

Recertification CARD No. 46 Removal of Waste

BACKGROUND

Assurance requirements were included in the disposal regulations to compensate in a qualitative manner for the inherent uncertainties in projecting the behavior of natural and engineered components of the Waste Isolation Pilot Plant (WIPP) for many thousands of years (50 FR 38072). Section 194.46 is one of the six assurance requirements in the Compliance Criteria.

REQUIREMENTS

“Any compliance application shall include documentation which demonstrates that removal of waste from the disposal system is feasible for a reasonable period of time after disposal. Such documentation shall include an analysis of the technological feasibility of mining the sealed disposal system, given technology levels at the time a compliance application is prepared.”

1998 CERTIFICATION DECISION

To meet the requirements for Section 194.46, the U.S. Environmental Protection Agency (EPA or Agency) expected the Compliance Certification Application (CCA) to describe the strategy for removing the waste from the repository after disposal is complete. EPA’s Compliance Application Guidance (CAG) states that compliance with the Section 194.46 criteria is demonstrated by an analysis that includes: (1) procedures necessary for removal of waste after disposal is complete; (2) descriptions of current technology that could be used in implementing these procedures; and (3) an estimate of how long it will be technologically feasible to remove the waste.

In CCA Chapter 7 and Appendix WRAC, the U.S. Department of Energy (DOE or Department) presented a five-phase approach to accomplish the removal of waste. This approach was supported by a discussion of techniques that could be used to remove the waste, given repository conditions at the time of removal. EPA reviewed the material to assess the completeness of the strategy and the justification of the proposed technology for removing the waste.

DOE demonstrated that it is possible to remove waste from the repository for a reasonable period of time after disposal, therefore EPA found DOE in compliance with Section 194.46.

A complete description of EPA’s 1998 Certification Decision for Section 194.46 can be obtained from Docket A-93-02, Items V-A-1 and V-B-2.

CHANGES IN THE CRA

DOE did not report any significant changes to the information on which EPA based the 1998 Certification Decision. There were no significant changes to Chapter 7 of the 2004 Compliance Recertification Application (2004 CRA) (p.7-89 to 7-91) and CCA Appendix WRAC.

EVALUATION OF COMPLIANCE FOR RECERTIFICATION

Based on EPA's review of the activities and conditions in and around the WIPP site, EPA did not identify any significant changes in the planning and execution of the DOE's strategy for removal of waste since the 1998 Certification Decision. The 2004 CRA provides documentation that the removal of waste from the disposal system is feasible for a reasonable period of time after disposal. (See 2004 CRA Chapter 7.6.2)

EPA did not receive any public comments on DOE's continued compliance with the removal of waste requirements of Section 194.46.

RECERTIFICATION DECISION

Based on a review and evaluation of the 2004 CRA, Appendix WRAC (1998), and supplemental information provided by DOE (FDMS Docket ID No. EPA-HQ-OAR-2004-0025, Air Docket A-98-49), EPA determines that DOE continues to comply with the requirements of Section 194.46.