

ATTACHMENT C

RADIATION PROTECTION PROGRAM

The following radiation protection program will be followed at all times. A copy of these procedures shall be maintained in the licensee's radioactive materials license file, and another copy in the shipping case of the nuclear gauge at all times.

1. Only licensed operators shall use, or supervise the use of, nuclear gauges.
2. All unauthorized persons shall be kept out of the operating area. A suggested distance is five meters or 15 feet.
3. The licensee shall not open a source containing radioactive material.
4. No one shall be permitted to touch or handle directly the unshielded source.
5. The operator shall never unnecessarily expose himself to the unshielded source.
6. The nuclear gauge source shall be locked in the safe, off, closed, or stored position when not in use.
7. Security of the nuclear gauge shall be maintained at all times. The gauge shall be returned to the carrying case when not in use. Nuclear gauges shall never be left unattended, except when in storage in the licensed storage facility in the designated locked storage area or in a locked vehicle out of sight so as to minimize the attractive nuisance value.
8. Only licensed operators shall have or carry keys to the nuclear gauges or to their locked storage areas. Key control shall be maintained by the Radiation Protection Officer.
9. If the operator detects any malfunction in the shutter or other part of the nuclear gauge, he shall immediately notify the Radiation Protection Officer.
10. The licensed operators shall keep the Radiation Protection Officer informed of the location of the radioactive sources at all times. A utilization log shall be maintained at the primary storage location including, but not limited to, the following information: device manufacturer and model number, user, date of use, and location of use.
11. Licensed operators and other persons working in the proximity of the nuclear gauges when they are being transported or used shall wear appropriate personnel dosimeters, such as film badges or thermoluminescent dosimeters (TLD's). Each worker shall be assigned his own dosimeter. On no occasion shall a person wear a dosimeter assigned to another individual.

12. Personnel dosimeters shall be kept in a cool, dry, low radiation background area when not in use.
13. The personnel dosimeter shall be processed immediately if there is any indication of a high or unusual exposure, or if the dosimeter is damaged in any way. The Radiation Protection Officer shall investigate all high or unusual exposures, and take corrective action if necessary to prevent other such high exposures. Notification procedures shall be in accordance with WAC 402-24-190 and WAC 402-24-200.
14. Exposure records shall be kept on the Department of Social and Health Services form RHF-5 or in a manner which includes all information required on said form. Each entry shall be for a period of time not exceeding one calendar quarter.
15. The company shall maintain on file indefinitely the exposure records of employees and past employees, and supply such employees with exposure data on request on termination of employment or hiring by another radiation work employer.
16. The nuclear gauges shall be securely restrained within the transportation vehicle and away from the passenger compartment to prevent theft or loss in an accident and to keep personnel exposure to a minimum. Metal clamps, chains, or bars will be used.
17. Transportation activities shall be carried out in accordance with the requirements of 10 CFR Part 71 and Department of Transportation regulations (49 CFR Parts 100 to 199).
18. Radiation labels or placards (if any) shall be removed from vehicles when not actually transporting the nuclear gauges to avoid confusion should an accident occur to the vehicle when it does not contain the gauges.
19. The Radiation Protection Officer shall maintain the following publications along with the nuclear gauge license: State of Washington Department of Social and Health Services, Title 402 WAC, "Rules and Regulations for Radiation Protection" and Washington State Department of Social and Health Services, "Radiation Emergency Handbook." A copy of the Radiation Emergency Handbook shall also be supplied with each nuclear gauge.
20. The door to the storage area and the storage cabinet shall each be posted with a CAUTION RADIOACTIVE MATERIALS sign. Form RHF-3, "Notice to Employees," shall be posted in a conspicuous place wherever individuals work in or frequent any portion of a restricted area. Licensed operators shall be responsible for posting the above also at all field locations.
21. Leak testing of the sealed sources is required at six months intervals, and shall be performed in the manner designated in the application form. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the department.

APPROVED BY

James W. Alban

DATE

10-4-85

ATTACHMENT C (Continued)

TRANSPORTATION INFORMATION

OWNER OF DEVICE Brinderson Corporation

ADDRESS: P. O. Box 990

Bremerton, WA 98310

PHONE NO. (206) 373-4322

DEVICE Troxler Moisture/Density Gauge MODEL 3400 Series

ISOTOPE(S) Cs-137 Am 241:Be

ACTIVITY 10 mCi 50 mCi

LABELING:

Proper Shipping Name: RADIOACTIVE MATERIAL, SPECIAL FORM, N.G.S.

Hazard Class: Radioactive Material

Identification Number: NA9182

☒ YELLOW II ☐ YELLOW III*

TRANSPORT INDEX: 0.3 ^{0.3}

*PLACARDS REQUIRED.

This is to certify that the above-named materials are properly classified, described, packaged, and marked and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

SIGNED James W. Allen TITLE CQC Manager

DATE 10-4-85

EMERGENCY PROCEDURES

If an emergency occurs, such as loss, theft, fire, explosion, or vehicle accident in which the nuclear gauge may be damaged, the operator shall follow the procedures outlined in the Washington State Department of Social and Health Services Radiation Emergency Handbook. Principally this shall include.

1. SECURE THE AREA AROUND THE ACCIDENT. KEEP UNAUTHORIZED PERSONS AWAY. ALERT PEOPLE IN VICINITY OF THE PRESENCE OF RADIOACTIVITY AND A POSSIBLE HAZARD.
2. DO NOT LEAVE THE SITE. Send a helper or onlooker to notify the following:
 - a. Radiation Safety Officer, whose phone numbers are
Work (206) 373-4322 Home (315) 336-6599
 - b. Local Police 911
 - c. Local Fire Department where applicable _____
3. The Radiation Safety Officer in turn must immediately notify State of Washington Radiation Emergency Response (206) 682-5327, which is (206) N-U-C-L-E-A-R, and other local authorities as indicated.
4. The operator should inform emergency workers of the radiation hazard possibly existing, and should help them keep the area secure and explain to the emergency personnel the location of the radioactive device, and the extent of the possible hazard. In no case should the operator leave the site until qualified experts arrive, unless, of course, the operator is seriously injured or incapacitated, and must be removed from the site by emergency personnel.

APPROVED BY

James W. Alban

DATE

10-4-85

DUTIES OF THE RADIATION SAFETY OFFICER
FOR PORTABLE GAUGE LICENSE

1. To assure that radioactive materials possessed under the license conform to the materials listed on the license.
2. To assure that use of the devices, particularly in the field, is only by individuals authorized by the license.
3. To assure that all users wear personnel monitoring equipment, such as film badges or thermoluminescence dosimeters (TLD's), when required.
4. To review all personnel monitor reports, to alert the radiation worker in the event of a high or unusual exposure, to notify the Department of Social and Health Services personnel as required of the high or unusual exposure, and to investigate all such unusual exposures and take any necessary corrective action to prevent other such high exposures.
5. To assure that gauges are properly secured against unauthorized removal at all times when they are not in use.
6. To serve as a point of contact and give assistance in case of emergency (gauge damage in the field, fire, theft, etc.) to assure that proper authorities, for example local police, and State personnel, are notified promptly in case of accident or damage to gauges.
7. To assure that the terms and conditions of the license, such as periodic leak tests, are met and that the required records, such as personnel exposure records, leak test records, etc., are periodically reviewed for compliance with department regulations, requirements, and license conditions.

APPROVED BY

James W. Alban

DATE

10-4-85