

NUCLEAR REGULATORY COMMISSION

[Docket No.: 40-8452; NRC-2012-0095]

**License Amendment for Anadarko Petroleum Corporation,
Bear Creek Facility, Converse County, Wyoming**

AGENCY: Nuclear Regulatory Commission.

ACTION: Environmental assessment and finding of no significant impact; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is considering the issuance of a license amendment to Source Materials License SUA-1310 issued to Anadarko Petroleum Corporation (APC or the licensee) to authorize alternate concentration limits (ACLs) at its point of compliance (POC) wells and the deletion of License Condition (LC) No. 47 for its Bear Creek Uranium Mill facility in Converse County, Wyoming. The NRC has prepared an environmental assessment (EA) for this proposed action in accordance with its regulations. Based on the EA, the NRC has concluded that a Finding of No Significant Impact (FONSI) is appropriate with respect to the proposed action. The amendment will be issued following the publication of this document.

ADDRESSES: Please refer to Docket ID **NRC-2012-0095** when contacting the NRC about the availability of information regarding this document. You may access information related to this document, which the NRC possesses and is publicly available, using any of the following

methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2012-0095**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-492-3668; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact the individual(s) listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**
You may access publicly available documents online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The ADAMS accession numbers for the referenced documents are: the licensee's license amendment request and environmental evaluation dated November 28, 2011 (ADAMS Accession Nos. ML12046A858, ML12046A857, ML12046A856, and ML12046A854); and EA for License Amendment No. 51 dated February 27, 2013 (ADAMS Accession No. LML12145A264).

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Thomas McLaughlin, Project Manager, Materials Decommissioning Branch, Division of Waste Management and Environmental Protection, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-5869; e-mail: Thomas.McLaughlin@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Background

The Bear Creek Uranium Mill operated from September 1977 until January 1986, and generated 4.7 million tons of uranium ore “tailings” that were placed in an onsite earthen impoundment. Decommissioning of the mill occurred between August 1987 and March 1989. Reclamation of the tailings impoundment began in June 1997 and was completed in November 1999. Following a final inspection of the completed tailings reclamation activities, in July 2001, the NRC staff concluded that reclamation of the facility had been completed in accordance with the requirements of part 40, Appendix A of Title 10 of the *Code of Federal Regulations* (10 CFR) and the licensee’s approved tailings reclamation plan (ADAMS Accession No. ML011910515). The licensee addressed, and the NRC approved, the remaining site-wide reclamation plan elements through separate licensing actions, including mill demolition, relocation of lined evaporation pond sediments, soil decommissioning plan, and ground water remediation. In November 2010, the NRC staff notified APC that assumptions contained in APC’s 1997 ACL application were incorrect, and requested that a new ACL application be submitted (ADAMS Accession No. ML103280165). On November 28, 2011, APC submitted the license renewal application. The current licensing action is in preparation for the termination of the license and transfer of the site to the U.S. Department of Energy (DOE) for Long-Term Care and Surveillance.

II. Environmental Assessment Summary

The purpose of the proposed amendment is to prepare the site for transfer to DOE. By letter dated November 28, 2011, the licensee submitted a request to the NRC for approval of ACLs for nickel, radium, and uranium for its POC wells and to establish new point of exposure

(POE) wells at the northern edge of its boundary which will be part of the Long-Term Surveillance Boundary (LTSB). The elimination of LC No. 47 is a necessary step for the transfer of the license to DOE. On April 26, 2012, NRC issued a *Federal Register* Notice (77 FR 24993) requesting comments on the licensee's proposed amendment. No comments were received.

The NRC staff, in coordination with the Wyoming Department of Environmental Quality, has prepared the EA in support of the proposed license amendment. The EA assessed the potential environmental impacts associated with this request for a license amendment to establish ACLs at the POC wells and designate new POE wells at the LTSB, and documented the results of the assessment in this EA. The NRC staff performed this assessment in accordance with the requirements of part 51 of 10 CFR, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions."

In conducting the assessment, the NRC staff considered the following:

- information in the ACL application and supporting documentation;
- information in modeling reports and NRC staff review reports;
- information in land use and environmental monitoring reports;
- personal communications with licensee staff, the State of Wyoming, and Federal agencies;
- information from NRC staff site visits and inspections;
- 10 CFR Part 40, Appendix A, "Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material From Ores Processed Primarily for Their Source Material Content;"
- NUREG-1620, Rev. 1, "Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act of 1978" (ADAMS Accession No. ML031550522); and

- NUREG-1748, “Environmental Review Guidance for Licensing Actions Associated with NMSS Programs, Final Report” (ADAMS Accession No. ML032540811).

As an alternative to the proposed action, the NRC staff considered denial of the proposed action (i.e., the “no-action alternative”). Denial of the proposed license amendment would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action, both of which involve ground water quality, are similar since the ACLs in both alternatives are the same, as the licensee has requested the same values for nickel, radium, and uranium at the POCs. For the proposed action, only the POE well locations (i.e., monitoring locations relocated to the northern site boundary) are changed. In either alternative, offsite ground water quality is either at or below the designated POE compliance values.

III. Finding of No Significant Impact

Based on the analysis contained in the EA, the NRC staff concluded that there are no significant environmental impacts from the proposed action, and that the preparation of an Environmental Impact Statement is not warranted. Accordingly, the NRC determined that a Finding of No Significant Impact is appropriate.

Dated at Rockville, Maryland, this 22nd day of April, 2013.

For the Nuclear Regulatory Commission.

/RA/

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