



CONVERSATION RECORD

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|---|--|---|--|--|
| <b>NAME OF PERSON(S)/TITLE CONTACTED OR IN CONTACT WITH YOU</b><br>Kelly Wegener-Gave<br>Radiation Safety Officer   |  | <b>DATE OF CONTACT</b><br>04/22/2019      | <b>TYPE OF CONVERSATION</b><br><input checked="" type="checkbox"/> E-MAIL<br><input type="checkbox"/> TELEPHONE<br><input type="checkbox"/> INCOMING<br><input checked="" type="checkbox"/> OUTGOING |  |
| <b>E-MAIL ADDRESS</b><br>kelly.wegener@dow.com  |  | <b>TELEPHONE NUMBER</b><br>(989) 496-1386 |  |  |
| <b>ORGANIZATION</b><br>The Dow Chemical Company, 1803 Bldg.,<br>Midland, MI 48674   |  | <b>DOCKET NUMBER(S)</b><br>030-04783      |  |  |
| <b>LICENSE NAME AND NUMBER(S)</b><br>21-00265-06  |  | <b>MAIL CONTROL NUMBER(S)</b><br>611397   |  |  |
| <b>SUBJECT</b><br>Additional Information Request concerning request to remove facilities authorized for use under the Dow Chemical Company, NRC License No. 21-00265-06   |  |   |  |  |
| <b>SUMMARY AND ACTION REQUIRED (IF ANY)</b><br>This record concerns your January 23, 2019 request to remove areas of use including buildings authorized for the use of sealed sources or other materials under Subitem Nos. 10.A. and 10.B. to your radioactive materials license, listed above, and to remove the location of use listed under Subitem No. 10.C. to that license (NRC Accession No. ML19025A243), including to transfer 1 sealed source containing nickel-63, 3 sealed sources containing tritium, and 8 sealed sources containing cesium-137 to new license applicant DDP Specialty Electronic Materials; 2 sealed sources containing nickel-63 and 21 sealed sources containing cesium-137 to Dow AgroSciences. We have noted that a total of 36 buildings or facilities to be released are listed in the application, including one building containing nickel-63 sources not listed as a transferred building.<br><br>We have reviewed the submitted application and have noted that additional information is needed to complete the review. Please see attached sheets for additional information needed concerning:<br><br><ul style="list-style-type: none"> <li>- Locations of Use - Confirmation that the buildings to be removed and associated with Condition No. 10.C. to the license are limited to Larkin Lab and/or Larkin 200, being transferred to DDP Specialty Electronics Materials</li> <li>- Campus Maps - for each contiguous location referenced in Condition Nos. 10.A. and 10.B. to the license, depicted by highlighting all buildings under the licensee's exclusive control, or lines outlining such areas</li> <li>- Decommissioning information - For buildings and gauges to be released, area maps, leak tests, and confirmatory statements as applicable</li> </ul> |  |   |  |  |
| <b>NAME OF PERSON DOCUMENTING CONVERSATION</b><br>Sara A. Forster, M.S., Health Physicist, Materials Licensing Branch, DNMS, RIII office, sara.forster@nrc.gov  |  |   |  |  |
| <b>SIGNATURE</b><br>  |  |   | <b>DATE OF SIGNATURE</b><br>04/22/2019   |  |

CONVERSATION RECORD (continued)

LICENSE NAME AND NUMBER(S)

21-00265-06

MAIL CONTROL NUMBER(S)

611397

SUMMARY AND ACTION REQUIRED (IF ANY) (Continued)

**ADDITIONAL INFORMATION NEEDED CONCERNING LOCATIONS OF USE:**

1. Your letter transmitting the application indicated that one address - 1801 Larkin Center Dr. - should be removed from the licensee's license and added to a new license - application pending for DDP Specialty Electronic Materials (DDP SEM). Meanwhile, the application lists two apparently applicable buildings or facilities - Larkin Lab and Larkin 200 - that are being transferred to DDP SEM and appear to be associated with the Larkin Center Dr. location of use listed in Condition No. 10.C.

**Please confirm the buildings that are associated with the Larkin Center Dr. location of use, which is being removed from the license, and has been confirmed as never having licensed material.**

2. Other than the Larkin Lab and Larkin 200 buildings, which appear to be associated with the Larkin Center Dr. location of use being removed from the license, your letter contained a list of 33 or 34 buildings or facilities to be removed from the contiguous geographic locations of use designated by Condition No. 10.A. (campus of the Dow Chemical Company) and 10.B. (3901 Saginaw Rd.). However, your letter contained no diagram showing which contiguous, licensee-controlled geographic locations - either designated by highlighted individual buildings or facilities or a map showing clear boundary lines for the licensee-owned/operated/controlled business campus or park - would remain under the exclusive control of the licensee, following transfer of the designated buildings. This information is needed to complete our review.

Accordingly, **please provide a facility diagram or area map** for each contiguous geographic location of use to be authorized under the license, including those on either the main business campus or the 3901 S Saginaw Rd. locations of use listed in Subitem Nos. 10.A. and 10.B. of your license. The maps should be drawn to scale and clearly indicate either (a) individual buildings and facilities to be authorized for use or (b) boundary lines for the contiguous licensee-controlled geographic areas to be authorized for radioactive materials use, under the license. If the submitted map also shows areas under the control of another company, NRC licensee, or applicant, please include clear lines delineating the boundary of the applicant-controlled areas.

In addition, for separate areas where material is used or stored, **please clarify how access is controlled.**

*For additional guidance, please refer to section 8.3, "Item 3: Purpose(s) for Which Licensed Material Will be Used," on pp. 8-3 to 8-5 of NUREG 1556, Volume 11, revision 1, "Program-Specific Guidance about Licenses of Broad Scope," published February 2017.*

3. Other than the Larkin Center Dr. location of use, your letter appears to contain a notification of plans for the licensee - the Dow Chemical Company to permanently cease principal activities at either 33 or 34 separate buildings or facilities, pursuant to Title 10 of the *Code of Federal Regulations* (CFR) Section 30.36(c). Although leak tests for some sealed sources from some of those buildings were contained with your request, not all NRC Form 314 materials disposition information was found in your request.

**CONVERSATION RECORD (continued)**

LICENSE NAME AND NUMBER(S)

21-00265-06

MAIL CONTROL NUMBER(S)

611397

SUMMARY AND ACTION REQUIRED (IF ANY) (Continued)

**ADDITIONAL INFORMATION NEEDED CONCERNING LOCATIONS OF USE:**

3. (continued)

**For each of the 33 or 34 (if including Bldg. 1702) separate buildings or facilities to be removed from the licensee's license, and transferred to the proposed new licenses for DDP SEM or Dow Agrosociences LLC (Dow Agrosociences), please provide the following, as applicable:**

- (a.i.) **Confirmation that no radioactive materials have ever been possessed or used** by the licensee at the separate building or facility, under the licensee's license; **OR**
- (a.ii) **A history of use at the separate building or facility**, under the licensee's license, including
  - Form of material (e.g. - sealed sources only, unsealed materials, etc.)
  - Radionuclide(s), maximum total possession limit(s), typical and maximum per-source possession limit(s)
  - Final disposition information for sources used at this building or facility (e.g. - transfer to DDP SEM, transfer to Dow Agrosociences, return to manufacturer, transfer to radioactive waste broker or contractor, decay-in-storage directly by the licensee, sewerage directly by the licensee, etc.)
  - Confirmation of no leaking sealed sources and no spill history, or description of such history
  - Leak test results (if not contained in the initial application) for all sealed sources removed from the referenced facilities
  - Final area surveys (as applicable) results for areas where unsealed materials were used or stored including confirmation that the survey confirms the absence of licensed material or that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA; **AND**
- (b) **Confirmation that all activities authorized by this license for the specified building have ceased or will cease** (e.g. as of a specified date or as of the date those facilities are transferred to another license); **AND**
- (c) If not clear from other diagrams or campus maps provided, **a facility diagram or map showing the building or facility locations** (or bounded, contiguous geographic areas) as they are requested to be removed from the licensee's license, and for which release certifications provided by the licensee apply.

*For additional guidance, please refer to section 11, "Termination of Activities," on pp. 11-1 to 11-3 of NUREG 1556, Volume 11, revision 1, including NRC Form 314, "Certificate of Disposition of Materials," and pp. C-1 to C-2 of Appendix C, "Notification Checklist," (Checklists C.1 and C.2.) to NUREG 1757, Volume 1, revision 2, "Decommissioning Process for Materials Licensees," published September 2006.*

## Forster, Sara

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**From:** Forster, Sara  
**Sent:** Monday, April 22, 2019 10:53 AM  
**To:** kelly.wegener@dow.com  
**Subject:** Additional Information Request re the Dow Chemical Company amendment request, CN611397  
**Attachments:** 03610.611397.21-00265-06 signed RFAI via NRC 699.pdf

Dear Ms. Wegener-Gave:

We have reviewed your January 23, 2019 amendment request (ML19025A243) for the entity referenced in the subject line of this message. Please note that additional information is needed to complete our review. Accordingly, please provide responses to the items noted below, to complete the review of your request:

- Locations of Use to be Removed from the license - Confirmation that the buildings to be removed and associated with Condition No. 10.C. to the license are limited to Larkin Lab and/or Larkin 200, being transferred to DDP Specialty Electronics Materials. See attached document for additional details.
- Campus Maps for all Locations of Use to be Retained on the license - for each contiguous location referenced in Condition Nos. 10.A. and 10.B. to the license, depicted by highlighting all buildings under the licensee's exclusive control, or lines outlining such areas. See attached document for additional details.
- Decommissioning information for all separate buildings or facilities or materials to be removed from the license - For buildings and gauges to be released, area maps, leak tests, and confirmatory statements as applicable. See attached document for additional details.

In order to amend your license (and to facilitate issuing new licenses to applicants – DDP Specialty Electronic Materials and Dow Agrosiences – referenced in your application), please submit requested information within 14 days (on or before May 6, 2019). If you are unable to respond by then, please let us know as soon as possible when you will be able to provide a response. Additional guidance may be found in NUREG 1556, Vol. 11, rev. 1, "Program-Specific Guidance about Licenses of Broad Scope;" NUREG 1757, Vol. 1, rev. 2, "Decommissioning Process for Materials Licensee;" and NRC Form 314, "Certificate of Disposition of Materials," which may be found, respectively, at:

<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/v11/>;  
<https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1757/v1/>; and  
<https://www.nrc.gov/reading-rm/doc-collections/forms/nrc314.pdf>.

Please note that, until our office receives information facilitating the transfer of radioactive materials and facilities from your license to the new license applicants – from both you and the other applicants – your license cannot be amended as requested.

Submission of your response as a pdf file attached to an email or via facsimile will allow for the quickest processing. Any response must be submitted under a signed and dated cover letter. Do not hesitate to call me with any questions you may have, or if you will need additional time to complete your response.

Sincerely yours,

Sara A. Forster, Health Physicist Licensing Reviewer  
U.S. Nuclear Regulatory Commission - Region III  
Division of Nuclear Materials Safety  
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