

[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[Docket No. 030-05976]

**US ENVIRONMENTAL PROTECTION AGENCY'S WESTERN ECOLOGY DIVISION,
CORVALLIS AND NEWPORT FACILITIES, OREGON: ISSUANCE OF ENVIRONMENTAL
ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT FOR LICENSE AMENDMENT**

AGENCY: Nuclear Regulatory Commission.

ACTION: Issuance of Environmental Assessment and Finding of No Significant Impact for License Amendment.

FOR FURTHER INFORMATION CONTACT: D. Blair Spitzberg, Ph.D., Chief, Fuel Cycle and Decommissioning Branch, Division of Nuclear Materials Safety, Region IV, U.S. Nuclear Regulatory Commission, 611 Ryan Plaza Drive, Suite 400, Arlington, TX 76011. Telephone: (817) 860-8100; email: *dbb@nrc.gov*.

SUPPLEMENTARY INFORMATION:

I. Introduction

The Nuclear Regulatory Commission (NRC) is considering issuance of an amendment to Material License No. 36-12343-02 issued to the United States Environmental Protection Agency, Western Ecology Division (EPA or the licensee). This license pertains to the following three EPA facilities located in Oregon: (1) Corvallis Environmental Research Laboratory; (2) Willamette Research Station (also in Corvallis); and (3) the Pacific Coastal Ecology Branch facility in Newport. Granting the amendment request would authorize the release of these facilities for unrestricted use, and would terminate the license as requested. In accordance with conditions in its license, the EPA was authorized to use radioactive material at its three facilities to conduct tracer studies involving marine organisms and plants (excluding animal studies); perform sample analysis; conduct tests for soil moisture; and for instrument calibration.

On November 30, 2004 (as supplemented by letter dated December 27, 2005), EPA requested that NRC release the three facilities for unrestricted use and to terminate the license. The licensee conducted radiological surveys of the subject facilities and concluded that the license termination criteria specified in Subpart E to 10 CFR Part 20 for unrestricted release have been met. The amendment will be issued if NRC determines that the request meets the standards specified in 10 CFR Part 20 and related NRC guidance documents.

II. Environmental Assessment (EA)

Identification of Proposed Action: The proposed action is to enable the licensee to use its subject facilities in any manner without NRC restriction. The NRC proposes to accomplish this by terminating NRC License No. 36-12343-02 because the licensee has permanently ceased all licensed activities and transferred or disposed of all licensed radioactive materials.

The Need for the Proposed Action: The licensee has permanently ceased all licensed activities at its subject facilities. The EPA desires to release these facilities for unrestricted use. The facilities will continue to be used for research with non-licensed materials. When the licensing action is complete, the licensee will be in compliance with the requirements of 10 CFR 30.36, "Expiration and Termination of Licenses and Decommissioning of Sites and Separate Buildings or Outdoor Areas."

Environmental Impact of the Proposed Action: NRC Materials License No. 36-12343-02 authorizes the EPA to possess small quantities of radioactive material, in both sealed and unsealed form. Under its license, the EPA's use of licensed material included the performance of tracer studies involving marine organisms and plants (excluding animal studies), use in gas chromatographs for sample analysis, use in Troxler Model 4300 Series gauges to measure soil

moisture, and use in a liquid scintillation counter for instrument calibration. By letter dated November 30, 2004, EPA requested that NRC release the subject facilities for unrestricted use and terminate the license.

A final status survey report (FSSR) was completed by the licensee, and a copy of the report was attached to the November 30, 2004, letter. During the November 2005 NRC inspection, EPA identified additional previous locations of use that had not been documented in the November 2004 FSSR submittal. An addendum to the FSSR was attached to a letter from EPA dated December 27, 2005. As discussed below, the EPA concluded that all three facilities were sufficiently free of radioactive material to permit unrestricted release of the facilities.

As part of its amendment request, the licensee conducted a historical review of its three facilities and found that the radionuclides of concern were carbon-14, calcium-45, chromium-51, hydrogen-3, phosphorus-32, sulfur-35, nickel-63, americium-241, and barium-133. Radioactive materials were used at the two Corvallis facilities from 1977 to 2004. Radioactive materials were used at the Newport facility from 1987-1995 under NRC License No. 36-23261-01. (This license was terminated in July 1995 after NRC License No. 36-12343-02 was amended to bring the Newport facility within its scope). To demonstrate compliance with the radiological criteria for unrestricted release as specified in 10 CFR 20.1402, the licensee developed derived concentration guideline levels (DCGLs). The NRC compared the licensee's proposed DCGLs to the screening criteria provided in NUREG-1757, "Consolidated NMSS Decommissioning Guidance," Volume 2. The NRC concluded that the proposed DCGLs were acceptable for use as release criteria.

The EPA's historical assessment identified two incidents that may have involved leaking sealed sources at the Corvallis Environmental Research Laboratory. One event occurred in March 1979 involving a sealed source containing a tritium-scandium foil. At the time of the event, the laboratory was cleaned and decontaminated. Significant remodeling had taken place

since the laboratory had been cleaned and decontaminated, so additional NRC confirmatory surveys were not performed in this area. A second event occurred in June 1982 involving either a leaking nickel-63 sealed source detector or radiotracers injected into a gas chromatograph. The licensee believed that the detector did not leak and that the contamination was tritium, not nickel-63. The laboratory was decontaminated and the event reported to the NRC at the time.

The NRC staff reviewed the docket file records and the FSSR to identify any non-radiological hazards that may have impacted the environment. No additional hazards or impacts were identified.

The licensee's radiation safety program allowed unrestricted release of previous locations of use once the areas were shown to be free from residual contamination. Final status surveys of the former locations of use were conducted when the laboratories were removed from service. Additional limited final status surveys were performed in 12 previous locations of use within the three subject facilities during November 2004, because the historical survey records were not adequate or complete to show that the locations were free from residual contamination. Final status surveys on remaining locations of use that had not been previously released were also performed during June 2004, November 2004 and December 2005. These final status surveys were conducted in buildings and laboratories identified during the historical assessment as previous locations of use with licensed radioactive materials.

The NRC conducted a confirmatory survey of 26 separate locations in the subject facilities during the NRC's November 2005 inspection. The NRC focused these confirmatory surveys in previous locations of use that were identified in the licensee's historical assessment as locations that potentially used licensed material in unsealed form. The confirmatory survey included the site at the Corvallis Environmental Research Laboratory where a leak from a sealed source may have occurred in June 1982. These confirmatory surveys also included the licensee-identified previous locations of use that were not in the original FSSR submittal dated

November 2004. The surveys included ambient gamma exposure rate measurements, as well as, fixed and removable surface contamination measurements. The removable surface contamination measurements included measurements for hydrogen-3 and carbon-14. None of the confirmatory sample results exceeded the proposed DCGLs identified in the FSSR.

In its FSSR, the licensee stated that radioactive waste material from previously licensed operations was transferred to an authorized waste contractor. All other previously licensed radioactive materials were transferred to authorized recipients. Solid waste disposal did not include on-site burial or incineration. Discharges to sewers were reviewed by inspectors during routine inspections to ensure compliance with the release limits specified in 10 CFR Part 20. Accordingly, the NRC finds that surface and groundwater sources were not impacted by previous EPA operations involving licensed material at the subject facilities.

Environmental Impacts of the Alternatives of the Proposed Action: The licensee seeks NRC approval of the license termination request. The alternatives to the proposed action are: (1) the no-action alternative, or (2) to deny the license termination request and require the licensee to take some alternate action.

1. *No-Action Alternative:* One alternative available to the NRC is to take no action by denying the license termination request. The no-action alternative is not feasible because it conflicts with the NRC's regulation (10 CFR 30.36(d)) requiring licensees to decommission their facilities when licensed activities permanently cease.

2. *Environmental Impacts of Alternative 2:* A second alternative is to deny the licensee's request in favor of alternate release criteria as allowed by §20.1403 (criteria for restricted conditions) or §20.1404 (alternate criteria). However, the NRC's analysis of the final status survey data confirmed that the proposed DCGLs meet the license termination requirements of §20.1402. Accordingly, the NRC has determined that the second alternative is

not reasonable, and this alternative action is eliminated from further consideration.

Conclusion: Based on its review, the NRC staff concludes that the environmental impacts associated with the proposed action do not warrant denial of the license termination request. The staff believes that the proposed action will result in no significant environmental impacts. The staff has determined that the proposed action, approval of the license termination, is the appropriate alternative for selection.

Agencies and Persons Contacted: The NRC staff did not consult with the local U.S. Fish & Wildlife Service or the State Historic Preservation Officer because licensed activities occurred only within the three EPA facilities in Corvallis and Newport, Oregon. There was no evidence of use or release of radioactive material outside of these facilities. Accordingly, there was no impact to historic properties or the cultural resources, endangered species, or critical habitats outside these facilities. The State of Oregon notified the NRC by telephone on March 29, 2006 that it had no comments on the EA. This conversation was documented in a Memorandum to the Docket File dated March 29, 2006. EPA notified the NRC by letter dated March 29, 2006 that it had four clarification comments on the EA. These comments have been incorporated.

III. Finding of No Significant Impact

The NRC staff has prepared this EA in support of the proposed license amendment to release the subject facilities for unrestricted use and terminate the license. On the basis of the EA, the NRC has concluded that there are no significant environmental impacts from the proposed action, and the license amendment does not warrant the preparation of an environmental impact statement. Accordingly, it has been determined that a Finding of No Significant Impact is appropriate.

IV. Further Information

Documents related to this action, including the application for amendment and supporting documentation, are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this site, you can access the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. The ADAMS accession numbers for the documents related to this Notice are:

1. NRC, "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities," NUREG-1496, July 1997 (ML042310492, ML042320379, and ML042330385).
2. Gile, Jay D., U.S. Environmental Protection Agency's Western Ecology Division, Cessation of Licensed Activities and Request for License Termination, November 30, 2004 (ML043620316, ML043620322, ML043620325, ML043620321).
3. Gile, Jay D., Environmental Protection Agency's Western Ecology Division, NRC Form 314 Certificate of Disposition of Materials, December 1, 2004 (ML043620317).
4. McBride, Kathy, Environmental Protection Agency's Western Ecology Division, NRC Form 314 (Certificate of Disposition of Materials) Retraction Memo, December 14, 2005 (ML060110330).
5. Burr, Dave, Environmental Protection Agency's Western Ecology Division, Decommissioning Audit Response, Addendum to the Final Status Survey Report, Certificate of Disposition of Materials and Request for License Termination, December 27, 2005 (ML060110298, ML060110337, ML060110472, ML060110496).
6. NRC Inspection Report 030-05976/05-001, January 10, 2006 (ML060120525).
7. Burr, Dave, Environmental Protection Agency's Western Ecology Division, EPA Comments

on the draft Environmental Assessment, March 29, 2006 (ML060890410).

8. Schlapper, Beth A. , Memorandum to Docket File 030-05976, State of Oregon Telephone Response Of No Comment For Comments On The Draft Environmental Assessment, March 29, 2006 (ML060880514).

If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737, or by email to pdr@nrc.gov.

These documents may also be viewed electronically on the public computers located at the NRC's PDR, O 1 F21, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852. The PDR reproduction contractor will copy documents for a fee.

Dated at Arlington, Texas this 19th day of April, 2006.

For the Nuclear Regulatory Commission.

/RA/

D. Blair Spitzberg, Ph.D., Chief
Fuel Cycle & Decommissioning Branch
Division of Nuclear Materials Safety
Region IV