UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

DEC 26 2019

Kevin P. Smith
Radiation Safety Officer
Dow AgroSciences
9330 Zionsville Rd.
Indianapolis, IN 46268

Dear Mr. Smith:

Enclosed is Amendment No. 30 renewing your NRC Material License No. 13-26398-01 in accordance with your application dated June 28, 2019 (ML19182A028), with the exception of updating the licensee name as shown in the application, and of removing references to letters listed in Condition No. 24 to the license.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region III office at (630) 829-9887 so that we can provide appropriate corrections and answers.

As we discussed via phone on December 19, 2019, the licensee name may not be amended until the NRC has consented to the Transfer of Control, as described in letter dated December 9, 2019 (ML19343A576). As noted, NRC consent may not be granted until after the letter has been posted for 30 days at the NRC's website – http://www.nrc.gov/about-nrc/regulatory/adjudicatory/hearing-license-applications.html#transfer. The Transfer of Control consent request is being reviewed under NRC Mail Control No. 617192. Upon completion of that posting period, and receipt of licensee's responses to additional information as outlined below, the license will be updated to reflect the new name.

As noted, and discussed via phone on December 19, 2019, additional information is needed to update the license to reflect the renewal application and to remove letters received prior to the renewal application. Accordingly, please submit the following items, to complete our review:

LICENSEE NAME AND TRANSFER OF CONTROL CONSENT REQUEST:

1. The licensee name currently listed on the license is Dow AgroSciences. However, the name listed on the application is Corteva Agriscience Dow AgroSciences LLC. As discussed, please confirm the name to be listed on the license.

OVERSIGHT OF THE LICENSEE'S PROGRAM:

2. The application requested possession limits of 9.8 and 4 curies of carbon-14 and tritium, respectively. However, using the sum of the fractions rule, a DFP would be required for the listed tritium and carbon-14 possession limits, while no such DFP has been submitted. As discussed, we have reduced the tritium possession limit to 1 curie, in which case your existing $1.125M certification of Financial Assurance is adequate. Please provide a written confirmation of the reduced tritium possession limit, in your response to this letter.

PURPOSE OF RADIOACTIVE MATERIALS USE AND POSSESSION:

3. The application requested a purpose of use of licensed material to include "distribution" to specific licensees. As discussed, we understand that such distribution is limited to transfers allowed under the license and Department of Transportation requirements and includes no exempt distribution transfers, etc. The license has been updated accordingly; please confirm the licensee's limited transfer program, in your response to this letter.

FACILITIES DESCRIPTIONS AND DIAGRAMS:

4. The application contained site maps for the Dow AgroSciences locations in Indianapolis, Indiana and Newark, Delaware. However, it lacked sample facility diagrams for overall building layouts, waste holding and processing areas, medium level iodine-125 areas of use, medium level carbon-14 radiosynthesis labs, and shipping and receiving areas. As discussed, please provide updated facility diagrams or other descriptions for the referenced areas. Upon receipt of acceptable diagrams, references to the previously submitted application and letters dated February 25, 2009, April 28, 2010, November 13, 2012, and January 24, 2019, may be removed from Condition No. 24 to the license.

OVERSIGHT OF THE LICENSEE'S PROGRAM:

5. The application was unclear as to the process by which the Radiation Safety Committee would update procedures and program reviews, including criteria used for making those changes and how the changes would be documented. As discussed, please clarify this process in your response to this letter.

6. The application lacked a copy of a Memorandum of Understanding and Delegation of Authority (MOU/DOA) showing the RSO's acknowledgement and acceptance of assigned duties. As discussed, please provide an updated MOU/DOA in your response to this letter.

7. The application was unclear in requesting flexibility to update the training program, audit program, instrument specifications, procurement and materials control procedures, occupational dose program, and safe use procedures, etc. As discussed, in your response to this letter, please provide a description of the RSC review process and a formal request for flexibility to revise the program as needed.

8. The application was unclear as to how executive management would oversee the program. As discussed, please clarify how oversight will be accomplished, in your response to this letter.

RADIATION SAFETY PROGRAM:

9. The application was unclear as to calibration of instruments being done by a licensed entity. As discussed, please clarify the same by confirming the following statement, in your response to this letter:

   "*Instruments will be calibrated by a vendor licensed by the NRC or an Agreement State to perform instrument calibrations.*"

RADIATION SAFETY PROGRAM (continued):

10. The application was unclear as to the commitments to ensuring accountability of licensed material and complying with National Source Tracking System requirements, if any. As discussed, please clarify the same by confirming the following statements, in response to this letter:

    "*We will develop, implement and maintain procedures for ensuring accountability of licensed materials at all times.*"

    "*We will comply with the National Source Tracking System (NSTS) reporting requirement as described in 10 CFR 20.2207.*"

11. The application was unclear as to the licensee's commitments to maintaining its analysis for individuals not monitored, as part of the occupational dose program. As discussed, please clarify the same by confirming the following statements, in response to this letter:

    "*We will maintain, for inspection by the NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of the limits in 10 CFR 20.1502.*"

Please provide additional information within 30 days of this letter (prior to January 25, 2019). Please provide your response as a signed and dated letter, directed to my attention and referencing NRC Mail Control No. 617192. You may submit your response via U.S. mail, via facsimile to 630-515-1078, or as a pdf file attached to an email message to sara.forster@nrc.gov.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the General Statement of Policy and Procedure for NRC Enforcement Actions. Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which NRC expects of its licensees.

The NRC's Safety Culture Policy Statement became effective in June 2011. While a policy statement and not a regulation, it sets forth the agency's *expectations* for individuals and organizations to establish and maintain a positive safety culture. You can access the policy statement *and supporting material that may benefit your organization on NRC's safety* culture Web site at http://www.nrc.gov/about-nrc/regulatory/enforcement/safety-culture.html. We strongly encourage you to review this material and adapt it to your particular needs in order to develop and maintain a positive safety culture as you engage in NRC-regulated activities.

In accordance with Title 10 of the *Code of Federal Regulations* (CFR) Section 2.390, a copy of this letter and its enclosures 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), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

Sincerely,

Sara A. Forster

Sara A. Forster, M.S.
Health Physicist
Materials Licensing Branch

License No. 13-26398-01
Docket No. 030-32714

Enclosure: Amendment No. 30