



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 E. LAMAR BLVD
ARLINGTON TX 76011-4511

December 28, 2023

Curtis Nelson
Radiation Safety Officer
Solvay Chemicals, Inc.
P.O. Box 1167
Green River, WY 82935

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION

Dear Curtis Nelson:

The Nuclear Regulatory Commission (NRC) has completed the technical review of the renewal application dated July 27, 2023 for license number 49-19597-02, and additional information is needed. Please provide the response on a signed and dated letter, in company letterhead, within 15 days from receipt of this letter, and make reference to mail control number 636648.

1. Your license specifies that some nonroutine maintenance will be performed by you, the licensee. Accordingly, applicants wishing to perform nonroutine operations must provide the following information with their license application:
 - a. Describe the types of work, maintenance, cleaning, and/or repair that involve any of the following:
 - i. installation, relocation, or alignment of the gauge
 - ii. components, including electronics, related to the radiological safety of the gauge (e.g., the source, source holder, source drive mechanism, shutter, shutter control, or shielding)
 - iii. replacement and disposal of sealed sources
 - iv. removal of a gauge from service
 - v. a potential for any portion of the body to come into contact with the primary radiation beam
 - vi. any other activity during which personnel could receive radiation doses exceeding NRC limits
 - b. Identify who will perform nonroutine operations, and describe their training and experience. Acceptable training includes manufacturers' or distributors' courses for nonroutine operations or an equivalent.
 - c. Submit procedures for nonroutine operations. These procedures should ensure the following:
 - i. doses to personnel and members of the public are within regulatory limits and are kept as low as is reasonably achievable (ALARA) (e.g., use of shielded containers or shielding)
 - ii. the source is secured against unauthorized removal or access or is under constant surveillance
 - iii. appropriate labels and signs are used (Lock-out procedures are adequate to ensure that no individual or portion of an individual's body can enter the radiation beam.)

- iv. manufacturer's or distributor's instructions and recommendations are followed
 - v. replacement components, parts, or other materials (e.g., lubricants) other than those supplied, specified, or recommended by the manufacturer or distributor are evaluated to ensure that they do not degrade the engineering safety analysis performed and accepted as part of the SSD registration certificate
 - vi. the gauge, before being returned to routine use, is tested to verify that it functions as designed and source integrity is not compromised
- d. Confirm that individuals performing nonroutine operations on gauges will wear both whole body and extremity monitoring devices or perform a prospective evaluation demonstrating that unmonitored individuals performing nonroutine operations are not likely to receive a radiation dose in excess of the limits in 10 CFR 20.1502(a).
 - e. Confirm possession of at least one survey instrument that is appropriate for measuring the types of radiation and expected dose rates from the fixed gauge(s).
 - f. Describe steps to be taken to ensure that radiation levels in areas where nonroutine operations will take place do not exceed limits set in 10 CFR 20.1301(e.g., surveys, calculations).

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Thank you for your cooperation.

Sincerely,

Samantha Everett, Health Physicist
Materials Licensing Branch

Docket: 030-29284
License: 49-19597-02
Control: 636648