Annotated Outline
for
UGTA Corrective Action Investigation Plan

1.0 Introduction

1.1 Purpose
Provide a description of the objectives of the document.

1.2 Scope
Provide a description of the scope of the document.

1.3 Summary of the CAIP

2.0 Legal/Regulatory Requirements

Introductory Statement

2.1 Federal Facility Agreement and Consent Order

Describe how the proposed Corrective Action Investigation (CAI) for the UGTA Corrective Action Unit (CAU) being discussed will be planned and conducted in accordance with the appropriate investigation purposes of the Agreement as outlined in Subparts II.1.b.ii, II.1.c, as well as the requirements of Subparts IV.14, and IV.15.

3.0 Description of Corrective Action Unit

3.1 Investigative Background
Identify the previous investigations conducted in and near the CAU. Include a summary of historical data. Include a statement referencing any required NEPA documents and any potential scheduling impacts they create.

3.2 Site History
Provide a generalized description of the operational history of the CAU.

3.3 Corrective Action Sites
Identify the characteristics of each Corrective Action Site (CAS) or groups of similar CASs in the CAU and describe the basis for groupings of CASs. Include the name and/or number, location, and the unique features of any CAS that differentiates it from the group in which it is placed.

3.4 Physical Setting
Describe the physical setting of the CAU, focusing on how the setting may affect the investigation requirements. Include a description, at the deterministic modeling level of detail, of all the geologic, stratigraphic, lithologic, hydrogeologic, geochemical, and radiological data available at the time of writing the CAIP for that CAU.

3.5 Contaminants
Identify all contaminants including radioactive/hazardous substances, known and/or inferred from process knowledge to be present in the CAU as part of the basis for the proposed CAI.

3.6 Conceptual Model of the CAU
This section should contain a discussion of the overall conceptual model of the CAU that will be proved or disproved by the investigation, based on the information provided above. The discussion shall include release/discharge mechanisms, migration routes, exposure pathways, and media contaminated by the previously described radioactive/hazardous substances.

3.7 Preliminary Corrective Action Levels
Provide regulatory and health-based concentration values for the radioactive/hazardous substances of potential concern upon which decisions for future action for the site are proposed to be based. If the investigation is proposed to include the sampling of more than one environmental medium, this section shall contain a subsection for each medium of concern.

4.0 Summary of Data Quality Objectives
This section discusses the results of the DQO process and relates the proposed conceptual model and the migration scenario(s) identified to these results. (This is required so that NDEP can clearly understand the degree to which DOE believes the problem has been clearly identified and the investigation aimed at achieving the stated DQOs.)

5.0 Corrective Action Investigation

This section will describe the proposed Corrective Action Investigation.

5.1 Analytic/Numerical Model(s) Applied to CAU Data

This section will describe the modeling process which will utilize the data/information available/collected from the CAU.

5.1.1 Model Selection

Discuss the criteria and process for selection of any analytic/numerical models proposed to be applied.

5.1.2 Model Discussion/Documentation/Data Availability

Include a discussion of each analytic/numerical model proposed to be applied based in part on the documentation for each model concurrently with the final model selection. Describe how data available as identified in 3.4 will be augmented as needed for use in the model(s) during the CAI and discuss how this determination will be made.

5.1.3 Validate Model Results

Include a discussion of the way in which the model(s)'s predictions of the locations and concentrations of the contaminants in the CAU will be assessed. Describe how the assessment of the model using new data will define if there is a need for additional data collection to improve predictive capability.

5.1.4 Define Contaminant Boundaries

Include a discussion of how any proposed "Contaminant Boundaries" will be determined to be reasonably representative of actual field conditions.

6.0 Field Investigation/No Field Investigation

If Field Investigations are planned as part of the CAI then: Provide a description of, and the rationale for, the activities planned to be conducted to gather and document information from the field investigation(s) and the process to be followed if additional studies are required. Identify and describe the methods to be used in enough detail to allow understanding of the scope and completion of the tasks involved. This will include, as applicable, the identification of sample collection and handling activities and analytical requirements. Topical areas of investigation, to be discussed include but are not limited to:

- Subsurface Soil Sampling
- Borehole Geophysics
- Monitoring Well Installation and Development
- Groundwater Sampling and Analysis

A description of the relevant Waste Management Plans, Health and Safety Plans, and any other such relevant Plans should also be given.

If no data acquisition activities are planned, discuss how the existing data have been determined to be adequate to support the remaining CAI activities and how the data demonstrate clear support for this decision.

7.0 Quality Assurance

This section will summarize how all Quality Assurance issues as associated with the use of existing data as well as the collection of new data will be addressed as described in the appropriate QA documents.

8.0 Duration and Records/Data Availability

8.1 Duration/Data Availability

Provide a projected duration in calendar days for the CAI. Provide a duration for the initial availability of quality-assured sampling results.

8.2 Document/Records Availability

Include a statement such as the following: "This Corrective Action Investigation Plan (CAIP) and all unclassified primary supporting documents/documentation are available to the extent allowed by law (and as addressed in paragraph XIII.3 of the FFACO), in the DOE public reading rooms located in Las Vegas and Carson City, Nevada and from the DOE Underground Test Area (UGTA) Project Manager. The Nevada Division of Environmental Protection (NDEP) maintains the official Administrative Record for all activities conducted under the auspices of the Federal Facility Agreement and Consent Order (FFACO)."

9.0 References

Provide references for all unclassified sources of information used during preparation of the CAIP.

Appendices

A1. Detailed Discussion of Data Quality Objectives/Process and Methodology as Applied to this Project and the DQO Results

A2. Other reports or information as appropriate