRC within 12 months of notification. | Y | | N | |
| If "Yes," date of submittal: | | | | | |
| If NRC approved, date of NRC approval: | | | | | |
| H. | Has the licensee submitted an alternative schedule request? | Y | | N | |
| If "Yes," date of submittal: | | | | | |
| I. | If decommissioning has been completed, it was completed within 24 months after approval of the decommissioning plan. | N/A | Y | N | |
| J. | If decommissioning is still scheduled to be completed, it is on schedule to be completed within 24 months after approval of the decommissioning plan. | | | | |
| | | N/A | Y | N | |
| Basis for Findings: | | | | | |
| Violations identified, if any: | | | | | |

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END

SAFETY AND COMPLIANCE INSPECTION

| | |
|---|--|
| 1. LICENSEE Worldwide Inspection Service HC-80, Box 6785 Dorado, Puerto Rico 00946-9505 | 2. REGIONAL OFFICE REGION II US NUCLEAR REGULATORY COMMISSION ATLANTA FEDERAL CENTER 61 FORSYTH ST SW STE 23T85 ATLANTA, GA 30303-3415 |
|---|--|

| | | | |
|-------------------------------|---|--|--|
| REPORT NUMBER(S) 00-01 | 3. DOCKET NUMBER(S) 030-34909 | 4. LICENSE NUMBER(S) 52-25461-01 | 5. DATE(S) OF INSPECTION May 4, 2000 |
|-------------------------------|---|--|--|

LICENSEE:
The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- 1. Based on the inspection findings, no violations were identified.
- 2. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, NUREG-1600, to exercise discretion, were satisfied.

_____ non-cited violation(s) were discussed involving the following requirement(s):

- 3. During this inspection certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited. This form is a NOTICE OF VIOLATION, which is required to be posted in accordance with 10 CFR 19.11.

STATEMENT OF CORRECTIVE ACTIONS

I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

| TITLE | PRINTED NAME | SIGNATURE | DATE |
|---------------|---------------------------|-------------|-----------------|
| LICENSEE | | | |
| NRC INSPECTOR | José M. Díaz Vélez | /RA/ | 06/01/00 |