

## **Department of Energy**

Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221
January 3, 2002

Mr. Frank Marcinowski
Office of Radiation and Indoor Air
Environmental Protection Agency
Center for Federal Regulation
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Mr. Marcinowski:

The purpose of this letter is to request approval from the Environmental Protection Agency (EPA) to change eleven of the appendices contained in the Compliance Certification Application (CCA) and the final compliance decision, for the Waste Isolation Pilot Plant (WIPP). As discussed in our meeting of November 28, 2001, changing these appendices will allow a more reasonable presentation of information important to the certification of the WIPP facility.

To accomplish this reorganization the Department of Energy (DOE) Carlsbad Field Office (CBFO) is requesting approval from the EPA to eliminate CCA Appendices BECR, VCMP, and LMP from the Compliance Certification Baseline. In addition, the CBFO proposes to change Appendices SER and DEL to references and to combine Appendices DMP, EMP, GWMP, GTMP and SMP into Appendix MON making one concise appendix with references to the individual monitoring plans.

The enclosure provides the DOE's rationale for the proposed changes to the appendices. If you have any questions, please contact Mr. Russell Patterson at (505) 234-7457.

Sincerely,

Dr. Inés R. Triay

Manager

**Enclosure** 

cc: w/enclosure

E. Forinash, EPA

C. Byrum, EPA

S. Monroe, EPA

S. White, EPA

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## Appendices to be Eliminated, Referenced, or Combined and Referenced

The following material provides the rationale for changing eleven appendices within the original compliance application and certification. The appendices that are proposed for elimination are addressed first, those that are proposed as reference material are addressed second, and finally the merging of similar appendices is addressed. The DOE-Carlsbad Field Office (CBFO) is requesting approval to make the changes described in the following paragraphs.

# **Appendices Proposed for Elimination**

### **Appendix BECR**

The Biennial Environmental Compliance Report (BECR) is required to be sent to the EPA every two years by the 1992 WIPP Land Withdrawal Act (LWA), Public Law 102-579, Section 9(a)(2). The CBFO will continue to submit the BECR to the EPA in compliance with the LWA and propose no change to this reporting requirement. Title 40 CFR 191, Subparts B and C, do not specify the submittal of a biennial report, nor is it required to demonstrate compliance under the Title 40 CFR 194 criteria. On the basis of this information, the CBFO is requesting approval from the EPA to eliminate Appendix BECR from the Compliance Certification Baseline.

#### Appendix VCMP

The primary purpose of the Volatile Organic Compound (VOC) Confirmatory Monitoring Program (VCMP) is to quantify the rate and concentration of VOC emissions from the WIPP. The collected data are to be used to demonstrate compliance with the environmental performance standards of 20 NMAC 4.1, Subpart V, Section 264.601(c), as required by the State of New Mexico via conditions of the WIPP RCRA operating permit.

This program was also included as Appendix VCMP to the CCA and is now part of the compliance baseline. The VCMP was included in the CCA as an appendix because the rate of VOC emission was considered to affect two interrelated repository properties: creep closure and gas-producing processes. In Chapter 7 of the CCA, the DOE stated that in addition to geomechanical monitoring, pre-closure monitoring of the creep closure parameters could be conducted indirectly via the VOC confirmatory monitoring program.

In Docket A-93-02, Item V-B-2, Compliance Application Review Document No. 42, Monitoring, in Section 42.C.5 EPA Compliance Review, the EPA concluded;

EPA agreed that VOC monitoring is not necessary as a secondary indicator of creep closure and is not necessary to fulfill the requirements of Section 194.42.

Since the EPA has determined that VOC monitoring is not necessary as an indicator of creep closure or to meet the requirements of Title 40 CFR, Section 194.42, the CBFO is requesting approval from the EPA to eliminate Appendix VCMP from the Compliance Certification Baseline.

### **Appendix LMP**

The CCA included the WIPP Land Management Plan (LMP) as an Appendix. The LMP is required by the 1992 WIPP LWA, Public Law 102-579, Section 4(b). The objectives of the LMP are to identify resource values, promote multiple-use management, and identify long term goals for the management of WIPP lands. The LMP was discussed in chapter 7 of the CCA in regard to Active Institutional Controls (AIC) as a means of controlling the use of the withdrawn lands and providing direction for site restoration activities. Appendix AIC references the LMP once in the Forward, stating that it describes the management and use of the land withdrawal area after facility decommissioning.

The LMP is an operational program designed to manage the withdrawn land thru decommissioning. AICs are implemented after decommissioning. The LMP, by definition, is not part of the WIPP AICs. Appendix LMP is not required to support the CCA or to support AICs. Appendix AIC describes the design of a system that the CBFO intends to implement for compliance with the requirement to control access to the WIPP disposal site. In addition, all site restoration work done after decommissioning will be conducted in accordance with a decommissioning plan.

As Appendix LMP is not required to demonstrate compliance, the CBFO is requesting approval form the EPA to eliminate Appendix LMP and all references to the LMP from the Compliance Certification Baseline.

# Appendices to be Referenced

## **Appendix SER**

The 1995 annual Site Environmental Report (SER) was included in the CCA as Appendix SER to augment the information provided to demonstrate compliance with 194.14(g) and 194.22(a)(2)(ii). The SER is used to report the environmental data collected each year in accordance with the Environmental Monitoring Plan and is submitted to the EPA Region 6, Dallas Texas, and to the Office of Radiation and Indoor Air in Washington, D.C. These annual reports document the continuing progress of the environmental program at WIPP and only augment information already provided in the CCA.

For the above reasons, the CBFO is requesting approval from the EPA to change this portion of the original application from an appendix to a reference for future WIPP compliance applications.

#### Appendix DEL

Appendix DEL was written for the CCA to compile information regarding drilling in the Delaware Basin. This appendix included a summary of drilling practices and well-plugging practices that were current at the time of the Compliance Decision. Appendix DEL also presented an inventory of deep and shallow wells, and proposed assumptions for the inadvertent human intrusion scenarios in the performance assessment. Section 6.4 of the CCA contains the conceptual model of drilling.

The information provided in Appendix DEL is updated annually and provided to EPA. The CBFO does not propose to discontinue submitting the annual update which documents the continual collection of information on drilling practices in the Delaware Basin This report, however, only augments information already provided in the CCA. For the above reasons, the CBFO is requesting approval from the EPA to change this portion of the original application from an appendix to a reference for future WIPP compliance applications.

# Appendices to be Merged into Appendix MON

The merger of multiple appendices into Appendix MON will provide for a more reasonable presentation of the overall WIPP monitoring program. Rather than being located in multiple documents the relevant information for the WIPP monitoring program will be located in Appendix MON. Information is provided below detailing the appendices that the CBFO proposes be merged into Appendix MON.

## Appendix EMP

Appendix EMP was included in the CCA to outline specific programs directed at ensuring compliance with Title 40 CFR, Sections 194.14(g) and 194.22(a)(2)(ii). The applicable portions of Appendix EMP that provide information relevant to compliance with these requirements are found in Sections 5 through 8 as follows;

- 5.3 Radiological Environmental Monitoring
- 6.0 SAMPLE HANDLING AND LABORATORY PROCEDURES
- 6.1 Sample Handling
- 6.2 Radiological Environmental Surveillance
- 6.3 Nonradiological Environmental Monitoring
- 7.0 DATA ANALYSES
- 7.1 Accuracy
- 7.2 Temporal and Spatial Analysis
- 7.3 Distribution and Descriptive statistics
- 7.4 Data Anomalies
- 7.5 Comparisons and Reporting
- 8.0 QUALITY ASSURANCE
- 8.1 Introduction
- 8.2 Goal
- 8.3 Program Elements/Criteria

The CBFO is requesting approval from the EPA to incorporate information from the EMP sections, listed above, into Appendix MON and that the EMP be referenced within MON for future compliance applications.

#### Appendix DMP

Appendix DMP was prepared to address the criteria found in Title 40 CFR, Sections 194.33 and 194.42(e). This appendix contains the Delaware Basin drilling activity surveillance program. The program focuses on drilling activities whose changes over time may impact the disposal

system. The program collects resource extraction information for comparison to the parameters and assumptions used to demonstrate radionuclide releases caused by human intrusion scenarios. This program will continue throughout the operational period to develop additional statistics on the following parameters:

- drilling rates,
- drilling practices,
- Castile brine reservoirs encountered,
- Castile brine characteristics (where available), and
- plugging practices.

Any analyses indicating that parameter values are changing will be studied to evaluate the impact of the changes. Significant changes in drilling practices, such as borehole diameters, plug and abandonment practices, mining techniques, Castile brine occurrence, and injection well use will be evaluated for potential impacts on disposal system performance.

The CBFO is requesting approval from the EPA to incorporate the descriptions of this surveillance program into Appendix MON and that the DMP be referenced in future compliance applications.

### Appendix GWMP, Appendix GTMP and Appendix SMP

Appendices GWMP, GTMP and SMP were included in the CCA to demonstrate compliance with Title 40 CFR, Section 194.42(e).

Appendix GWMP contains the groundwater surveillance program that the CBFO operates at the WIPP. This program will continue to operate as part of the pre- and postclosure monitoring system. The program will focus on those characteristics of the Culebra Member of the Rustler whose changes over time may be diagnostic of changes in the disposal system.

Appendix GTMP contains the geotechnical surveillance program that the CBFO operates at the WIPP site and plans to continue to operate as part of the preclosure monitoring system. The program focuses on observations of excavation effects such as creep closure and stresses that are useful in detecting deviations in expectations for near-term disturbed rock zone development.

Appendix SMP contains the subsidence surveillance program that the CBFO operates. This program monitors subsidence. Subsidence predictions will be compared to actual measurements to investigate any potential deviations that may indicate a change in repository performance.

The CBFO is requesting approval from the EPA to incorporate the descriptions of these programs into Appendix MON and that the GWMP, the GTMP, and the SMP only be referenced in future compliance applications.