

DL-050995_05



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

OFFICIAL RECORD COPY

MAY 11 1995

Newport News Industrial Corporation
ATTN: Mr. Thomas E. Bond
Radiation Safety Officer
700 Thimble Shoals Boulevard, Suite 113
Newport News, Virginia 23606-2544

Gentlemen:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE RENEWAL
APPLICATION DATED APRIL 10, 1995
(REFERENCE CONTROL NO. 256401; DOCKET NO. 030-06601)

This refers to your letter dated April 12, 1995, submitting your radioactive materials license renewal application dated April 10, 1995. The following information is needed to continue our review of your application:

1. Item 8 describes your training program for radiation workers and radiological control monitors. Please define the term "satisfactory completion" used therein and confirm that the training program for radiation workers will include in-house operating and emergency procedures and applicable license conditions and regulatory requirements. Also, please confirm that you will have the same training and qualifications recordkeeping requirements for your radiological control monitors as you will have for your radiation workers, and specify the requalification process for radiological control monitors if different from the 200 hours of classroom training every two years. Please provide a copy of sample written examinations for both radiation workers and radiological control monitors.
2. Item 9.4 describes your proposed ventilation system. Please provide the system's mass flow rate specifications and your procedures to ensure that the system's design specifications are maintained. As a minimum, you should commit to follow the manufacturer's use and maintenance instructions.
3. Item 9.5 refers to a ventilation exhaust's monitoring system. Please describe the system in terms of sensitivity and calibration frequency, and the air sampling technique used to ensure that the monitored air is representative of the exhaust air. Also, please specify action levels and the associated actions you will take as a result of detection of airborne radioactivity in the ventilation system's exhaust. Please note that the last sentence in page 9-1 does not take into consideration the contribution of internal exposures to the total effective dose equivalent limit specified in 10 CFR 20.1301 and, therefore, the proposed use of TLD's alone will not necessarily ensure compliance with § 20.1301.
4. Item 10.II.A.1.1, page 10-2, describes responsibilities of your receiving warehouse personnel, contamination action levels for incoming

packages, and notifications to be made in case of receiving packages with excessive contamination levels. Please provide the following:

- a. Training program, commensurate with the type of work involved, regarding operating and emergency procedures for receiving warehouse personnel. As a minimum, personnel should know how to recognize an incoming radioactive shipment, any special precautions associated with the handling of radioactive packages, who to contact, to keep materials secure from unauthorized access, what to do if encountering an incoming wet/crushed package, etc.
 - b. Radiation dose rate action levels and the associated actions you will take as a result of encountering an incoming package with excessive radiation levels (e.g., notifications, radiation surveys, assessment of radiation exposures received, etc).
 - c. Additional actions you will take if you receive a package with excessive contamination levels (e.g., personnel and area contamination surveys, assessment of uptakes of radioactive materials, etc.)
 - d. Confirm that action levels specified are based on "exclusive use" shipments, and that, for non-exclusive-use shipments, your action levels will be one order of magnitude smaller.
5. Item 10.II.B.2, page 10-4, addresses the use of self-reading pocket dosimeters. Please indicate the useful range of the pocket dosimeters, their calibration frequency, and the acceptable uncertainty in their calibration. You may consider information contained in §§ 34.33(a) and (c) of 10 CFR Part 34, "Radiation Safety Requirements for Radiographic Operations," as acceptable guidance.
 6. Items 10.II.B.3 and 10.II.C address gamma radiation and contamination surveys. Please describe your controls to ensure that you will not receive, possess and handle alpha-contaminated equipment at your facility. Otherwise please submit a radiation safety program addressing alpha contamination similar to the one submitted for beta-gamma contamination.
 7. Item 10.II.C.1.4 specifies a limit of 450 picocuries [1000 disintegrations per minute (dpm)] per 100 square centimeters for externally deposited radioactivity on the skin of an individual. This limit is higher than the 220 dpm per 100 square centimeters of removable contamination published in Table 2 to Regulatory Guide 8.23, which is considered an acceptable limit. Please provide justification, from an "As Low As Reasonably Achievable" (ALARA) point of view, for the higher limit or commit to a limit of 220 dpm per 100 square centimeters.
 8. Item 10.II.C.1.5 addresses the use of full face respirators or air supplied hoods. Please provide your respiratory protection program. The enclosed Regulatory Guide 8.15, "Acceptable Programs for Respiratory Protection," may be helpful to you in developing your program.

9. Item 10.II.C.3.3, page 10-6, states "Additional details of contamination control techniques in the facility are shown in Item 13 of the license application." The application ended with Item 11. Please provide the described information.
10. Please confirm that smoking, eating and drinking in contamination control areas will be prohibited.
11. Regarding Item 10.II.C.5.5, please confirm that records of surveys described in Section 10.II.C.5 will be retained indefinitely. Please review Item 10.II.C.5.4 and the associated recordkeeping requirement to ensure that it is your intent to comply accordingly.
12. Item 10.II.D.5.1 refers to a gamma spectroscopy system for assessing uptakes of cobalt-60. Please describe the system, explain how it will be available and operational at any time, and provide your basis for indicating that the system will detect 0.010 microcuries of cobalt-60.
13. Item 10.II.F indicates how all portable survey instruments will be calibrated. The described methodology is not acceptable for the calibration of contamination survey instruments in that such instruments must be calibrated in terms of dpm, not millirems per hour. If Newport News Shipbuilding can not provide the needed calibration service, please indicate which vendor will likely provide you such service.
14. Please confirm that you will maintain records to demonstrate that survey instrumentation was calibrated as approved by the NRC pursuant to this license renewal action.
15. Item 11 indicates that containers of radioactive waste will be transferred to a licensed disposal contractor for subsequent burial in approved locations. Please provide alternate disposal methods in the event that you are unable to dispose of radioactive wastes by transfer for burial. Also, please confirm that you are aware of the requirements contained in Appendix F to 10 CFR 20, which became effective on January 1, 1994, regarding transfers of waste for burial.
16. Item 11 also proposes to discharge cobalt-60 in air effluents to unrestricted areas. Pursuant to 10 CFR 20.1302(b), please demonstrate that your activities will not result in a member of the public receiving a total effective dose equivalent in excess of 100 millirems per year.
17. In addition, Item 11 proposes to discharge cobalt-60 liquid wastes in concentrations up to $3E-6$ microcuries per milliliter. If you intend to discharge liquid wastes into the sanitary sewerage system, this procedure may not be acceptable in that, with the revision of 10 CFR 20 which became effective on January 1, 1994, only readily soluble or readily dispersible biological materials may be released into the sanitary sewerage system. Mixed corrosion products do not meet the criteria for release into the sanitary sewerage system. However, you may release liquid wastes into the sanitary sewerage system provided that adequate surveys are performed, prior to release, to demonstrate

that you can not detect radioactivity in the waste to be released. This is acceptable, provided that you can demonstrate that your detection system has a minimum detectable activity of at least ten percent of the limit for sewerage release specified in Appendix B to 10 CFR 20. If you intend to release liquid wastes to other unrestricted areas, please justify, through measurements and/or calculations, that your activities will not result in a member of the public receiving a total effective dose equivalent in excess of 100 millirems per year. Another option you have is to solidify your liquid wastes.

Our review of your license renewal request will continue upon receipt of the above requested information. Please provide two copies of your reply and refer to Control Number 256401. If you wish, replies may be transmitted via electronic facsimile (FAX) to (404) 331-5559. You should then mail the original copy of any electronically transmitted documents.

In order to continue prompt review of your application, we request that you respond to this letter within 30 calendar days from the date of this letter.

If you have any questions, please call me at (404) 331-7880.

Sincerely,



Hector Bermudez
Nuclear Materials Licensing Section
Division of Radiation Safety
and Safeguards

Enclosure:
Regulatory Guide 8.15

SEND	OFC	RII:DRSS	RII:DRSS	RII:DRSS		
TO	NAME	HBermudez	JHenson	JHester		
PCR?	DATE	05/17/95	05/17/95	05/17/95	1/1/95	1/1/95
Yes	No	COPY?	Yes	No	Yes	No