



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005

February 20, 2007

U.S. Department of Commerce  
NOAA, Southwest Fisheries Science Center  
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Deputy Science Director  
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La Jolla, CA 92037

**SUBJECT: NOTIFICATION OF CESSATION OF LICENSED ACTIVITIES**

The U.S. Nuclear Regulatory Commission (NRC) received your letter dated January 11, 2007, in which you informed the NRC of your intent to cease licensed activities and terminate your Radioactive Materials License No. 04-29022-01, Docket No. 030-31988. The NRC has specific requirements as specified in 10 CFR 30.36 for decommissioning facilities and subsequent termination of license. The information outlined below may be helpful in understanding these requirements. NRC's decommissioning guidance can be found in NUREG-1757, Volume 1, "Consolidated NMSS Decommissioning Guidance," which is available on the NRC website at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1757/>.

Following the guidance in NUREG-1757, your license may be categorized as Group 2, based on the fact that you used unsealed byproduct material with a half life greater than 120 days. Licensees identified as Group 2 in NUREG-1757, Volume 1, did not have releases into the environments in excess of 10 CFR Part 20 limits and did not activate adjacent materials. A Group 2 licensee should be able to demonstrate that the facility meets the provisions of 10 CFR 20.1402, "Radiological Criteria for Unrestricted Use," by following the screening approach dose analysis described in NUREG-1757, Volume 1. If you meet Group 2 criteria, then you should:

1. Determine the extent of contamination at your facility;
2. Remove residual radioactive material to levels that would permit release of the facility;
3. Dispose of the licensed material in accordance with NRC requirements, usually by returning sealed sources to the manufacturer or disposing of licensed material as outlined in NRC regulations;
4. For all sealed sources, including sources no longer in the licensee's possession, provide to the NRC, the results from the most recent leak tests;
5. Transfer the decommissioning records discussed in 10 CFR 30.35, 30.36, and 30.51 and 40.36, 40.42, and 40.61, or 70.25, 70.38, 72.30, and 72.80, as appropriate, or affirm that as the licensee, you are not required to retain or transfer those records.

6. Determine the radiological status of the facility and perform further remediation as necessary, to meet the NRC's screening criteria for unrestricted use. Refer to Enclosure 3 for a description of the surveys that should be performed for licensees meeting the criteria discussed above.
7. Submit a Final Status Survey Report (FSSR), or demonstrate that the facility, or portion of the facility, meets NRC criteria for unrestricted use by using the dose screening methodology described in NUREG-1757, Volume 1. Please address embedded or buried piping in your survey report.
8. Submit NRC Form 314 "Certificate of Disposition of Materials" to NRC Region IV office. Written confirmation from the recipient listed on NRC Form 314 that the material has been transferred to them should be attached to the Form 314.
9. Please note that if leak test results indicate a presence of 0.005 microcuries or more of removable contamination, you must file a report with NRC in accordance with 10 CFR 30.50(b)(2) and your license conditions.

If you meet any of the following conditions, you will be required to submit a Decommissioning Plan to NRC for review and approval prior to commencing decommissioning operations.

1. Although you could meet the screening criteria and have prerequisite expertise, equipment and facilities to remediate your facilities, you have not incorporated remediation procedures into your license. A license amendment is necessary to authorize the activities for decommissioning, and as such, you will need to submit a Decommissioning Plan.
2. Your facility has residual radiological contamination present in building surfaces and soils, but you can not meet, or choose not to use screening criteria, and the ground water is not contaminated. A site Decommissioning Plan is required and must characterize the location and extent of radiological contamination, land use, exposure pathways and critical group for the dose analysis.
3. Your facility has residual radiological contamination present in building surfaces and soils, and the ground water. You are able to demonstrate that residual radioactive material may remain at the site but within levels specified in NRC criteria for unrestricted use by applying site-specific criteria in a comprehensive dose analysis. A site Decommissioning Plan is required and must characterize the location and extent of radiological contamination, land use, exposure pathways and critical group for the dose analysis.

10 CFR 30.36(g)(1) describes several cases when submission of a Decommissioning Plan is required, such as when:

1. Procedures would involve techniques not applied routinely during cleanup or maintenance operations;
2. Workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;

3. Procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or
4. Procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

The National Environmental Policy Act (NEPA) of 1969 requires Federal Agencies, as part of their decision making process, to consider the environmental impacts of actions under their jurisdiction. NRC requirements which implement NEPA are provided in 10 CFR Part 51. If a categorical exclusion does not apply, then the NRC typically prepares an Environmental Assessment (EA), which is a concise, publicly available document that provides sufficient evidence and analysis for determining whether to prepare and Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI). The objective of the proposed action is to ensure that the decommissioning of the facility meets the license termination criteria in 10 CFR Part 20, Subpart E. Some of the information required to support the EA includes a brief summary of the facility location and surrounding areas, as well as a brief summary of the proposed decommissioning activities. The EA describes the potential impacts such as construction, noise, hazardous and radioactive emissions, doses to the public from transporting radioactive material to disposal sites, and land use and aesthetic impacts from the decommissioning activities.

When you submit your termination request and final decommissioning survey documentation, please identify the license and docket numbers specified below on your submittal. If you have questions or require clarification on any of the information discussed, please contact Rachel Browder at (817) 276-6552.

Sincerely,

**/RA/**

Roberto J. Torres, Senior Health Physicist  
Nuclear Materials Licensing Branch

Docket No.: 030-31988  
License No.: 04-29022-01

Enclosures:

1. NRC Form 314
2. Information That Should Be Submitted to NRC Staff  
for Decommissioning and Termination of Licensed Facilities
3. Survey Information to Support License Termination

NRC Form 314 "Certificate of Disposition of Materials"

NRC Form 314 can be found at:

<http://www.nrc.gov/reading-rm/doc-collections/forms/nrc314.pdf>

INFORMATION THAT SHOULD BE SUBMITTED TO THE NRC STAFF FOR  
DECOMMISSIONING AND TERMINATION OF LICENSED FACILITIES

The following information is needed from licensees who request authorization from the NRC for the release of a room, building or outdoor area for unrestricted use:

- 1) A list of the radionuclides that were actually used at the site. To the extent possible (and reasonable), the quantities and dates of use should also be provided.
- 2) The physical form of each radionuclide, i.e., sealed or unsealed form.
- 3) Information regarding major radiological spills of any licensed material such as the location of the spill(s) and pertinent radiological information about the spill(s). (Major spills for the purpose of this document means a spill that resulted in off-site contamination or any other spill where more than minimal decontamination effort is required, e.g., spills requiring assistance in cleanup and monitoring from persons other than the user.)
- 4) Information on any leaking sealed source used or stored at the site being released, including radionuclide, amount of leakage, contamination of other areas or personnel, description of cleanup, and disposition of the source. If no sources were determined to be leaking at the facility, the licensee should state this fact.
- 5) The results of the licensee's final surveys as required by 10 CFR Parts 30.35(j)(2), 40.42(j)(2), 70.38(j)(2), and 72.54(l)(2). This includes submitting data in the following units: gamma radiation in units of mSv/hr ( $\mu$ R/hr) at one meter from surfaces, radioactivity in units of MBq/100cm<sup>2</sup> (dpm/100cm<sup>2</sup>) (removable and fixed) for surfaces, MBq/ml (mCi/ml) for water, and Bq/g (pCi/g) for soils and concrete.
- 6) The survey instrumentation used for the final survey along with the certification that each instrument has been properly calibrated and tested and the minimum detectable activity (MDA) for each instrument. This information is needed for instruments used for measuring exposure rates and for those used for analysis of wipes, soil and water samples, etc.
- 7) Maps and/or drawings which clearly indicate the locations where wipes and fixed measurements were taken. If contaminated drain lines (or other buried and inaccessible pipes) are an issue, blueprints or drawings should be included that show the locations of the drain lines, including where they originate and end.
- 8) If other than minimal contamination efforts are necessary, both the before and after decontamination survey data should be provided as part of the final survey report, including the locations of these areas.
- 9) The release criteria used as a basis for demonstrating the site can be released for unrestricted use.
- 10) If the licensee intends to leave certain portions of the site contaminated in excess of the release guidelines, a risk assessment of the potential dose consequences.
- 11) The disposition of radioactive waste resulting from any remediation efforts.

## SURVEY INFORMATION TO SUPPORT LICENSE TERMINATION

In performing the decommissioning of its facility the licensee should first identify any areas in the facility that were involved in licensed material use by reviewing facility records and conducting a survey of the licensed material use area. This survey should be similar to the routine contamination surveys conducted under the licensee's radiological safety plan. The licensee should then remediate all surfaces in the areas at the facility that were involved in licensed material use or storage and dispose of all radioactive material and waste as discussed in the NRC regulations at 10 CFR 20 Subpart K.

If the licensee elects to demonstrate that its facility is suitable for unrestricted use by conducting a Final Status Survey, the licensee should design the survey so as to be of sufficient scope and quality to make this demonstration. In preparing for the Final Status Survey, the licensee should establish a method to identify individual measurement/sampling points, such as establishing reference grids on each surface in the indoor area that was involved in licensed material. At a minimum, the licensee's termination survey should consist of:

- 1) 100% scanning of all surfaces in the area at the facility where licensed material was used or stored using an appropriate radiation detection instrument (including scan sensitivity);
- 2) evaluations for total and removable radioactive material at each area exhibiting elevated radiation levels or at a frequency of one wipe comprising 100 cm<sup>2</sup> per grid; and
- 3) evaluations of radiation levels at one meter above surfaces.

Particular attention should be afforded any drains, air vents or other fixtures or equipment that may have become contaminated during licensed material use. This is especially significant in situations where renovations have occurred and potentially contaminated areas may be inaccessible under current conditions.

The information that should be submitted to the NRC to support the final status survey should consist of:

- 1) a brief description of the remediation activities undertaken by the licensee;
- 2) a detailed drawing of the licensed material use areas indicating the sampling locations;
- 3) a table showing the results of the radiation levels and removable contamination surveys keyed to the detailed drawing (organized by survey unit);
- 4) the training and qualifications of the individual(s) performing the decontamination and surveys; and
- 5) a description of the type of equipment used by the licensee to evaluate the wipes and perform the surveys. This description should include all information required to determine the appropriateness of the equipment for determining the radiological status of the facility such as last calibration date, type of radiations detected, sensitivity of detection, efficiency, etc.