



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

April 13, 2012

Docket Nos. 030-38526
030-38527

Control Nos. 577140
577142

Marc Vada Hill
Facilities Maintenance and Radiation Safety Officer
Legacy Supply Chain Services
500 Ships Landing Way
New Castle, DE 19720

**SUBJECT: LEGACY SUPPLY CHAIN SERVICES, REQUEST FOR ADDITIONAL
INFORMATION CONCERNING APPLICATIONS FOR NEW LICENSES,
CONTROL NOS. 577140 AND 577142**

Dear Mr. Vada Hill:

This is in reference to your letter dated March 8, 2012 requesting new Nuclear Regulatory Commission Licenses. In order to continue our review, we need the following additional information:

1. Your application should have been signed by a management representative rather than the Radiation Safety Officer. Please submit a letter signed by a management representative indicating that management has reviewed the application and concurs in the statements and representations contained therein. Note also that a management representative should sign all future correspondence that requests a change in your license.
2. In accordance with Section 8.5.1 of NUREG-1556, "Consolidated Guidance About Materials Licenses", Volume 12, "Program-Specific Guidance About Possession License for Manufacturing and Distribution" (NUREG-1556, Vol. 12), provide the total quantity of nickel-63 as sealed sources that you want to be authorized to possess at your facility. Although the individual sources do not exceed 15 millicuries, the total number of sources and/or activity must be specified. For example, if you expect to possess only up to 100 sources and/or devices containing sources, the total possession activity would be 1500 millicuries. Please note that the total activity must include all nickel-63 on site, in sources and/or devices in storage, packaged for shipment, received from customers and any sources or contaminated materials in waste. (NUREG-1556, Volume 12 is available electronically at <http://www.nrc.gov/reading-rm/doc-collections/nureqs/staff/sr1556/v12.>)
3. In accordance with Section 8.6 of NUREG-1556, Volume 12, describe any type of services that you intend to provide with/for the sources, such as leak-testing, transfer to/from customers; service and repair of the ECD devices; return from customers for disposal, etc. some of these activities may require you also to be authorized to possess small amounts of unsealed nickel-63; if so, please revise your response to Section 8.5.1.

4. In accordance with Section 8.7.2 of NUREG-1556, Volume 12, provide a brief resume of the training and experience of each person who will directly supervise the use of material, who will use material without supervision, or who will have responsibility for radiological safety. The resume should include the type (on-the-job or formal course work), location, and duration of the training. Training should cover (a) principles and practices of radiation protection, (b) radioactivity measurements, standardization, and monitoring techniques and instruments, (c) mathematics and calculations basic to the use and measurement of radioactivity, and (d) biological effects of radiation. The description of the use of licensed materials should include the specific isotopes handled, the maximum quantities of materials handled, where the experience was gained, the duration of experience, and the type of use.
5. In accordance with Section 8.8 of NUREG-1556, Volume 12, describe your radiation safety training program for radiation workers and ancillary personnel (maintenance, security, etc.). The description should include the topics covered, groups of workers to be trained, assessment of training, the qualifications of the instructors for the training, and the method and frequency of the training. The training program must assure that personnel are instructed before assuming duties with, or in the vicinity of, licensed materials and specify a frequency for periodic refresher training. Appendix H of NUREG-1556, Volume 12 addresses radiation safety training topics and may be helpful in developing your response.
6. In accordance with Section 8.9 of NUREG-1556, Volume 12, describe the facilities and equipment to be made available at each location where radioactive materials will be possessed and/or used. A diagram should be submitted showing locations of materials and items related to radiation safety; and dimensions should be specified.
7. In accordance with Section 8.10.1 of NUREG-1556, Volume 12, provide a description of your audit program that addresses the criteria listed in that section. Please note that and 10 CFR 20.1101(c) also requires that a review of your radiation safety program be performed annually, and documentation of the review is required.
8. In accordance with Section 8.10.2 of NUREG-1556, Volume 12, provide a description of any instrumentation that you will use to perform required surveys (such as contamination surveys or leak tests), and a statement describing the criteria for calibration and instrumentation specifications, as described in that section.
9. In accordance with Section 8.10.3 of NUREG-1556, Volume 12, confirm that you will perform a physical inventory of all sealed sources at intervals not to exceed 6 months, to account for all sealed sources and devices received and possessed under the license.
10. In accordance with Section 8.10.4 of NUREG-1556, Volume 12, confirm if you will provide dosimetry to persons who will handle radioactive materials in order to determine their occupational dose, or state if you used a prospective method to determine their likely occupational dose if dosimetry is not required.
11. In accordance with Section 8.10.6 of NUREG-1556, Volume 12, confirm that operating and emergency procedures will be developed and documented prior to receipt of radioactive materials; that operating and emergency procedures will be implemented and

maintained; and that operating and emergency procedures will be revised only if (1) any changes are reviewed and approved by licensee management and the RSO in writing, (2) staff is provided training in the revisions prior to implementation, (3) the changes are in compliance with NRC regulations and license requirements, and (4) the changes do not degrade the effectiveness of the radiation safety program.

12. In accordance with Section 8.10.7 of NUREG-1556, Volume 12, describe your survey program. In addition, provide your leak test procedures. Appendix Q of NUREG-1556, Volume 12 contains model leak test procedures and may be helpful to you in developing your response. If you elect to have another person perform the leak test, please submit the name of the person and the applicable U.S. Nuclear Regulatory Commission or Agreement State license number.
13. Your letter states that any radioactive waste generated at your facility will be sent to Agilent Technologies Little Falls ECD Lab in Wilmington, Delaware. However, this is not an approved method of waste disposal, because Agilent Technologies (Agilent) is not a waste broker or waste disposal facility. Approved methods for waste disposal are discussed in Section 8.11 of NUREG-1556, Volume 12 and in 10 CFR Part 20, Subpart K. In accordance with Section 8.11, provide your procedures for waste collection and storage at your site, and disposal by an authorized method. If there is a close business relationship between Agilent and Legacy Supply Chain Services, you may request alternate disposal method pursuant to 10 CFR 20.2002, by providing information to the NRC for our review that describes the business relationship and why the waste generated by your business should be transferred to Agilent. This information should also include documentation from Agilent that agrees to receive such waste materials. In addition, Agilent would also be required to submit a request to amend their license to receive such waste materials from you.
14. Please contact me by telephone or email to set up a date for a pre-licensing visit. This is a requirement for all new license applicants, and the license will not be issued until this visit is completed, and all information is received and approved. I can be reached at (610) 337-5040 or Elizabeth.ullrich@nrc.gov.

Current NRC regulations and guidance are included on the NRC's website at www.nrc.gov; select **Nuclear Materials; Med, Ind, & Academic Uses**; then **Licensee Toolkits, see our toolkit index page**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays).

We will continue our review upon receipt of this information. Please reply to my attention at the Region I Office and refer to Mail Control Nos. 577140, and 577142. If you have any technical questions regarding this deficiency letter, please call me at (610) 337-5040.

M. Vada Hill

4

If we do not receive a reply from you within 30 calendar days from the date of this letter, we will assume that you do not wish to pursue your application.

Sincerely,

Original signed by Todd J. Jackson, CHP for

Betsy Ullrich
Senior Health Physicist
Commercial and R&D Branch
Division of Nuclear Materials Safety

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