

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and 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.

Licensee		
1. Consolidated NDE, Inc.		3. License Number 29-21452-02
2. 6 Woodbridge Avenue Woodbridge, New Jersey 07095		4. Expiration Date August 31, 2001
		5. Docket or Reference No. 030-34195
6. Byproduct, Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum Amount that Licensee May Possess at Any One Time Under This License
A. Cesium 137	A. Sealed sources	A. 100 millicuries
B. Americium 241	B. Sealed neutron sources	B. 500 millicuries
9. Authorized use		
A. and B. For possession and use in Troxler Electronic Laboratories, Inc., Campbell Pacific Nuclear Corp., Humboldt Scientific, Inc., Seaman Nuclear Corporation, or Soiltest, Incorporated devices which have been evaluated and approved for licensing purposes under a license issued by the U.S. Nuclear Regulatory Commission or any Agreement State.		

CONDITIONS

10. Licensed material may be stored at the licensee's facilities located at 6 Woodbridge Avenue, Woodbridge, New Jersey and may be used only at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. The licensee may not possess and use materials authorized in Items 6, 7, and 8, until: (1) the licensee has constructed the facilities and obtained the equipment described in the application and supporting documentation; and (2) the U.S. Nuclear Regulatory Commission, Region I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406 has been notified in writing that activities authorized by the license will be initiated.

In accordance with the requirements set forth in 10 CFR 30.36(b), 40.42(b), and 70.38(b), the licensee shall promptly notify the Nuclear Regulatory Commission, in writing, of a decision not to complete the facility, acquire equipment, or possess and use authorized material.

12. Licensed material shall only be used by, or under the supervision and in the physical presence of, Bruce R. Ballard or individuals who have successfully completed the manufacturer's training program for gauge users, have been instructed in the licensee's routine and emergency operating procedures and who have been designated in writing by the Radiation Safety Officer.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

29-21452-02

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030-34195

13. The Radiation Safety Officer for this license is Bruce R. Ballard.
14. A. Sealed sources and detector cells containing licensed material shall be tested for leakage and/or contamination at intervals not to exceed six months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed three years.
- B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed three months.
- C. In the absence of a certificate from a transferor indicating that a leak test has been made within six months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
- E. Sealed sources and detector cells need not be leak tested if:
- (i) they contain only hydrogen-3; or
 - (ii) they contain only a radioactive gas; or
 - (iii) the half-life of the isotope is 30 days or less; or
 - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
 - (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transfer to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- F. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission and the source or detector cell shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within five days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406. The report shall specify the source or detector cell involved, the test results, and corrective action taken.

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- G. The licensee is authorized to collect leak test samples for analysis by Boart Longyear CPN. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
15. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
16. The licensee shall conduct a physical inventory every six months to account for all sealed sources and devices containing licensed material received and possessed under the license.
17. The licensee shall not acquire licensed material in a sealed source or device unless the source or device has been registered with the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or equivalent regulations of an Agreement State.
18. Each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage or when not under the direct surveillance of an authorized user.
19. Any cleaning, maintenance, or repair of the gauge(s) that requires removal of the source rod shall be performed only by the manufacturer or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
20. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
21. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated June 14, 1996
B. Letter dated August 16, 1996

For the U.S. Nuclear Regulatory Commission

Original Signed By:

John R. McGrath

By

Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406

Date

AUG 27 1996

AUG 27 1996

License No. 29-21452-02
Docket No. 030-34195
Control No. 123337

Mr. Bruce R. Ballard
Radiation Safety Officer
Consolidated NDE, Inc.
6 Woodbridge Avenue
Woodbridge, New Jersey 07095

Dear Mr. Ballard:

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

Please be advised that your license expires at the end of the day, in the month, and year stated in the license. Until your license is terminated, you must conduct your program involving byproduct materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Not possess and use materials authorized in Items 6, 7, and 8, on the license until:
 - a. you have constructed the facilities and obtained the equipment described in the license application and supporting documentation; and
 - b. you have notified the U.S. Nuclear Regulatory Commission, Region I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406 in writing, that activities authorized by the license will be initiated.
3. Notify NRC, in writing, within 30 days:
 - a. when the Radiation Safety Officer, permanently discontinues performance of duties under the license or has a name change; or

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ML 10

- b. when the mailing address on the license changes (no fee is required if the location of byproduct material remains the same).
4. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license:
 - a. when you decide to terminate all activities involving materials authorized under the license; or
 - b. if you decide not to complete the facility, acquire equipment, or possess and use authorized material.
5. Request and obtain a license amendment before you:
 - a. change Radiation Safety Officer;
 - b. order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license;
 - c. add or change the areas of use, or address or addresses of use identified in the license application or on the license; or
 - d. change ownership of your organization.
6. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or a certifying official of the licensee rather than the Radiation Safety Officer or a consultant.

You will be periodically inspected by the NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the "General Statement of Policy and Procedure for NRC Enforcement Actions," (Enforcement Policy), NUREG 1600.

Mr. Bruce R. Ballard
Consolidated NDE, Inc.

-3-

Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which NRC expects of its licensees.

Thank you for your cooperation.

Sincerely,

Original Signed By:
John R. McGrath

John R. McGrath
Senior Health Physicist
Division of Nuclear Materials Safety

License No. 29-21452-02
Docket No. 030-34195
Control No. 123337

Enclosures:

1. License No. 29-21452-02
2. 10 CFR Parts 2, 19, 20, 30 and 170
3. NRC Forms 3 and 313

DOCUMENT NAME: R:\WPS\MLTR\L2921452.02

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/enc "E" = Copy w/ attach/enc "N" = No copy

OFFICE	DNMS/RI	N	DNMS/RI				
NAME	McGrath						
DATE	08/22/96	08/	/96	08/	/96	08/	/96

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6 WOODBRIDGE AVENUE
WOODBRIDGE, NJ 07095

CONSOLIDATED NDE, INC.

TEL (908) 636-4550
FAX (908) 636-5845

MS 16
Q-Ø

August 16, 1996

John R. McGrath, Senior Health Physicist
Division of Nuclear Materials Safety
US Nuclear Regulatory Commission, Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

Docket No. 030-34195
Control No. 123337

Dear Mr. McGrath:

I shall submit the additional information regarding CNDE's license application in the same order as requested in your letter. In order to best respond, I have added new sections to the previously submitted O&E manual, and incorporated other items into a newly submitted Administrative Manual.

I hope this format will meet with your approval.

1. The permanent facility is located at 6 Woodbridge Avenue, Woodbridge, NJ 07095.
2. The gauge shall be placed in a shipping container and stored in one of two locations.
 - A. In a trunk, that is in a below ground pit, that is accessible via a stairway. The trunk shall be locked and labeled with a radioactive materials sign. *(diagram enclosed)*
 - B. In the approved permanent installation, licensed for Ir-192 radiography. Operations may be conducted in the permanent radiographic installation. *(diagram enclosed)*
3. The maximum number of sources shall not exceed six (6) at any one time.

CNDE shall limit the number of source-device combinations so that the quantities of by-product material will not require financial assurance for decommissioning.

4. Sealed sources shall not be lowered into the ground more than the 1-3 feet that is necessary for the surface measurements.

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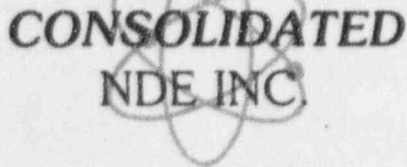
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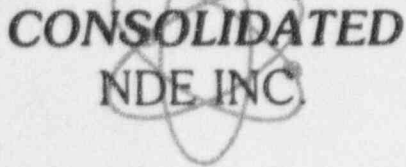
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5. The Radiation Safety Officer has completed the manufacturer's training program for the gauges requested in the application. Refer to the enclosed certificate.
 - A. Before an individual is permitted to use a gauge, the individual shall:
 1. successfully complete a course that meets the criteria in Part I of Appendix D of Regulatory Guide DG-0008. The course may be conducted by a manufacturer or CNDE.
 - a. For a CNDE course outline, refer to Part 2.0 in the enclosed Administrative Manual.
 2. receive copies of and training in CNDE Operating and Emergency Procedures, and shall be designated as an authorized user in writing.
 - B. Copies of training records shall be maintained for 3 years.
 - C. The course instructor shall meet the qualification requirements as outlined in Part II of Appendix D of Draft Regulatory Guide DG-0008.
 1. For CNDE instructor qualifications, refer to Part 3.0 in the enclosed Administrative Manual.
 - D. For a description of the annual refresher training, including topics and instructor qualifications, refer to Part 4.0 in the enclosed Administrative Manual.
6. For a list of the duties and responsibilities of the Radiation Safety Officer, refer to Part 1.0 in the enclosed Administrative Manual.
7. Eberline Analytical Corp is the supplier of film and TLD badges and is NVLAP certified. A copy of the Certificate of accreditation is on file.
8. A least one appropriate, calibrated survey meter shall be available at each job-site for timely evaluation of source integrity following an incident.



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9. The collection of leak test samples shall be performed by individuals trained and authorized by CNDE to use the gauges.

The analyzing of leak test samples shall be performed by the manufacturer:

Bort Longyear/CPN - 2830 Howe Rd / Martinez, CA 944553.
State of California Radioactive Material License Number 1100-07.

10. For transportation requirements, refer to Part 10.0 in the enclosed O&E Procedures Manual.
11. For audit requirements, refer to Part 5.0 in the enclosed Administrative Manual.
12. All licensed material shall be disposed of by transfer to the original supplier or other NRC or Agreement State authorized recipient.

Respectfully Submitted,



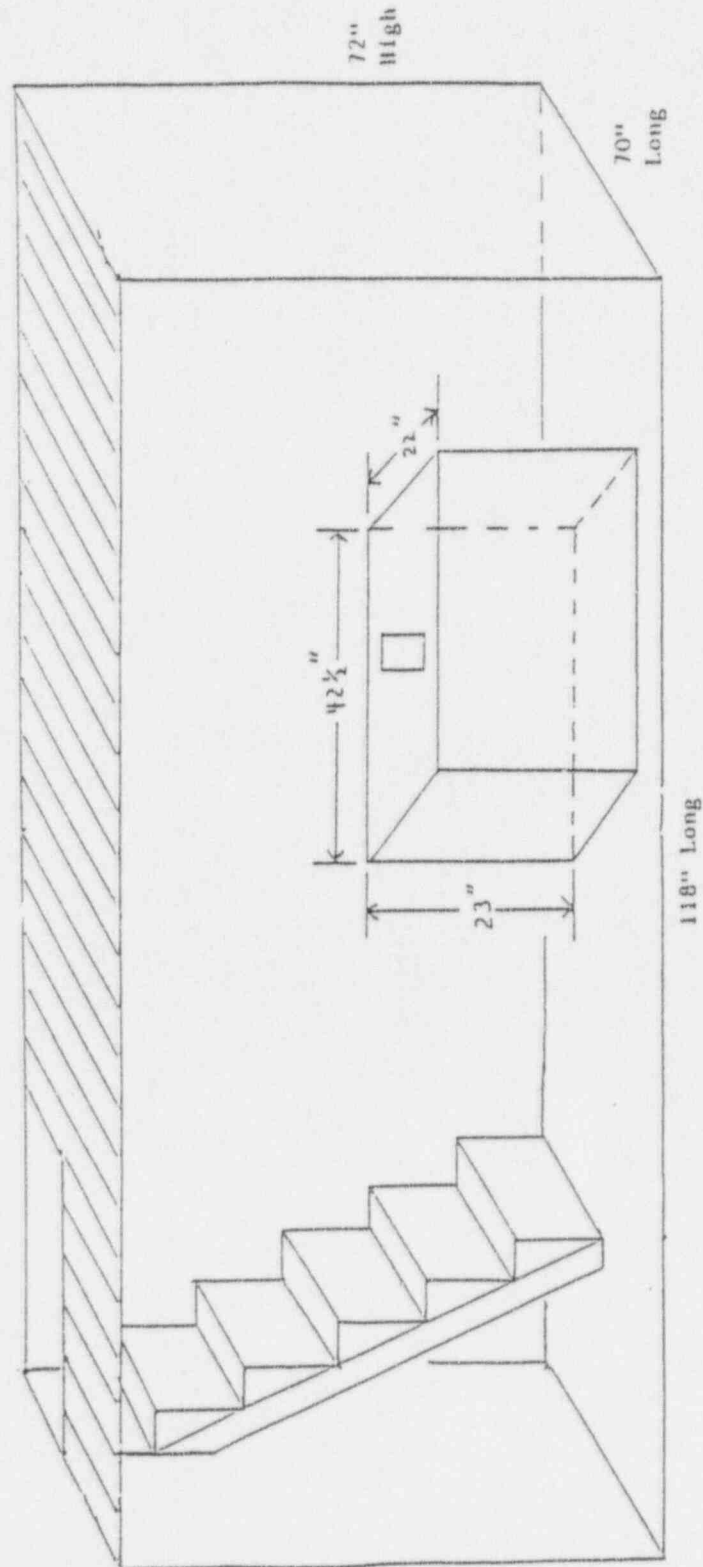
Bruce R. Ballard
RSO

enc: As Stated

OPERATING & EMERGENCY PROCEDURES MANUAL

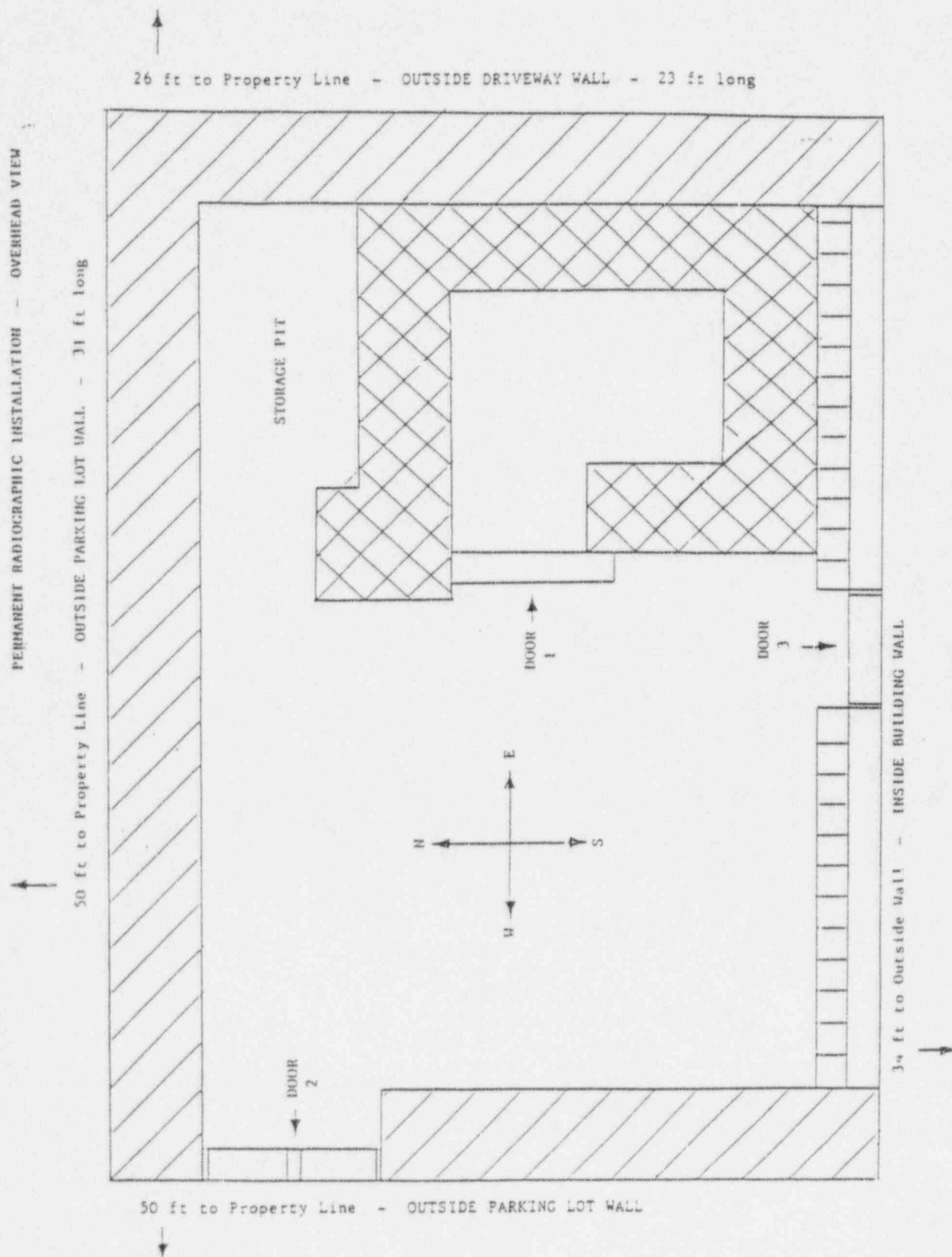
STORAGE 3A 3 - Trunk in Storage Pit

Entire Storage Pit is Below Ground Level



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OPERATING & EMERGENCY PROCEDURES MANUAL



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CONSOLIDATED NDE, INC

6 WOODBRIDGE AVENUE WOODBRIDGE, NJ 07095

1-800-451-6069

OPERATING & EMERGENCY PROCEDURES MANUAL

TO BE FOLLOWED WHEN UTILIZING

PORTABLE GAUGES CONTAINING

CESIUM 137 (Cs-137) & AMERICIUM 241/BERYLLIUM (Am-241/Be)

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

1.0 GENERAL POLICY STATEMENT

- A. This Moisture/Density Gauge Safety Manual, herein called the MDG Manual, outlines Consolidated NDE, Inc., herein called CNDE, operating and emergency procedures governing the use, storage and transport of sealed gauges.
- B. The purpose of these rules is to protect the health and safety of the general public and the CNDE operators authorized to use sealed gauges.
- C. It is the formal policy of CNDE to maintain the individual and collective occupational radiation exposures of all personnel:

AS LOW AS REASONABLY ACHIEVABLE - A L A R A

- D. All personnel authorized to utilize the sealed gauge shall be familiar with the concept and practice of radiation safety, and shall strictly adhere to the requirements set forth in this manual.

2.0 RESPONSIBILITY

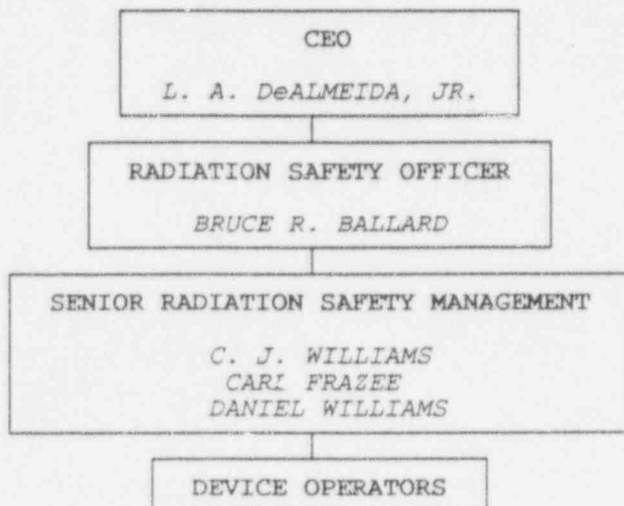
2.1 RSO RESPONSIBILITY

- A. The Radiation Safety Officer, herein called the RSO, is responsible for the radiation safety program, this includes authorizing, supervising or conducting operations involving sealed gauges.
- B. This responsibility also includes ensuring that operators are properly trained; are designated by the RSO; receive refresher training at least annually; and are informed of all changes in regulatory requirements and deficiencies identified during annual audits.

2.2 OPERATOR RESPONSIBILITY

- A. A operator as directed by the RSM, is authorized to perform all aspects of detection and related operations involving the moisture/density gauge.
- B. A operator shall assure these operations comply with the requirements of the NRC regulations and the license conditions of CNDE.

3.0 ORGANIZATION CHART



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MOISTURE/DENSITY GAUGE SAFETY MANUAL

4.0 PERSONNEL MONITORING

4.1 MONTHLY BADGE

- A. A monthly badge measures the accumulated radiation dose of an individual over a fixed period of time, usually corresponding to the months of the year.
- B. A monthly badge shall be a TLD type badge.

4.2 CARE

- A. Heat in excess of 130 degrees F should be avoided.
- B. Opening the holder or immersion in processing chemistry should be avoided.

NOTE: Damaged badges may make it impossible to accurately document radiation exposure. If a badge is damaged or is suspected of being damaged, contact the RSM.

4.3 ISSUE

NOTE: Monthly badges shall not be interchanged between personnel.

- A. Badges shall be issued, under the authorization of the RSM:
 - 1. Prior to initial operations involving licensed material.
 - 2. On or near the first day of each calendar month, thereafter.
 - 3. A new badge may be issued any time, as directed by the RSM.

4.4 USE

- A. Badges shall be worn when performing detection operations, maintenance, inventory, or leak testing.
- B. Badges shall be worn for the calendar month inscribed on it.
- C. Upon receipt of a new badge, the expired badge shall be sent to the RSM at the CNDE New Jersey office or to the regional RSM office, if so directed.
- D. If a badge is not received on or before the first day of a new month, contact the RSM at the CNDE New Jersey office.
- E. Badges may be used beyond the calendar month with the approval of the RSM.

4.5 RESPONSIBILITY

- A. The badge label shall include the individual's name, and unique issue or ID number. The calendar month and year shall be identified by name and number, or by any suitable means, i.e., a corresponding letter and color.
- B. The individual shall check that the badge information is correct and legible.

4.6 RECORDS

- A. The badge number shall be recorded in the FILM/TLD BADGE NUMBER section of the Utilization Log.
- B. The Utilization Log shall be sent to the appropriate branch office, if required, then to the New Jersey office for review by the RSM.

4.7 ATTACHMENT LOCATION

- A. Monthly badges shall be worn between the hips and the upper body, but shall not be carried in a back pocket.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

5.0 LIMITS FOR RADIATION EXPOSURE

5.1 STANDARD OCCUPATIONAL DOSE

5.1.1 Definitions

- A. **Occupational Dose** - Exposure to radiation in a restricted area or in the course of employment involving sealed gauges.
- B. **Calendar Year** - Shall not be less than 365 consecutive days. The first month shall begin on January 1st and the last month shall end on December 31st.

5.1.2 Standard Dose Limits

- A. No individual may receive in any one calendar year, a total effective dose equivalent in excess of:
 - 1. 5 Rem to the whole body, head and trunk, male gonads and active blood-forming organs, including arms above the elbows and legs above the knees.
 - 2. 15 Rem to the lens of the eye.
 - 3. 50 Rem to the extremities, including the elbows, lower arms, hands, and knees, lower legs, feet.
- B. When the sealed gauge contains a material that emits neutron radiation, a quality factor of 10 shall be used to convert the absorbed dose to the dose equivalent.

5.2 DECLARED PREGNANCY DOSE

- A. After a female operator declares herself pregnant, the dose for the entire pregnancy (gestation period) of the embryo/fetus shall not exceed 0.5 Rem.
- B. The declaration of pregnancy must be submitted in writing to the RSO or State RSO.

5.3 MEMBERS OF THE PUBLIC DOSE

- A. The total dose to individual members of the public, from licensed material, shall not exceed 100 mRem in a year.

5.4 UNRESTRICTED AREA

- A. An area that is accessible by the public shall have no radiation levels which, if an individual were continuously present, could result in their receiving a radiation dose in excess of 2 millirems in any one hour.

5.5 EXPOSURE HISTORY

- A. Individuals shall be informed in writing, if they receive any radiation exposure in excess of the limits allowed by the appropriate agency regulations or this section.
- B. At the annual request of an individual, they shall be advised of their radiation exposure as maintained in the exposure records.
- C. At the request of an individual formerly employed by CNDE, they shall be furnished with a report of their radiation exposure received while employed by CNDE. The report shall be furnished within 30 days after the request is received or 30 days after the exposure has been determined, whichever is later.
- D. At the request of an individual terminating employment in a given calendar quarter, they shall be furnished with a written estimate of their radiation exposure received during that specifically identified calendar quarter.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

6.0 INSPECTION CHECK & MAINTENANCE

6.1 SAFETY WARNING

DO NOT Remove the Source from the Gauge

Make No Attempt to Physically Inspect the Source

6.2 SERVICE AND REPAIR

- A. If any gauge becomes in need of service or repair, stop all operations immediately. Secure the gauge and contact Radiation Safety Management.
- B. Any gauge requiring service or repair shall be returned to the manufacturer or approved service center.

6.3 GAUGE TYPES

6.3.1 MCM Series

- A. For moisture measurement of thermal insulation around piping and vessels.

6.3.2 MC Series

- A. For density/moisture measurement of soils and construction materials.

6.4 GAUGE IDENTIFICATION

- A. Gauges or the storage/transportation case shall be affixed with:
 - 1. an identification plate, that includes the sealed source serial number; and
 - 2. a sticker bearing the words "Caution" or "Danger Radioactive Material" and a red cross-hatched symbol on a yellow background.

6.5 GAUGE MAINTENANCE

6.5.1 General Check

- A. Check that the ID plate and warning label are legible and attached securely.
- B. Check that the sealed source is attached securely.
- C. Check the gauge and handle for cracking and corrosion.
- D. Check for broken or missing screws and rivets.
- E. Check the shape of the device for bulges or dents.
- F. Check for internal rattles or clunking sounds.

6.5.2 Check Frequency

- A. The gauge shall be checked by the operator at the beginning of the work shift, before the start of any detection.

6.5.3 Maintenance

- A. Maintenance shall consist of cleaning the gauge.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

7.0 QUARTERLY INVENTORY

7.1 REQUIREMENTS

- A. A physical inventory shall be performed to account for all licensed material and shall be performed every 90 days.

7.2 INVENTORY FORMS

- A. The information required on the form shall be completed in full and shall include:
1. Inventory Due Date & Date inventory was performed;
 2. Device Serial Number, and Source Type, Curies & Serial Number;
 3. Location of the device & Name and Signature of person performing the inventory.

7.3 PROCEDURE

- A. Perform the inventory and complete the form. By signing the form, the person performing the inventory certifies that the information is correct.

8.0 LEAK TEST

8.1 REQUIREMENTS

- A. Each sealed source shall be tested for leakage (removable contamination) at intervals not to exceed six (6) months.

8.2 PROCEDURE

- A. Remove the gauge from the storage case.
B. Wash your hands thoroughly.
C. Follow the instructions on the leak test packet.
D. Complete the leak test information form
E. Return the envelope to the Senior RSM at the New Jersey office.

9.0 STORAGE

9.1 PERMANENT STORAGE

9.1.1 Location - 6 Woodbridge Avenue / Woodbridge, New Jersey

- A. Permanent Radiographic Installation
B. Locked Storage Cabinet in Rear Workroom
C. Storage Pit in Rear Workroom

9.2 TEMPORARY STORAGE

- A. Vehicles may be used as temporary storage for provided the gauge is placed in the storage/transport case and the vehicle is properly identified and locked.

9.3 SECURITY REQUIREMENTS

9.3.1 Storage/Transport Cases

- A. Storage or transport cases containing gauges shall be secured to prevent tampering or removal by unauthorized personnel.

9.3.2 Gauges

- A. Unless the gauge is under the direct surveillance of the operator, it shall be secured to prevent unauthorized or accidental tampering or removal.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

10.0 TRANSPORTATION

10.1 SHIPPING LABELS

10.1.1 Transport Index

- A. The Transport Index is the dose rate at 1 meter (39.34 inches) from the exterior surface of the package.
- B. A sticker bearing the words "Inside Packages Comply With Prescribed Specifications" shall be affixed to the package.

10.1.2 Label Information

- A. The proper shipping label for a package is based on the radiation dose rate at the surface and the Transport Index.
- B. Two shipping labels shall be affixed to the package.
- C. The information required on the shipping labels shall include the:
 - 1. Name of radionuclide.
 - 2. Number of Curies or milliCuries.
 - 3. Transport Index.

10.1.3 Yellow II - Label Category

- A. The radiation level at the package surface is greater than 0.5 mR/hr and less than or equal to 50 mR/hr.
- B. The Transport Index is less than or equal to 1.0 mR/hr.

10.2 SHIPPING PAPERS

10.2.1 Transport by Motor Freight or CNDE

- A. The information required on shipping papers shall be fully completed and shall include:
 - 1. Proper Shipping Name
 - 2. Hazard Class
 - 3. Identification Number
 - 4. Number of milliCuries

10.2.2 Transport by Air Freight

- A. The information required on shipping papers is the same as in Part 10.2.1.
- B. Use a red bordered "Shipper's Declaration For Dangerous Goods" form.
- C. Packages shall be shipped on "CARGO AIRCRAFT ONLY"

10.3 SECURING

- A. Packages shall be secured to prevent tampering or removal by unauthorized personnel, or shifting during normal transit.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

11.0 OPERATIONS

11.1 GENERAL REQUIREMENTS

- A. Operations shall be conducted to maintain radiation exposures - A L A R A.

11.2 PRE-JOB EQUIPMENT CHECK

- A. The operator shall verify all items on the pre-job check list are accounted for.

11.2.1 Documents

- A. Operating & Emergency Procedures
- B. CNDE Material License
- C. Training Certificate

11.2.2 Forms

- A. Utilization Log
- B. Transport Form
- C. Leak Test Results

11.3 SET-UP

11.3.1 Communication

- A. The appropriate customer and/or contractor personnel shall be informed or aware that detection operations are to be performed.

11.3.2 Assembly

- A. Open the storage case and attach the gauge handle.

11.4 EXPOSING THE SOURCE

11.4.1 Area Check

- A. Verify no unauthorized personnel are near the detection area.

11.4.2 Operating the Gauge

- A. Position yourself at the control assembly handle.
- B. Remove the gauge from the storage case and begin detection operations.

11.5 SECURING THE SOURCE

- A. Place the gauge in the storage case.
- B. Remove the handle from the gauge.
- C. Close and secure the storage case.
- D. Unless the gauge is under the direct surveillance of an operator it shall be locked and secured to prevent unauthorized or accidental removal of the gauge from the storage case, or tampering or removal by unauthorized personnel.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

12.0 EMERGENCY PROCEDURES INDEX

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12.4	PLAN 4 - MISSING OR STOLEN GAUGE	11
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12.6	PLAN 6 - FIRE	12
12.7	EMERGENCY PHONE NUMBERS	12

12.1 EMERGENCY PLAN - 1

12.1.1 THE SOURCE BECOMES UNATTACHED FROM THE GAUGE

12.1.2 No Damage to the Source Capsule

- A. Locate the capsule.
- B. Place the capsule back into the gauge housing and secure with tape.
- C. Place the gauge in the storage case and secure the case.
- D. Contact the Radiation Safety Management.

12.1.3 Damage to the Source Capsule

- A. Locate the capsule.
- B. Using pliers or tongs, put the capsule into a plastic bag or other container that will not allow the spread of contamination.
- C. Put the pliers or tongs into the plastic bag.
- D. Tie or tape the bag closed.
- E. Wash your hands thoroughly.
- F. Put the bag into the storage case and secure the case.
- G. Contact the Radiation Safety Management.

12.2 EMERGENCY PLAN - 2

12.2.1 DAMAGE TO THE GAUGE

- A. Return the gauge to the storage case and secure the case.
- B. Contact the Radiation Safety Management.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

12.3 EMERGENCY PLAN - 3

12.3.1 PERSONNEL IN THE DETECTION AREA

12.3.2 Response

- A. Place the gauge on the ground, with the source capsule pointing down.

12.3.3 Exit Procedure

- A. Inform the individual of the operations in the area and instruct them to leave.
B. If the individual refuses to leave the area return the gauge to the storage box, and cease operations.

12.4 EMERGENCY PLAN - 4

12.4.1 MISSING OR STOLEN GAUGE

- A. Note the following information.
1. Exposure device model and serial number.
 2. Source type and strength.
 3. Location where the gauge was last accounted for.
 4. Date and Time the gauge was last accounted for.
- B. Try to determine how the gauge could have been lost or stolen.
- C. Ask any CNDE personnel in the area if they have any information concerning the missing or stolen gauge.
- D. Contact the customer, job-site supervisor and/or contractor personnel and inform them of the situation.
1. Inquire if they have any information concerning the missing or stolen gauge.
- E. Contact CNDE Radiation Safety Management.

12.5 EMERGENCY PLAN - 5

12.5.1 TRANSPORTING VEHICLE ACCIDENT

- A. Remove the gauge from the transport case.
- B. Inspect the gauge and make note of any damage.
- C. Return the gauge to the transport case.
- D. Give assistance, if it is needed and notify the local authorities, as necessary.
1. Follow CNDE policy and State law concerning vehicle accidents.
- E. Contact Radiation Safety Management.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

12.6 EMERGENCY PLAN - 6

12.6.1 FIRE

12.6.2 Gauge Can be Removed from the Fire Area.

- A. Exit the area of the fire.
- B. Secure the gauge in the storage case.
- C. Contact the Radiation Safety Management.

12.6.3 Gauge Cannot be Removed from the Fire Area.

- A. Exit the fire area and stand-by at a safe distance to inform the fire fighting personnel of the nature, location and hazards of the radioactive material.
- B. Contact the Radiation Safety Management.

12.7 EMERGENCY PHONE NUMBERS

12.7.1 CORPORATE OFFICE

CONSOLIDATED NDE, INC. 6 WOODBRIDGE AVENUE WOODBRIDGE, NEW JERSEY			
24 HOUR ANSWERING SERVICE	(908) 636-4550	NEW JERSEY	NRC REGION I
MAIN OFFICE	(908) 636-4550 (908) 636-4551	NEW JERSEY	NRC REGION I

12.7.2 RADIATION SAFETY MANAGEMENT PERSONNEL

RADIATION SAFETY OFFICER			
BRUCE R. BALLARD	(908) 767-0910	NEW JERSEY	NRC REGION I
SENIOR RADIATION SAFETY MANAGEMENT			
C. J. WILLIAMS	(908) 969-2183	NEW JERSEY	NRC REGION I
CARL FRAZEE	(908) 463-7810	NEW JERSEY	NRC REGION I
RADIATION SAFETY MANAGEMENT			
PAUL DRYDEN	(704) 568-4058	NORTH CAROLINA	NRC REGION II
RONALD BUCHSEN	(404) 254-0071	GEORGIA	NRC REGION II
LARRY CURREY	(304) 622-8327	WEST VIRGINIA	NRC REGION II
PAUL OWEN	(203) 267-9182	CONNECTICUT	NRC REGION I
DANIEL WILLIAMS	(908) 918-9649	NEW JERSEY	NRC REGION I
THOMAS TRAYNOR	(814) 334-5873	PENNSYLVANIA	NRC REGION I
EDWARD PORTER	(412) 499-5479	PENNSYLVANIA	NRC REGION I
RONALD WILLIAMS	(804) 564-0919	VIRGINIA	NRC REGION II

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CONSOLIDATED NDE, INC

6 WOODBRIDGE AVENUE WOODBRIDGE, NJ 07095

1-800-451-6069

ADMINISTRATIVE MANUAL

OUTLINING

PERSONNEL QUALIFICATION STANDARDS

AND

AUDITS REQUIREMENTS

FOR

UTILIZING PORTABLE GAUGES CONTAINING

CESIUM 137 (Cs-173) & AMERICIUM 241/BERYLLIUM (Am-241/Be)

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MOISTURE/DENSITY GAUGE TRAINING MANUAL

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MOISTURE/DENSITY GAUGE ADMINISTRATIVE MANUAL

1.0 RESPONSIBILITY

1.1 RSO RESPONSIBILITY

- A. The Radiation Safety Officer, herein called the RSO, is responsible for the radiation safety program, includes authorizing, supervising or conducting operations involving sealed gauges.
- B. This responsibility also includes ensuring that:
1. possession is limited to the kind and quality of byproduct material that is listed on the CNDE license.
 2. operators are properly trained; are designated by the RSO; receive refresher training at least annually; and are informed of all changes in regulatory requirements and deficiencies identified during annual audits.
 3. personnel monitoring devices are used as required and reports of personnel exposure are reviewed in a timely manner.
 4. gauges are properly secured against unauthorized removal at all times when gauges are not in use and proper authorities are notified in case of accident, damage to gauges, fire or theft.
 5. audits are performed at least annually to ensure that:
 - a. CNDE is in compliance with NRC and DOT regulations;
 - b. the radiation protection program content and implementation achieve occupational doses and doses to members of the public that re ALARA.
 - c. CNDE maintains required records with all required information sufficient to comply with NRC requirements.
 6. results of audits, identification of deficiencies and recommendations for change are documented (and maintained for at least three years) and provided to management for review, and that audit results and corrective actions are communicated to all personnel who use licensed material.
 7. ensure that prompt action is taken to correct deficiencies.
 8. all incidents, accidents and personnel exposure to radiation in excess of ALARA or 10 CFR - Part 20 limits are investigated and reported to the NRC and other authorities, as appropriate, within the required time limits.
 9. the sealed gauges are leak tested, as required.
 10. licensed material is transported according to all applicable DOT requirements.
 11. licensed material is disposed of properly.
 12. up-to-date copies of NRC's regulations are available, new or amended NRC regulations are reviewed, and CNDE procedures are revised, as needed, to comply with NRC regulations.
 13. the license is amended whenever there are changes in licensed activities, responsible individuals, or information or commitments provided to the NRC in the licensing process.

2.2 OPERATOR RESPONSIBILITY

- A. An operator shall comply with the requirements of the NRC regulations and the license conditions of CNDE.

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MOISTURE/DENSITY GAUGE ADMINISTRATIVE MANUAL

2.0 TRAINING COURSE OUTLINE

- A. The course shall be a minimum of 8 hours formal classroom training.
- B. Course topics shall include:
 - 1. Radiation Physics (0.5 hour)
 - a. Atomic and Subatomic Structure
 - b. Radioactivity and Types of Radiation
 - c. Sources of Radioactivity
 - d. Isotopes and Periodic Table
 - e. Units of Radiation Measurement and Half-life
 - 2. Radiation Safety (1.0 hour)
 - a. Biological Effects of Radiation
 - b. Occupational Dose Limits
 - c. ALARA
 - d. Methods to Reduce Dose
 - e. Personnel Monitoring
 - 3. Regulatory Requirements (1.5 hour)
 - a. Licensing
 - b. Storage of Licensed Material
 - c. Constant Control and Surveillance of Radioactive Material Not in Storage
 - d. Personnel Monitoring
 - e. Leak Testing
 - f. Inventory
 - g. Maintenance
 - h. Operating & Emergency Procedures
 - i. Audits
 - j. Recordkeeping
 - k. reciprocity
 - l. Disposal
 - m. incidents
 - 4. Transportation (0.5 hour)
 - a. Requirements in 10 CFR 71.5 and 49 CFR
 - b. Transportation of Licensed Material in Vehicles
 - c. Shipping by Common Carrier
 - 5. Gauge Theory, Operation and Field Training (3.5 hour)
 - 6. Written Test and Test Review (0.5 hour)

3.0 INSTRUCTOR QUALIFICATIONS

- A. An instructor who trains individuals as gauge operators shall meet the following criteria:
 - 1. Be a high school graduate or have a general equivalency diploma (GED)
 - 2. Successfully complete a training course as outlined in Part 1.0.
 - 3. Successfully complete a 40 hour training course in radiation safety principals and practices.
 - 4. Have 32 hours of hands-on experience, or 8 hours of hands-on experience, if previously certified as a radiographer, in the use of portable gauge devices.

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MOISTURE/DENSITY GAUGE TRAINING MANUAL

4.0 ANNUAL REFRESHER TRAINING

- A. Annual refresher training shall be conducted during each calendar year.
- B. Refresher topics shall vary from year to year. The RSO shall select specific topics from appropriate subjects and they shall include, but are not limited to:
 - 1. biological effects of radiation exposure.
 - 2. radiation dose limits.
 - 3. federal safety regulations.
 - 4. federal transportation regulations.
 - 5. gauge operations utilizing the ALARA concept.
- C. The RSO or other Radiation Safety Management shall conduct the refresher training.
 - 1. Other designated RSM include:
 - a. C. J. Williams
 - b. Carl Frazee
 - c. Daniel Williams
 - 2. For qualification of the RSO & RSM, refer to Part 7.0.

5.0 ANNUAL AUDITS

- A. The RSO shall conduct the audits.
- B. The audits shall be conducted at intervals not to exceed 12 months and the records shall be maintained for at least 3 years.
- C. CNDE management commits to review the audit results promptly, and shall take prompt action to correct any deficiencies identified during audits, to inform all personnel of the deficiencies and the actions personnel are expected to take to avoid similar deficiencies.
- D. The scope and extent of the audit shall include verify that:
 - 1. operators are properly trained and receive copies of the O&E Manual prior to using a gauge, and receive refresher training.
 - 2. material is not possessed in quantities greater than allowed in the license.
 - 3. leak tests and quarterly inventories are performed at the required intervals.
 - 4. operable and calibrated survey instrument are available at each job-site.
 - 5. the required gauge and storage radiation surveys are performed.
 - 6. receipt, transfer and transportation is in accordance with DOT regulations and the proper shipping papers are prepared and accessible during transport.
 - 7. unmonitored personnel, including members of the public, are not likely to receive more than 10 percent of the allowable limits.
 - 8. personnel monitoring records are reviewed and that occupational exposures to operators do not exceed the applicable limits.
 - 9. notifications or reports are filed, if applicable.
 - 10. compliance with posting and labeling requirements.
 - 11. action to correct deficiencies or problems is implemented.

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6.0 RADIATION SAFETY EXAMINATION

CONSOLIDATED NDE, INC.

WOODBIDGE, NEW JERSEY

REVISION - 08/96

**RADIATION SAFETY EXAMINATION FOR QUALIFYING INDIVIDUALS
TO USE SEALED SOURCES IN DENSITY & MOISTURE MEASUREMENT**

NAME - PRINT (LAST - FIRST - MI)

DATE

NAME - SIGNATURE

BADGE NUMBER

REVIEWED BY

TEST SCORE

01. Gauges use which types of radiation for density and moisture measurements?
 - a. Alpha/Beta
 - b. X-Ray/Neutron
 - c. Proton/Gamma
 - d. Gamma/Neutron
02. Federal NRC regulations do NOT govern the possession and use of type of radioisotope?
 - a. Reactor by-product
 - b. Natural occurring
 - c. All radioisotopes
 - d. None of the above
03. The term describing the activity of a radioactive source?
 - a. Curie or milliCurie
 - b. mRem
 - c. Roentgen
 - d. mRem/hr
04. The effective dose rate in a radiation field is measured in?
 - a. mRems
 - b. footcandles
 - c. mRem/hr
 - d. flux
05. What forms of measurement are used in density mode of operation?
 - a. Moisture & Transmission
 - b. Backscatter & Transmission
 - c. Density & Gamma
 - d. Backscatter Only (There is only one mode in density)

MOISTURE/DENSITY GAUGE TRAINING MANUAL

CONSOLIDATED NDE, INC.

REVISION - 08/96

WOODBIDGE, NEW JERSEY

06. A construction vehicle runs over your gauge, crushing it and scattering parts all over. You cannot positively determine that the sealed source(s) are intact. What should you do?
- a. Secure the vehicle
 - b. Call the RSO
 - c. Rope off the area
 - d. All of the above
07. What is the approximate depth of moisture measurement?
- a. 1/2 inch
 - b. 1 inch
 - c. 6 inches
 - d. 24 inches
08. Water is a good shielding material for neutron radiation. What is another good shielding material?
- a. Lead
 - b. Plastic
 - c. Brick
 - d. Steel
09. What type of radiation dose a Cs-137 sealed source emit?
- a. Gamma
 - b. Neutron
 - c. X-Ray
 - d. Proton
10. What is the maximum annual accumulated radiation dose permitted by the NRC and Agreement States for an occupational worker is?
- a. 50 Rem per year
 - b. 50 mRem per year
 - c. 500 mRem per year
 - d. 5 rem per year
11. What is the typical dose rate at mid-body (2 feet), while carrying a moisture/density gauge?
- a. 7 mRem/hr
 - b. 1 mRem/yr
 - c. 0.5 mRem/hr
 - d. 3.0 mRem/hr
12. A gauge operator can reduce their radiation exposure by:
- a. Time and Distance
 - b. Wearing a monitoring badge
 - c. Protective eyewear
 - d. wearing coveralls

MOISTURE/DENSITY GAUGE TRAINING MANUAL

CONSOLIDATED NDE, INC.

WOODBRIDGE, NEW JERSEY

REVISION - 08/96

13. In using a gauge, an operator receives a reported dose of 2 mRem for the month. Can he transmit it to others
 - a. Yes
 - b. No
14. During normal and correct use of a compaction gauge, the exposure will be received mostly by the:
 - a. chest.
 - b. mid-body.
 - c. ankles.
 - d. eyes.
15. Which requires the least thickness for shielding gamma radiation?
 - a. Lead
 - b. Plastic
 - c. Brick
 - d. Steel
16. When assigned a gauge, you are responsible for the gauge at all times while it is in your possession.
 - a. True
 - b. False
17. When using a gauge, you are required to:
 - a. Have a physical exclamation.
 - b. Wear a monitoring badge.
 - c. Have a college degree.
 - d. All of the above.
18. The dose rate for a 10 mCi CS-137 source is 3.3 mRem/hr at a distance of 1 meter (39.4 inches).
 - a. True
 - b. False
19. The dose rate for a 50 mCi Am-241/Be source is 0.11 mRem/hr at a distance of 1 meter (39.4 inches).
 - a. True
 - b. False
20. Disconnecting the battery turns off the radiation from a source.
 - a. True
 - b. False

MOISTURE/DENSITY GAUGE TRAINING MANUAL

CONSOLIDATED NDE, INC.

REVISION - 04/91

WOODBIDGE, NEW JERSEY

21. Your monitoring badge reading is 100 mRem for the month. Assuming the gauge has a whole body dose rate of 0.5 mRem/hr, how many hours would you have had to carry the gauge in that month?
- a. 100 hours
 - b. 20 hours
 - c. 2.0 hours
 - d. 200 hours
22. Using a brush with a 4 inch handle, an operator takes 30 seconds to clean the inspection face (source side) of a moisture gauge. If the dose rate from the face is 14000 mRem/hr at 1 inch, what approximate dose will their hands receive?
- a. 3 mRem
 - b. 7 mRem
 - c. 18 mRem
 - d. 36 mRem
23. The dose rate from a gauge containing Cs-137 is 10 mRem/hr at one foot. At what distance would the dose rate be 2.5 mRem/hr.
- a. 2 feet
 - b. 4 feet
 - c. 6 feet
 - d. 8 feet
24. Using the source and dose rate in Question #23, what thickness of lead would be required to reduce the dose rate to 2.5 mRem/hr.
- a. 1/4 inch
 - b. 3/8 inch
 - c. 1/2 inch
 - d. 1 inch
25. Only the Radiation Safety Officer should consider the situation from the ALARA standpoint?
- a. 2 feet
 - b. 4 feet
 - c. 6 feet
 - d. 8 feet

MOISTURE/DENSITY GAUGE TRAINING MANUAL

7.0 RADIATION SAFETY EXAMINATION ANSWER SHEET

RADIATION SAFETY EXAMINATION FOR QUALIFYING INDIVIDUALS
TO USE SEALED SOURCES IN DENSITY & MOISTURE MEASUREMENT

ANSWER SHEET

1. d
2. a
3. a
4. c
5. b
6. d
7. c
8. b
9. a
10. d
11. c
12. a
13. a
14. c
15. a
16. a
17. b
18. a
19. a
20. b
21. d
22. b
23. a
24. b
25. b

MOISTURE/DENSITY GAUGE TRAINING MANUAL

8.0 RADIATION SAFETY MANAGEMENT

8.1 BRUCE R. BALLARD - Radiation Safety Officer

A. Radiation Safety Experience

1. Officer Radiation Safety Officer - Consolidated NDE, Inc. - 1/85 To Present
2. Radiation Safety Management - Consolidated X-Ray Service Corp. - 07/78 to 5/85
3. Radiographer - 4/76 to 7/78 & 5/71 to 11/72

B. Radiation Safety Qualifications

1. Certified Radiographer - ASNT & State of Texas
2. Radiation Safety Program Administration - RTS Technology, Inc.
3. Radiographic Testing Level III - ASNT Certificate No. JM 1174
4. Administration of Isotope Radiography Safety Programs - Tech Ops Inc.
5. Radiographic Testing - Westinghouse, NDE Technical Institute
6. Radiation Safety Aspects of Isotope Radiography - Tech Ops Inc.

8.2 C. J. WILLIAMS - Radiation Safety Management

A. Radiation Safety Experience

1. Senior Radiation Safety Manager - Consolidated NDE, Inc. - 5/85 to Present
2. Radiation Safety Manager - Consolidated X-Ray Service Corp. - 1971 to 1985
3. Radiation Safety Manager - Conam Inspection, Inc. - 1967 to 1971
4. Radiation Safety Manager - Radiography Inspection, Inc. - 1965 to 1967
5. Radiographer - 1955 to 1965

B. Radiation Safety Qualifications

1. Radiation Safety Aspects of Isotope Radiography - Tech Ops Inc.
2. Radiation Safety & Equipment Operations - Budd Instrument Co.
3. Radiation Safety - Industrial X-Ray Engineers / Radiography Insp. / Conam Insp.

8.3 CARL W. FRAZEE - Radiation Safety Management

A. Radiation Safety Experience

1. Senior Radiation Safety Manager - Consolidated NDE, Inc. - 5/85 to Present
2. Radiation Safety Manager - Consolidated X-Ray Service Corp. - 1971 to 1985
3. Radiation Safety Manager - Conam Inspection, Inc. - 1969 to 1971
4. Radiographer - 1966 to 1968

B. Radiation Safety Qualifications

1. Radiation Safety Aspects of Isotope Radiography - Tech Ops Inc.
2. Radiation Safety Program Administration - RTS Technology, Inc.
3. Radiation Safety - Radiography Inspection / Conam Inspection

8.4 DANIEL P. WILLIAMS - Radiation Safety Management

A. Radiation Safety Experience

1. Radiation Safety Manager - Consolidated NDE, Inc. - 1/89 to Present
2. Radiographer - 5/79 to 1/89

B. Radiation Safety Qualifications

1. Initial Radiation Safety Training - Tech Check, Inc.
2. Radiation Safety - Consolidated NDE, Inc. / Consolidated X-Ray Service Corp.

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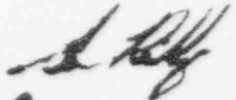
Nº 27805

Certificate Of Completion

This is to certify that Bruce R. Ballard has completed the
basic CPN® training course on Radiation Safety and Use of Nuclear Gauges,
held this 29th day of July 19 96 in the
City of Woodbridge State of NJ by Boart Longyear Company.

Boart Longyear Company
2830 Howe Road
Martinez, California 94553 USA
Phone: (510) 228-9770
Fax: (510) 228-3183




INSTRUCTOR
Douglas Carter
RADIATION SAFETY OFFICER

JUL 23 1996

License No. New
Docket No. 030-34195
Control No. 123337

Mr. Bruce R. Ballard
Radiation Safety Officer
Consolidated NDE, Inc.
6 Woodbridge Avenue
Woodbridge, New Jersey 07095

Dear Mr. Ballard:

This is in reference to your application dated June 14, 1996 requesting authorization of moisture density gauges. In order to continue our review, we need the following additional information:

1. Please specify each permanent facility used as a location of storage by the street address, city, and State or other descriptive address (such as on Highway 10, 5 miles east of the intersection of Highway 10 and State Route 234, Anytown, State). The descriptive address should be sufficient to allow an NRC inspector to find the storage location. A Post Office Box address is not acceptable. Also, clearly specify whether a location(s) is one at which operations will be conducted or whether the location is only for storage of gauges.
2. For each proposed permanent facility discussed in response to question 1, submit a diagram showing where the gauge(s) will be stored when not at field locations. Also, describe the security measures that will be taken during storage of gauges at the facility.
3. Specify the maximum number of sources that you will possess at any one time. Alternatively, provide a commitment to limit the number of source-device combinations such that you do not exceed the quantities of byproduct material that would require financial assurance for decommissioning.
4. Specify whether sealed sources will be lowered into the ground more than the 1-3 feet common for most surface measurements. If you plan to make measurements at depths exceeding 3 feet, you will need appropriate provisions in your operating and emergency procedures to reduce the probability of the source becoming lodged in the hole and to recover a "stuck" source, respectively.

5. Please indicate if the Radiation Safety Officer has completed the manufacturer's training program for the requested gauges. If not, provide information with regard to his formal training in radiation safety and the use of portable moisture density gauges. Also provide a commitment that, before an individual is permitted to use a gauge, the individual (a) will have successfully completed a gauge manufacturer's course that meets the criteria in Part I of Appendix D of Draft Regulatory Guide DG-0008, and the course instructor's qualifications meet the criteria in Part II of Appendix D of that guide, (b) will have received copies of, and been trained in, the applicant's operating and emergency procedures, and (c) will have been designated as an authorized user, in writing, by the RSO. Alternatively, you may provide details of a training program that meets the requirements of Appendix D of Draft Regulatory Guide DG-0008. Provide a commitment that training records will be maintained for 3 years. Also describe your annual refresher training program, including the topics to be covered and the qualification of the instructor.
6. Provide a list of duties and responsibilities of the Radiation Safety Officer. Such duties and responsibilities should be in accordance with Appendix C of the enclosed guide.
7. With regard to your personnel monitoring program, confirm that your film badge or TLD supplier is NVLAP certified.
8. Provide a commitment to have at least one appropriate, calibrated survey meter at each jobsite for timely evaluation of source integrity following an incident.
9. Please provide the following information regarding the leak testing of your sealed sources:
 - a. A description of the procedure for leak testing the source.
 - b. The instrumentation used to measure activity on the wipe and the lower limit of detectability for this instrumentation.

If you elect to have another person perform the leak test, please submit the name of the person and the applicable NRC or Agreement State license number. If this person is not licensed, please submit a description of their procedure and instrumentation as requested above.

10. In your application, you do not provide sufficient information regarding the transporting of sealed sources, securing gauges, and having shipping papers available for the transporting of licensed materials. 10 CFR 71.5 requires that transport of licensed material be carried out in accordance with applicable requirements of the Department of Transportation (DOT). The following items should be covered in instructions to your personnel:
 - a. Labeling containers with appropriate label as specified in 49 CFR 172.403.

- b. "Securing" the gauge within the transportation vehicle, as specified in 49 CFR 173.448.
 - c. Including "Shipping Papers" with appropriate information as specified in 49 CFR 172.202 with the licensed material being shipped.
11. 10 CFR 20.1101(c) requires that the licensee review the radiation protection program content and implementation at least annually. Submit a description of your program for performing the required annual review. Appendix I of the enclosed Draft Regulatory Guide may be used as a model. Your description should include the following:
- a. The name and radiation safety qualifications of the individual who will conduct audits.
 - b. A description of the scope and extent of the audits.
 - c. A commitment to conduct audits at intervals not to exceed 12 months and to maintain records of the audits for at least 3 years after the record is made.
 - d. Management's commitment to review the documented results of the audit promptly after the audit's completion.
 - e. A commitment to take prompt action to correct deficiencies identified during audits, to inform all personnel of the deficiencies and the actions management expects its personnel to take to avoid similar deficiencies.
12. Your application does not contain sufficient information on the disposal of licensed material. Specify how you will dispose of licensed material.

We will continue our review upon receipt of this information. Please reply in duplicate to my attention at the Region I Office and refer to Mail Control No. 123337. If you have any technical questions regarding this deficiency letter, please call me at (610) 337-5069.

If we do not receive a reply from you within 30 calendar days from the date of this letter, we shall assume that you do not wish to pursue your application.

Sincerely,

ORIGINAL SIGNED BY:

John R. McGrath
Senior Health Physicist
Division of Nuclear Materials Safety

OFFICIAL RECORD COPY

Mr. Bruce R. Ballard
Consolidated NDE, Inc.

-4-

License No. New
Docket No. 030-34195
Control No. 123337

Enclosure:
Draft Regulatory Guide DG-0008

DOCUMENT NAME: R:\WPS\DLTR\L2921452.02

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	N	DNMS/RI				
NAME	McGrath <i>JAM</i>						
DATE	07/23/96	07/	/96	07/	/96	07/	/96

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6 WOODBRIDGE AVENUE
WOODBRIDGE, NJ 07095

CONSOLIDATED NDE, INC.

TEL (908) 636-4550
FAX (908) 636-5845

June 14, 1996

L 21452
030-34195
03121
~~030-20987~~

Duncan White,
Nuclear Materials Safety Branch
US Nuclear Regulatory, Region 1
King of Prussia, PA 19406-1415

Subject: License Amendment

Reference: License Number 29-21452-01

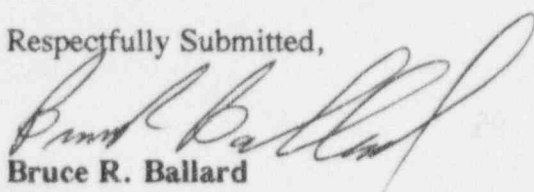
Dear Mr. White;

Please amend Consolidated NDE, Inc., material license 29-21452-01 to include the following sources and devices manufacturer by Boart Longyear CPN.

Enclosed is CNDE check #12252 in the amount of \$690.00 for the amendment fee and two copies of the appropriate safety procedures manual for sealed source gauges.

Nuclide	Form	Activity	Model	Authorized Use	Registry Number	Registry Jurisdiction
1. Cesium 137	Sealed Source	10 mCi	CPN-131	CPN Gauges MC & 501	CA208D108S	State of California
2. Americium 241/ Beryllium	Sealed Source	50 mCi	CPN-131	CPN Gauges MC & 501	CA208D108S	State of California
3. Americium 241/ Beryllium	Sealed Source	50 mCi	CPN-131	CPN Gauges MCM-2	CA208D102S	State of California

Respectfully Submitted,


Bruce R. Ballard
RSO

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ML 10

123337

JUN 17 1996

CONSOLIDATED NDE, INC

6 WOODBRIDGE AVENUE WOODBRIDGE, NJ 07095

1-800-451-6069

OPERATING & EMERGENCY PROCEDURES MANUAL

TO BE FOLLOWED WHEN UTILIZING

PORTABLE GAUGES CONTAINING

CESIUM 137 (Cs-137) & AMERICIUM 241/BERYLLIUM (Am-241/Be)

123337

ADOPTED 06/96	REVISED N/A	TITLE COVER PAGE	SECTION N/A	PAGE 01 of 12
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JUN 17 1996

MOISTURE/DENSITY GAUGE SAFETY MANUAL

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

1.0 GENERAL POLICY STATEMENT

- A. This Moisture/Density Gauge Safety Manual, herein called the MDG Manual, outlines Consolidated NDE, Inc., herein called CNDE, operating and emergency procedures governing the use, storage and transport of sealed gauges.
- B. The purpose of these rules is to protect the health and safety of the general public and the CNDE operators authorized to use sealed gauges.
- C. It is the formal policy of CNDE to maintain the individual and collective occupational radiation exposures of all personnel:

AS LOW AS REASONABLY ACHIEVABLE - A L A R A

- D. All personnel authorized to utilize the sealed gauge shall be familiar with the concept and practice of radiation safety, and shall strictly adhere to the rules set forth in this manual.

2.0 RESPONSIBILITY

2.1 CORPORATE RESPONSIBILITY

2.1.1 The Radiation Safety Officer, herein called the RSO

- A. The RSO is responsible for the radiation safety and protection program, this includes authorizing, supervising or conducting operations involving sealed gauges.
- B. This responsibility also includes ensuring that:
 - 1. all regulations and license conditions are adhered to;
 - 2. operators are properly trained and that periodic training is conducted;
 - 3. the sealed gauges are leak tested, as required.

2.1.2 Chain of Command

- A. The RSO may substitute for the Senior RSM, the Senior RSM may substitute for the State RSO and the State RSO may substitute for the RSM where the MDG Manual requires authorization, supervision or contact by any Radiation Safety Management.

2.2 OPERATOR RESPONSIBILITY

2.2.1 Operator

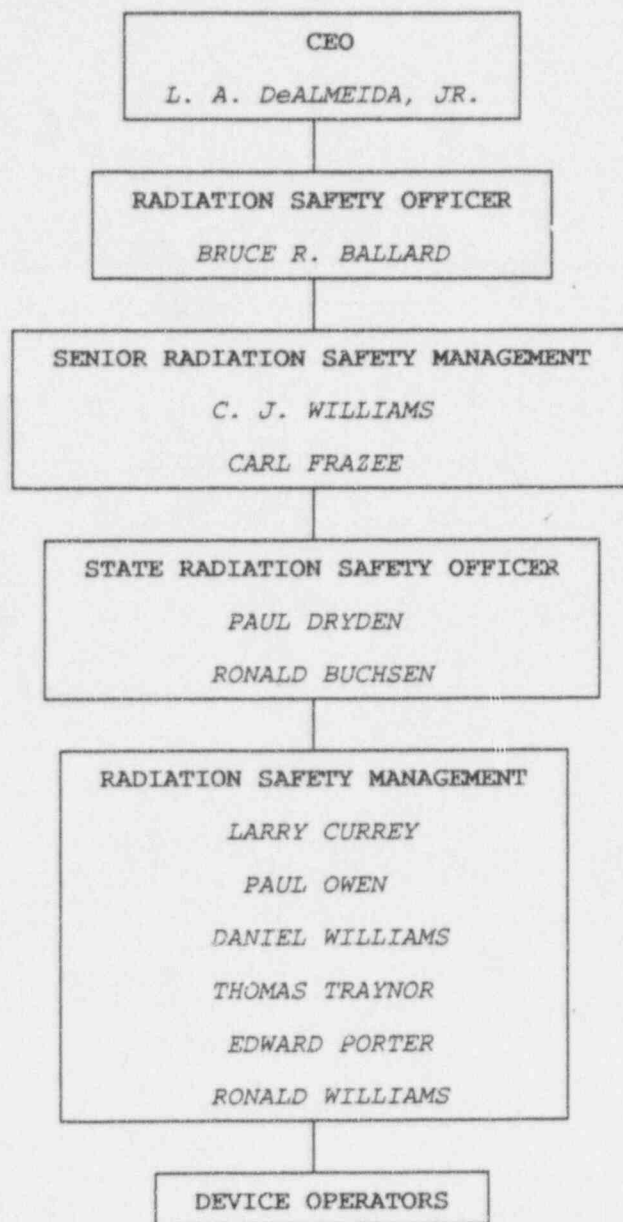
- A. A operator as directed by the RSM, is authorized to perform all aspects of detection and related operations involving the moisture/density gauge.
- B. A operator shall assure these operations comply with the requirements of the Nuclear Regulatory Commission's regulations and the license conditions of Consolidated NDE, Inc.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

3.0 ORGANIZATION CHART

3.1 RADIATION SAFETY & PROTECTION PROGRAM



MOISTURE/DENSITY GAUGE SAFETY MANUAL

4.0 PERSONNEL MONITORING

4.1 MONTHLY BADGE

- A. A monthly badge measures the accumulated radiation dose of an individual over a fixed period of time, usually corresponding to the months of the year.
- B. A monthly badge shall be a TLD type badge.

4.2 CARE

- A. Heat in excess of 130 degrees F should be avoided.
- B. Opening the holder or immersion in processing chemistry should be avoided.

NOTE: Damaged badges may make it impossible to accurately document radiation exposure. If a badge is damaged or is suspected of being damaged, contact the RSM.

4.3 ISSUE

NOTE: Monthly badges shall not be interchanged between personnel.

- A. Badges shall be issued, under the authorization of the RSM:
 - 1. Prior to initial operations involving licensed material.
 - 2. On or near the first day of each calendar month, thereafter.
 - 3. A new badge may be issued any time, as directed by the RSM.

4.4 USE

- A. Badges shall be worn when performing detection operations, maintenance, inventory, or leak testing.
- B. Badges shall be worn for the calendar month inscribed on it.
- C. Upon receipt of a new badge, the expired badge shall be sent to the RSM at the CNDE New Jersey office or to the regional RSM office, if so directed.
- D. If a badge is not received on or before the first day of a new month, contact the RSM at the CNDE New Jersey office.
- E. Badges may be used beyond the calendar month with the approval of the RSM.

4.5 RESPONSIBILITY

- A. The badge label shall include the individual's name, and unique issue or ID number. The calendar month and year shall be identified by name and number, or by any suitable means, i.e., a corresponding letter and color.
- B. The individual shall check that the badge information is correct and legible.

4.6 RECORDS

- A. The badge number shall be recorded in the FILM/TLD BADGE NUMBER section of the Utilization Log.
- B. The Utilization Log shall be sent to the appropriate branch office, if required, then to the New Jersey office for review by the RSM.

4.7 ATTACHMENT LOCATION

- A. Monthly badges shall be worn between the hips and the upper body, but shall not be carried in a back pocket.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

5.0 LIMITS FOR RADIATION EXPOSURE

5.1 STANDARD OCCUPATIONAL DOSE

5.1.1 Definitions

- A. Occupational Dose - Exposure to radiation in a restricted area or in the course of employment involving sealed gauges.
- B. Calendar Year - Shall not be less than 365 consecutive days. The first month shall begin on January 1st and the last month shall end on December 31st.

5.1.2 Standard Dose Limits

- A. No individual may receive in any one calendar year, a total effective dose equivalent in excess of:
 - 1. 5 Rem to the whole body, head and trunk, male gonads and active blood-forming organs, including arms above the elbows and legs above the knees.
 - 2. 15 Rem to the lens of the eye.
 - 3. 50 Rem to the extremities, including the elbows, lower arms, hands, and knees, lower legs, feet.
- B. When the sealed gauge contains a material that emits neutron radiation, a quality factor of 10 shall be used to convert the absorbed dose to the dose equivalent.

5.2 DECLARED PREGNANCY DOSE

- A. After a female operator declares herself pregnant, the dose for the entire pregnancy (gestation period) of the embryo/fetus shall not exceed 0.5 Rem.
- B. The declaration of pregnancy must be submitted in writing to the RSO or State RSO.

5.3 MEMBERS OF THE PUBLIC DOSE

- A. The total dose to individual members of the public, from licensed material, shall not exceed 100 mRem in a year.

5.4 UNRESTRICTED AREA

- A. An area that is accessible by the public shall have no radiation levels which, if an individual were continuously present, could result in their receiving a radiation dose in excess of 2 millirems in any one hour.

5.5 EXPOSURE HISTORY

- A. Individuals shall be informed in writing, if they receive any radiation exposure in excess of the limits allowed by the appropriate agency regulations or this section.
- B. At the annual request of an individual, they shall be advised of their radiation exposure as maintained in the exposure records.
- C. At the request of an individual formerly employed by CNDE, they shall be furnished with a report of their radiation exposure received while employed by CNDE. The report shall be furnished within 30 days after the request is received or 30 days after the exposure has been determined, whichever is later.
- D. At the request of an individual terminating employment in a given calendar quarter, they shall be furnished with a written estimate of their radiation exposure received during that specifically identified calendar quarter.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

6.0 INSPECTION CHECK & MAINTENANCE

6.1 SAFETY WARNING

DO NOT Remove the Source from the Gauge

Make No Attempt to Physically Inspect the Source

6.2 SERVICE AND REPAIR

- A. If any gauge becomes in need of service or repair, stop all operations immediately. Secure the gauge and contact Radiation Safety Management.
- B. Any gauge requiring service or repair shall be returned to the manufacturer or approved service center.

6.3 GAUGE TYPES

6.3.1 MCM Series

- A. For moisture measurement of thermal insulation around piping and vessels.

6.3.2 MC Series

- A. For density/moisture measurement of soils and construction materials.

6.4 GAUGE IDENTIFICATION

- A. Gauges or the storage/transportation case shall be affixed with:
 - 1. an identification plate, that includes the sealed source serial number; and
 - 2. a sticker bearing the words "Caution" or "Danger Radioactive Material" and a red cross-hatched symbol on a yellow background.

6.5 GAUGE MAINTENANCE

6.5.1 General Check

- A. Check that the ID plate and warning label are legible and attached securely.
- B. Check that the sealed source is attached securely.
- C. Check the gauge and handle for cracking and corrosion.
- D. Check for broken or missing screws and rivets.
- E. Check the shape of the device for bulges or dents.
- F. Check for internal rattles or clunking sounds.

6.5.2 Check Frequency

- A. The gauge shall be checked by the operator at the beginning of the work shift, before the start of any detection.

6.5.3 Maintenance

- A. Maintenance shall consist of cleaning the gauge.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

7.0 QUARTERLY INVENTORY

7.1 REQUIREMENTS

- A. A physical inventory shall be performed to account for all licensed material and shall be performed every 90 days.

7.2 INVENTORY FORMS

- A. The information required on the form shall be completed in full and shall include:
1. Inventory Due Date & Date inventory was performed;
 2. Device Serial Number, and Source Type, Curies & Serial Number;
 3. Location of the device & Name and Signature of person performing the inventory.

7.3 PROCEDURE

- A. Perform the inventory and complete the form. By signing the form, the person performing the inventory certifies that the information is correct.

8.0 LEAK TEST

8.1 REQUIREMENTS

- A. Each sealed source shall be tested for leakage (removable contamination) at intervals not to exceed six (6) months.

8.2 PROCEDURE

- A. Remove the gauge from the storage case.
- B. Wash your hands thoroughly.
- C. Follow the instructions on the leak test packet.
- D. Complete the leak test information form
- E. Return the envelope to the Senior RSM at the New Jersey office.

9.0 STORAGE

9.1 PERMANENT STORAGE

9.1.1 Location - 6 Woodbridge Avenue / Woodbridge, New Jersey

- A. Permanent Radiographic Installation
- B. Locked Storage Cabinet in Rear Workroom
- C. Storage Pit in Rear Workroom

9.2 TEMPORARY STORAGE

- A. Vehicles may be used as temporary storage for provided the gauge is placed in the storage/transport case and the vehicle is properly identified and locked.

9.3 SECURITY REQUIREMENTS

9.3.1 Storage/Transport Cases

- A. Storage or transport cases containing gauges shall be secured to prevent tampering or removal by unauthorized personnel.

9.3.2 Gauges

- A. Unless the gauge is under the direct surveillance of the operator, it shall be secured to prevent unauthorized or accidental tampering or removal.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

10.0 OPERATIONS

10.1 GENERAL REQUIREMENTS

- A. Operations shall be conducted to maintain radiation exposures - A L A R A.

10.2 PRE-JOB EQUIPMENT CHECK

- A. The operator shall verify all items on the pre-job check list are accounted for.

10.2.1 Documents

- A. Operating & Emergency Procedures
- B. CNDE Material License
- C. Training Certificate

10.2.2 Forms

- A. Utilization Log
- B. Transport Form
- C. Leak Test Results

10.3 SET-UP

10.3.1 Communication

- A. The appropriate customer and/or contractor personnel shall be informed or aware that detection operations are to be performed.

10.3.2 Assembly

- A. Open the storage case and attach the gauge handle.

10.4 EXPOSING THE SOURCE

10.4.1 Area Check

- A. Verify no unauthorized personnel are near the detection area.

10.4.2 Operating the Gauge

- A. Position yourself at the control assembly handle.
- B. Remove the gauge from the storage case and begin detection operations.

10.5 SECURING THE SOURCE

- A. Place the gauge in the storage case.
- B. Remove the handle from the gauge.
- C. Close and secure the storage case.
- D. Unless the gauge is under the direct surveillance of an operator it shall be locked and secured to prevent unauthorized or accidental removal of the gauge from the storage case, or tampering or removal by unauthorized personnel.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

11.0 EMERGENCY PROCEDURES INDEX

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11.1 EMERGENCY PLAN - 1

11.1.1 THE SOURCE BECOMES UNATTACHED FROM THE GAUGE

11.1.2 No Damage to the Source Capsule

- Locate the capsule.
- Place the capsule back into the gauge housing and secure with tape.
- Place the gauge in the storage case and secure the case.
- Contact the Radiation Safety Management.

11.1.3 Damage to the Source Capsule

- Locate the capsule.
- Using pliers or tongs, put the capsule into a plastic bag or other container that will not allow the spread of contamination.
- Put the pliers or tongs into the plastic bag.
- Tie or tape the bag closed.
- Wash your hands thoroughly.
- Put the bag into the storage case and secure the case.
- Contact the Radiation Safety Management.

11.2 EMERGENCY PLAN - 2

11.2.1 DAMAGE TO THE GAUGE

- Return the gauge to the storage case and secure the case.
- Contact the Radiation Safety Management.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

11.3 EMERGENCY PLAN - 3

11.3.1 PERSONNEL IN THE DETECTION AREA

11.3.2 Response

- A. Place the gauge on the ground, with the source capsule pointing down.

11.3.3 Exit Procedure

- A. Inform the individual of the operations in the area and instruct them to leave.
B. If the individual refuses to leave the area return the gauge to the storage box, and cease operations.

11.4 EMERGENCY PLAN - 4

11.4.1 MISSING OR STOLEN GAUGE

- A. Note the following information.

1. Exposure device model and serial number.
2. Source type and strength.
3. Location where the gauge was last accounted for.
4. Date and Time the gauge was last accounted for.

- B. Try to determine how the gauge could have been lost or stolen.

- C. Ask any CNDE personnel in the area if they have any information concerning the missing or stolen gauge.

- D. Contact the customer, job-site supervisor and/or contractor personnel and inform them of the situation.

1. Inquire if they have any information concerning the missing or stolen gauge.

- E. Contact CNDE Radiation Safety Management.

11.5 EMERGENCY PLAN - 5

11.5.1 TRANSPORTING VEHICLE ACCIDENT

- A. Remove the gauge from the transport case.

- B. Inspect the gauge and make note of any damage.

- C. Return the gauge to the transport case.

- D. Give assistance, if it is needed and notify the local authorities, as necessary.

1. Follow CNDE policy and State law concerning vehicle accidents.

- E. Contact Radiation Safety Management.

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MOISTURE/DENSITY GAUGE SAFETY MANUAL

11.6 EMERGENCY PLAN - 6

11.6.1 FIRE

11.6.2 Gauge Can be Removed from the Fire Area.

- A. Exit the area of the fire.
- B. Secure the gauge in the storage case.
- C. Contact the Radiation Safety Management.

11.6.3 Gauge Cannot be Removed from the Fire Area.

- A. Exit the fire area and stand-by at a safe distance to inform the fire fighting personnel of the nature, location and hazards of the radioactive material.
- B. Contact the Radiation Safety Management.

11.7 EMERGENCY PHONE NUMBERS

11.7.1 CORPORATE OFFICE

CONSOLIDATED NDE, INC. 6 WOODBRIDGE AVENUE WOODBRIDGE, NEW JERSEY			
24 HOUR ANSWERING SERVICE	(908) 636-4550	NEW JERSEY	NRC REGION I
MAIN OFFICE	(908) 636-4550 (908) 636-4551	NEW JERSEY	NRC REGION I

11.7.2 RADIATION SAFETY MANAGEMENT PERSONNEL

RADIATION SAFETY OFFICER			
BRUCE R. BALLARD	(908) 767-0910	NEW JERSEY	NRC REGION I
SENIOR RADIATION SAFETY MANAGEMENT			
C. J. WILLIAMS	(908) 965-7113	NEW JERSEY	NRC REGION I
CARL FRAZEE	(908) 463-7110	NEW JERSEY	NRC REGION I
RADIATION SAFETY MANAGEMENT			
PAUL DRYDEN	(704) 568-4058	NORTH CAROLINA	NRC REGION II
RONALD BUCHSEN	(404) 254-0071	GEORGIA	NRC REGION II
LARRY CURREY	(304) 622-8327	WEST VIRGINIA	NRC REGION II
PAUL OWEN	(203) 267-9182	CONNECTICUT	NRC REGION I
DANIEL WILLIAMS	(908) 918-9649	NEW JERSEY	NRC REGION I
THOMAS TAYNOR	(814) 334-5873	PENNSYLVANIA	NRC REGION I
EDWARD PORTER	(412) 499-5479	PENNSYLVANIA	NRC REGION I
RONALD WILLIAMS	(804) 564-0919	VIRGINIA	NRC REGION II

LICENSE FEE REQUIREMENTS

LICENSE FEE AND DEBT COLLECTION BRANCH
DIVISION OF ACCOUNTING AND FINANCE
OFFICE OF THE CONTROLLER
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001CONSOLIDATED NDE, INC.
ATTN: BRUCE R. BALLARD
RADIATION SAFETY OFFICER
6 WOODBRIDGE AVENUE
WOODBIDGE, NJ 07095

TYPE OF ACTION

- ☐
- NEW LICENSE
-
- ☐
- RENEWAL OF LICENSE
-
- ☒
- AMENDMENT TO LICENSE

REQUESTED DATE

6-14-96

LICENSE NUMBER

29-21452-01

CONTROL NUMBER

123337

I. APPLICATION FEE DUE

Your request for a licensing action is subject to the fee(s) in the category(ies) noted below in accordance with Section 170.31 of the enclosed Federal Register notice. Payment of the fee is required prior to the issuance of the license, renewal, or amendment.

FEE CATEGORY	APPLICATION	RENEWAL	AMENDMENT
30	\$	\$	\$ 720.00
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$

FEE(s) DUE \$ 720.00
PAYMENT RECEIVED \$ 690.00
AMOUNT DUE \$ 30.00

- ☒ Your request was received without the prescribed application fee.
- ☒ We received your Check No. 12251 in the amount of \$ 690.00. Payment of the additional fee noted above is required.
- ☐ Your request will increase the scope of your license program. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(d)(2).
- ☐ Your license expired prior to the receipt of your application for renewal. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(a).

MAKE PAYMENT OF THE FEE(S) TO THE U.S. NUCLEAR REGULATORY COMMISSION AND MAIL THE PAYMENT TO THE ADDRESS LISTED AT THE TOP OF THIS FORM. IF WE DO NOT RECEIVE A REPLY FROM YOU WITHIN 30 CALENDAR DAYS FROM THE DATE LISTED BELOW, WE SHALL ASSUME THAT YOU DO NOT WISH TO PURSUE YOUR APPLICATION AND WILL VOID THIS ACTION.

II. FEE NOT REQUIRED

- ☐ Enclosed is Check No. _____ which accompanied your request. The fee is not required because:
- ☐ We received your Check No. _____ in payment of the fee.
- ☐ The Licensing staff has informed us that your request is to be considered as a continuation of your request dated _____, Control No. _____.
- ☐ Your request was combined, prior to review, with your request, Control No. _____.

III. CHECK RETURNED

- ☐ Enclosed is Check No. _____ which was returned to us by the bank for:
- ☐ INSUFFICIENT FUNDS
- ☐ ACCOUNT CLOSED
- ☐ OTHER

MAIL THE REPLACEMENT CHECK TO THE ADDRESS LISTED AT THE TOP OF THIS FORM AND REFERENCE THE ABOVE CONTROL NUMBER.

IV. LICENSE ISSUED WITHOUT THE REQUIRED FEE

- ☐ License No. _____ Amendment No. _____, issued on _____, was issued without the required fee being collected. The fee required is noted in Section I of this form.
- ☐ The scope of your licensed program was increased. Therefore, your request is subject to the application fee(s) noted in Section 1 of this form. Refer to Section 170.31 and Footnote 1(d)(2).
- ☐ Because of the urgency of your request, the license was issued without remittance of the prescribed fee noted in Section 1 of this form.

SIGNATURE - LICENSE FEE ANALYST

BRENDA BROWN

LFDCB

BB *BB*
6/26/96

LFDCB

Distribution:

MAF Correspondence
LFDCB Chief
Invoice File w/enclLFDCB Analyst
LFDCB R/F (2)

DATE

6-26-96
OL/DAF/R/F (LF-3-2-7)

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: 03121

STATUS CODE: 3

FEE CATEGORY: _____

EXP. DATE: 0

FEE COMMENTS: _____

DECOM FIN ASSUR REQD: _____

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

APPLICANT/LICENSEE: CONSOLIDATED NDE, INC.

RECEIVED DATE: 960617

DOCKET NO: 3034195

CONTROL NO.: 123337

LICENSE NO.: _____

ACTION TYPE: NEW LICENSE

2. FEE ATTACHED

AMOUNT: _____

CHECK NO.: _____

3. COMMENTS

CHANGED FROM AMENDMENT TO
NEW LICENSE APPLICATION

SIGNED
DATE

M. A. Perkins
7/10/96

B. LICENSE FEE MANAGEMENT BRANCH CHECK WHEN MILESTONE 03 IS ENTERED 1

1. FEE CATEGORY AND AMOUNT: 3P \$550

2. CORRECT FEE PAID- APPLICATION MAY BE PROCESSED FOR:

AMENDMENT _____

RENEWAL _____

LICENSE _____

3. OTHER _____

SIGNED
DATE

I (96)

Log	<u>June 14</u>
Remitter	
Check No.	<u>12251</u>
Amount	<u>\$690</u> \$550 (Refunded \$140)
Fee Category	<u>3P</u>
Type of Fee	<u>APP</u>
Check Recd	<u>6/26/96</u>
Completed	<u>BO</u>