

Standardized FFACO Outline
Underground Test Area
Corrective Action Decision Document/Corrective Action Plan
(CADD/CAP)
Revision 1
May 2011

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Executive Summary

1.0 Introduction

Provide a concise description of the Corrective Action Unit (CAU) and reason(s) that a corrective action is needed. Identify the Corrective Action Site (CAS) numbers and locations included in the CAU. Provide a concise statement relating provisions of the Federal Facility Agreement and Consent Order (FFACO) to the Corrective Action Decision Document/Corrective Action Plan (CADD/CAP).

State the purpose of the report, namely, the purpose of the CADD is to present the results of the Corrective Action Investigation Plan (CAIP) (and CAIP addenda if applicable) activities and to select a corrective action alternative for the CAU. The purpose of the CAP is to describe the plan for implementing the selected corrective action alternative including the strategy for evaluating the flow and transport model.

Discuss the scope and substance of activities used to identify, evaluate, and recommend alternatives. Concisely summarize the scope of the preferred corrective action alternative.

2.0 Corrective Action Investigation Summary

Concisely discuss or list corrective action investigation objectives as defined in the approved CAIP (and CAIP addenda, if applicable). Provide a statement addressing accomplishment of objectives through completion of CAIP activities. Refer to substantiating data and discussions that follow.

2.1 Data-Collection Activities

Summarize key data collection activities and documentation for the CAU including any modifications to the approved CAIP. Discuss the results of data collection activities, including field and laboratory investigation activities, with sufficient detail to allow an understanding of the purpose, work completed, and results obtained for each activity. Refer to the CAIP, (and CAIP addenda if applicable), field and laboratory investigation reports, and other references for each activity discussed.

2.2 Modeling Activities

Describe the modeling approach, as established within the CAIP (and CAIP addenda if applicable). Briefly discuss and reference data and modeling reports for descriptions of input parameters (boundary conditions, recharge areas and rates, hydrostratigraphic layers, source term, and transport parameters) and the modeling processes. Present the methodology used to calculate the model-forecasted contaminant boundaries (including both the perimeter and lower hydrostratigraphic unit boundaries). Describe the QA/QC process followed for the modeling activities including model code(s) verification and model input and output QA/QC.

Summarize the results of the modeling. Provide maps and/or graphics summarizing model investigation results. Discuss the level of confidence of the model including data limitations and an evaluation of uncertainty reduction. Describe how the numeric models support the conceptual model.

2.3 Contaminant Boundaries

Present the modeled results for the locations of the contaminant boundaries within the 1,000-year time frame at the 95% level of confidence. Illustrate how modeling uncertainty is expressed as confidence levels for the contaminant boundaries. If significant changes in the boundaries over the 1,000-year time frame occur then contaminant boundaries for interim time periods must be included. If contaminant transport is such that there is no significant change in the boundaries over the 1,000-year time frame, then only the 1,000-year boundaries need to be presented along with the defense of that assertion. All boundaries must be presented at the 95% level of confidence. Provide maps, and/or graphics representing the contaminant boundaries within each time frame presented.

2.4 Peer Review

Present a summary of the formal peer review recommendations and the National Nuclear Security Administration Nevada Site Office (NNSA/NSO) responses to these recommendations.

2.5 Model Acceptance

Present a summary of model acceptance by Nevada Division of Environmental Protection (NDEP) including any conditions.

3.0 Corrective Action Alternative

3.1 Corrective Action Objectives

Describe the corrective action objectives.

3.2 Recommended Alternative

Present the recommended corrective action alternative and the rationale for its selection.

4.0 Implementation of the Corrective Action Plan

Provide a description of the key elements associated with the planned implementation of the corrective action alternative. Reference applicable programmatic plans and other documents as appropriate to support the implementation of the preferred corrective action alternative.

4.1 Use Restriction Boundaries

Present the NNSA/NSO and NDEP negotiated initial use restriction boundaries including maps and/or graphics in addition to the basis for their identification.

4.2 CAU Regulatory Objectives

Present the NNSA/NSO and NDEP negotiated CAU regulatory objectives along with the basis for their identification.

4.3 Model Evaluation Purposes

Describe the purposes of the model evaluation program including:

- Continue the process of model evaluation with an increased focus on assessing the reliability of model results.
- Test contaminant boundary forecasts through data collection.
- Increase confidence that the results from modeling of flow and contaminant transport can be used for CAU closure.

4.4 Model Evaluation Approach

Present the approach used to identify, prioritize, and select data collection activities to be performed in support of model evaluation. Present the approach used to integrate the new data gathered and the basis for determining whether model refinements are required.

4.5 Data Collection Activities

Identify data collection activities that will be performed during the CADD/CAP stage. Describe the purpose for each activity.

4.6 Waste Management

Provide a summary of how wastes generated during data collection activities will be managed.

4.7 Reporting Requirements

Specify the frequency and format of reporting data collection and model evaluation results. Describe the contents and purpose of the summary reports developed during the CADD/CAP stage.

5.0 References

Provide references for sources of information used during preparation of the CADD/CAP and for sources of information contributing to the overall understanding of the CAU.

Appendices:

NNSA/NSO Responses to Formal Peer Review

NDEP Letter of model acceptance and concurrence of advancement to the CADD/CAP Stage

All Final Documents must include an Appendix with the NDEP Comment Response Sheets

Library Distribution List