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SEP 12 1985

Marion Steel Company
ATTN: R.G. Ogden
Electrical Engineer
912 Cheney Avenue
Marion, OH 43302

Re: Letter Dated June 10, 1985 To Amend NRC License Number 34-21123-01

Gentlemen:

In order to authorize your request to perform "service operations" on the gauges you possess, it will be necessary for you to address the following items:

SERVICE OPERATIONS

- a. Specify the types of services you wish to perform (e.g., installation, relocation, leak testing, initial radiation survey, etc.).
- b. Submit your step-by-step procedures for performing the requested services.
- c. Submit your instructions for locking source housings in the "store" or "off" position during mounting, servicing, or relocating the device.
- d. Describe the surveys to be performed (such as those around the housing) to be sure the device is in the "safe," "store," or "off" position, and during other specific maintenance and servicing operations when sources may not be shielded by the source holders.
- e. Describe your procedures for proper mounting or relocation.
- f. Submit procedures describing when the device can be safely unlocked and checked for proper operation after servicing is completed.
- g. Describe your procedures for final survey of the source head during "on" and "off" modes of operation following installation, etc., including leak testing. Include a description to show the locations of the radiation measurements and the kinds of records to be maintained of the results.

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LEAK TESTING

Please submit a description of your method of leak testing the gauge. If you will use a leak test kit, specify the name of the manufacturer and model number. If you desire to perform your own leak tests, you will need to provide a description of the following:

- a. The materials and procedures used for collecting leak test samples.
- b. The name of the manufacturer and model number of the measuring instrument used to analyze the leak test samples.
- c. Your procedures for calibration of the measuring instrument including a sample calculation showing how leak test results are converted to microcuries.

RADIATION DETECTION INSTRUMENTS

- a. Since you will be servicing your gauges, you must have a calibrated and operable survey meter. Paragraph 20.201(b) of 10 CFR Part 20 specified that you, as the licensee, must make such surveys as are necessary to evaluate the extent of radiation hazards that may be present and to comply with regulatory requirements. Please modify your procedures to ensure that you have available for use a calibrated, operable survey meter that can measure at least 1 through 200 milliroentgens per hour.
- b. In order to perform appropriate surveys, instruments must be operable and calibrated with an appropriate radiation source. Please verify that the instrument used will:
 1. Be calibrated so that the readings are $\pm 20\%$ of the actual values over the range of the instrument;
 2. Have a calibration chart or graph that shows the results of the calibration, the date of the last calibration, and the due date for the next calibration affixed to the survey meter; and
 3. Be calibrated at least annually and after servicing.

Your procedures should state that calibration records will be kept for a minimum of two years after each calibration and identify who will calibrate the instrument. If a person or firm outside your organization will perform the calibration, identify each person or firm by name and the NRC or Agreement State license number. If the person or firm is not a licensee, provide a copy of the procedures used for instrument calibration for our review.

PERSONNEL MONITORING

Section 20.202 of 10 CFR Part 20 specified that personnel monitoring equipment must be used by individuals in restricted areas who receive, or are likely to receive, a dose in excess of 25% of the dose specified in paragraph 20.101(a) of 10 CFR Part 20. The specified doses per calendar quarter are 1-1/4 rems to the whole body, head and trunk, active blood-forming organs, or gonads; 18-3/4 rems to the hands and forearms or feet and ankles; and 7-1/2 rems to the skin of the whole body. Individuals under 18 years of age are required to use personnel monitoring equipment if they receive, or are likely to receive, a dose in excess of 5% of the specified doses in paragraph 20.101(a).

Since you will be servicing the gauges yourself, it will be necessary for you to provide personnel monitoring devices to the individual(s) who will be performing the operations. Please specify the type of personnel monitoring devices supplied (film badges or thermoluminescent dosimeters) and the exchange frequency. Be advised that the recommended exchange frequency for film badges is 1 month and 3 months for thermoluminescent dosimeters (TLD's).

If you have any questions or require clarification on any of the information stated above, you may contact us at (312) 790-5625.

We will continue our review of your application upon receipt of this information. Please reply in duplicate, within 30 days, and refer to Control Number 79179.

Sincerely,

Original Signed By
Patricia J. Whiston
Materials Licensing Section

Enclosure: 10 CFR Part 20

RIN
Whiston/cm
09/11/85