

**CONVERSATION RECORD**

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU Jim Weldy, RSO	DATE OF CONTACT 08/07/2015	TYPE OF CONVERSATION <input type="checkbox"/> E-MAIL <input type="checkbox"/> INCOMING	
E-MAIL ADDRESS jrweldy@dow.com	TELEPHONE NUMBER (989) 636-1440	<input checked="" type="checkbox"/> TELEPHONE <input type="checkbox"/> OUTGOING	
ORGANIZATION Dow Chemical Company	DOCKET NUMBER(S) 030-04783		
LICENSE NUMBER(S) 21-00265-06	CONTROL NUMBER(S) 587181		

**SUBJECT**  
Additional information needed after review of the licensee's June 16, 2015, amendment request.

**SUMMARY AND ACTION REQUIRED (IF ANY)**  
We have reviewed Dow Chemical's request for authorization of 0.5 microcurie of Ra-226. Dow Chemical currently holds a broad scope license issued by the NRC. However, the handling and use of unsealed quantities of Ra-226 is considered to be a special use activity that extends beyond the scope of typical, routine radioisotope use. Therefore, please submit the following additional information:

1. Provide a description of the types of experiments that will be conducted, including the maximum quantity that will be used at any one time.
2. It appears that users of the Ra-226 plan to open ampules containing the isotope and remove small aliquots to conduct experiments. Please describe this process in detail, and include all radiation safety equipment (e.g., fume hoods, glove boxes, types of radiation survey meters, protective clothing, etc.) that will be utilized to prevent the spread of contamination and accidental ingestion or inhalation of the isotope.
3. Describe specialized training that authorized users and their staff will be required to obtain before they are allowed to use the isotope.
4. Describe the criteria that the RSC will utilize to evaluate the training and experience of proposed authorized users.
5. Describe the locations where the material will be used and stored.
6. Describe procedures for control and security of the material.
7. Commit to only processing (including removing from the glass ampule) the isotope in an operating fume hood, or glove box. Describe minimum air flow that will be maintained and filtration that will be used to limit concentrations that will be released to the environment. Describe procedures for checking filters for saturation and change out.
8. Provide the make and model numbers of survey meters that will be available for authorized users. Describe the type of radiation detected, and calibration procedures and frequency.
9. Describe the area survey program (including types and frequency) that authorized users will implement

CONVERSATION RECORD (continued)

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SUMMARY AND ACTION REQUIRED (IF ANY) (Continued)

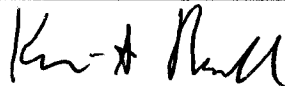
during the use of the isotope, and the types and frequency of surveys that will be conducted by the radiation safety staff as part of their routine audit program.

10. Submit modifications to your bioassay program that may be necessary to account for the use the isotope.
11. Describe procedures that will be followed for the safe and secure storage of radioactive waste held in the laboratories, and the waste that is held in long term storage pending final disposal.
12. Submit an evaluation of the impact that the material will have on the current decommissioning financial assurance that the NRC holds for Dow Chemical's broad scope license.

NAME OF PERSON DOCUMENTING CONVERSATION

Kevin Null

SIGNATURE



DATE OF SIGNATURE

08/07/2015