



Nevada
Environmental
Management
Operations
Activity

FFACO Handbook

Revision No.: 3

April 2013

U.S. Department of Energy
National Nuclear Security Administration
Nevada Field Office



FFACO Handbook

U.S. Department of Energy
National Nuclear Security Administration
Nevada Field Office
Las Vegas, Nevada

Revision No.: 3

April 2013

FFACO Handbook

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List of Acronyms and Abbreviations

A-E	Architectural and engineering
AL	Activity Lead
BLM	Bureau of Land Management
CADD	Corrective action decision document
CAI	Corrective action investigation
CAIP	Corrective action investigation plan
CAP	Corrective action plan
CAS	Corrective action site
CAU	Corrective action unit
CNTA	Central Nevada Test Area
CFR	<i>Code of Federal Regulations</i>
CR	Closure report
D&D	Decontamination and decommissioning
Decon	Decontamination
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
DP	Defense Program
DQO	Data quality objective
DRS	Document Review Sheet
DTRA	Defense Threat Reduction Agency
DU	Depleted uranium
EM	Environmental Management
EMIS	Environmental Management Information System
ER	Environmental Restoration
FAL	Final action level

List of Acronyms and Abbreviations (continued)

FFACO	<i>Federal Facility Agreement and Consent Order</i>
FIMS	Facility Information Management System
ft	Foot
FY	Fiscal year
GCP	Groundwater Characterization Program
GIS	Geographic Information Systems
GPS	Global Positioning System
in.	Inch
LM	Legacy Management
M&O	Management and operating
NAD 83	North American Datum of 1983
NAFR	Nellis Air Force Range
NDEP	Nevada Division of Environmental Protection
NNSA/NFO	U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office (current name, since March 10, 2013)
NNSA/NSO	U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office (used January 2003-March 2013)
NNSS	Nevada National Security Site
NSSAB	Nevada Site Specific Advisory Board
NTTR	Nevada Test and Training Range
OAM	Operations Activity Manager
OSTI	Office of Scientific and Technical Information
PCB	Polychlorinated biphenyl
PCM	Post-closure monitoring
PM	Project Manager
ppm	Parts per million
PRF	Public Reading Facility

PSA

Project Shoal Area

List of Acronyms and Abbreviations (continued)

Pu	Plutonium
Rad	Radiation
RCRA	<i>Resource Conservation and Recovery Act</i>
RG	Range
ROTC	Record of Technical Change
SAFER	Streamlined Approach for Environmental Restoration
TA	Target Area
TIRP	Technical Information Review Program
TPH	Total petroleum hydrocarbons
TTR	Tonopah Test Range
UGTA	Underground Test Area
UR	Use restriction
USAF	U.S. Air Force
UST	Underground storage tank
UTM	Universal Transverse Mercator

1.0 Introduction

In 1996, the *Federal Facility Agreement and Consent Order* (FFACO) was signed to govern the process for identifying, characterizing, and providing corrective actions for historical sites within the state of Nevada related to the development, testing, and production of nuclear weapons. The FFACO is a tri-party agreement entered into by the State of Nevada, acting by and through the Department of Conservation and Natural Resources, Nevada Division of Environmental Protection (NDEP); the U.S. Department of Energy (DOE), National Nuclear Security Administration Nevada Field Office (NNSA/NFO [previously known as the National Nuclear Security Administration Nevada Site Office [NNSA/NSO]]); and the U.S. Department of Defense (DoD). The Agreement is a legally binding document that supersedes the corrective action requirements of the *Resource Conservation and Recovery Act* (RCRA) Permit. With the transfer of the Offsites Activity to DOE, Legacy Management (LM), on October 1, 2006, a modification to the Agreement dated August 5, 2006, was put into place and DOE-LM became a signatory to the Agreement.

1.1 Purpose of the Handbook

The purpose of the *FFACO Handbook* is to aid the implementation of the requirements of the FFACO by creating a central repository for FFACO-related policy and guidance for use by DOE and its contractors. Users can check with the appropriate DOE Activity Lead (AL) for activity-specific applicability.

Sources for statements made in this handbook are either mentioned in the text or noted parenthetically after the relevant section.

1.2 Table of FFACO Obligations and Commitments

Key elements of the FFACO and the parties responsible for their completion are outlined in the [“Obligations and Commitments Federal Facility Agreement and Consent Order.”](#)

1.3 Handbook Modification

This handbook will be updated as FFACO policy is created and/or modified. Any DOE or contractor personnel may initiate an update. However, approval of changes will ultimately reside with DOE. Changes will be executed by the FFACO Support Group. Depending on the extent of the change, an addendum or full revision may be published.

When the need for a modification is identified, the change initiator will forward the change to the FFACO Support Group (FFACO@nv.doe.gov). The FFACO Support Group will review the change and forward it to the DOE FFACO Administrator.

The DOE FFACO Administrator will review the change, and approve or disapprove it in conjunction with other DOE personnel, as needed. He/she will notify the FFACO Support Group of his/her decision.

The FFACO Support Group will notify the change initiator of the result of the DOE FFACO Administrator review of the submitted modification request. If the change is approved, it will be incorporated into the next revision of the *FFACO Handbook*, or an addendum will be issued. If the change is disapproved, then no further action is required.

2.0 Structure and Issuance of the FFACO and Appendices

The State of Nevada, DoD, and DOE signed the [FFACO on May 10, 1996](#). The DOE and its contractors can view a copy of the Agreement and the majority of the supporting data on the FFACO website. This section provides an overview of the Agreement and the FFACO dataset.

2.1 DOE/DoD Transfer of Authority

The federal government is bound to the requirements of the FFACO regardless of the creation or deletion of specific federal agencies. The Agreement is “binding on all successors in interest and on any successor agency” to DOE or DoD. DOE and DoD are required to provide notice of the FFACO (including all appendices and any amendments) to every successor in interest and to any successor agency before any transfer of ownership or operation of the real property subject to this Agreement (FFACO Part I.2).

2.2 Agreement Coordinators

Each party to the Agreement must designate an individual to serve as the Agreement coordinator. The Agreement coordinator, on behalf of the designating organization, is responsible for the overall implementation of the Agreement (FFACO Part IV.4).

The Agreement coordinators are as follows:

- Environmental Management (EM) Operations Activity Manager (OAM), DOE/EM
- Environmental Program Manager, Defense Threat Reduction Agency (DTRA) for DoD
- Bureau Chief, NDEP
- Nevada Offsites Manager, DOE/LM

NDEP personnel will initially contact DOE ALs for requests concerning field-activity coordination. NDEP personnel may contact the DOE Agreement coordinator if there is no response 24 hours after the initial request per an agreement reached at the [August 15, 1996, FFACO meeting](#).

2.2.1 Corrective Action Coordinators

Per Part XVI of the FFACO, *Notification and Agency Coordination*, each Agreement coordinator works with the other agencies' corrective action coordinators and ensures that all communications from the other agencies are appropriately disseminated and processed within his/her organization.

The corrective action coordinators are as follows:

- EM OAM, DOE/EM
- Environmental Program Manager, DoD
- FFACO Coordinator, NDEP
- Nevada Offsites Manager, DOE/LM

2.3 NDEP Signature Authority

It is the responsibility of the NDEP Bureau Chief to approve various types of documents and field activities (NDEP correspondence dated [July 16, 1998](#), and [May 30, 2000](#); a letter agreement dated [June 19, 2000](#)). The following determinations must be issued under the signatory block of the NDEP Bureau Chief:

- Regulatory determinations (e.g., a change to a permit condition, waiver of requirements, determination of compliance, change to compliance schedules)
- Modification to the FFACO (e.g., movement of corrective action units [CAUs], Appendix III changes in CAU scope, establishment of or changes to deadlines)
- Approval of any final document outlined in the FFACO
- Approval of any major changes to an already approved FFACO final document

Note: Any change to an already approved FFACO final document requires that DOE submit an addendum, errata sheet, revision, or Record of Technical Change (ROTC) to NDEP.

- Concurrence with budget reprogramming and funding requests
- Formal requests for information under Part XIII of the FFACO

The NDEP Las Vegas Office Branch Supervisor and NDEP Programs Supervisor have signature authority for letters under the Bureau Chief's purview. The NDEP Project Manager(s) (PM) may sign other correspondence.

2.4 FFACO and Appendices

The FFACO consists of the Agreement (i.e., the main body of the document) and appendices that contain important information about the implementation and status of the Agreement scope. The following sections provide an overview of both the Agreement and the appendices.

The current revision of the FFACO can be found on the FFACO website. Additionally, controlled and uncontrolled copies of the FFACO are distributed twice a year to specific recipients per an agreement reached at the FFACO meeting on [February 12, 1997](#) (contact the DOE FFACO Administrator or the FFACO Support Group for details).

2.5 Facilities

The FFACO applies to land controlled, managed, owned, or withdrawn by DOE and/or DoD in the state of Nevada. This includes the Nevada National Security Site (NNSS), Central Nevada Test Area (CNTA), Project Shoal Area (PSA), and parts of the Tonopah Test Range (TTR) and the Nevada Test and Training Range (NTTR) (formerly the Nellis Air Force Range [NAFR]). The facilities are defined in the FFACO Appendix I, Part 1.0.

2.6 Interpretation of the Agreement by DOE Personnel and Contractors

During implementation, the Agreement and/or appendices may need clarification. If clarification is needed, DOE personnel and contractors should contact the DOE FFACO Administrator or the FFACO Support Group. The DOE FFACO Administrator or the FFACO Support Group will investigate the issue and provide guidance on interpretation. If needed, the DOE FFACO Administrator or the FFACO Support Group will initiate a proposal for a new agreement or other instrument to clarify passages that might lend themselves to misinterpretation.

2.7 The Agreement and Consent Order

The main body of the FFACO contains the basis for the environmental work that is conducted by DOE and DoD in the state of Nevada resulting from historical nuclear testing and weapons delivery systems development. Key facets of the Agreement presented in the main body of the FFACO are listed below:

- Legal authority for the FFACO
- Definitions of all FFACO terms
- Purpose and scope of the Agreement
- Enforceability of the Agreement

- Reporting requirements
- Amendments and modifications
- Severability of the Agreement
- Classified and confidential information

There have been six modifications to the Agreement since its inception. These modifications were approved on [July 19, 2000](#); [April 5, 2004](#); [August 5, 2006](#); [January 14, 2007](#); [February 20, 2008](#); and [March 17, 2010](#), respectively.

- The July 19, 2000, modification clarified what constituted a modification of the Agreement.
- The April 5, 2004, modification changed the biweekly field report to a monthly field report (see Section 3.3 for the details on the monthly field report).
- The August 5, 2006, modification added the DOE/LM as a signatory to the Agreement.
- The January 14, 2007, modification affected the setting of milestones and progress reporting.
- The February 20, 2008, modification consisted of administrative changes.
- The March 17, 2010, modification changed FFACO meeting frequency from a semiannual basis to an annual basis and instituted some administrative changes to accommodate the new meeting frequency.

2.7.1 CAU/CASs Defined

The FFACO defines CAUs and corrective action sites (CASs). A CAS is a solid waste management unit, disposal site, or release site within a CAU that potentially requires corrective action. One or more CASs are grouped into a CAU for remediation. Any change—including additions, archive, or movement of CASs or CAUs—requires an FFACO modification. Section 7.0 details the modification process.

2.7.1.1 CAS Numbering and Descriptions

Systems have been established to number CASs. All numbers are issued by the FFACO Support Group. The system for numbering CASs is described as follows:

- All CAS descriptions are designated through the modification process (see Section 7.0 for more detail).
- No CAS numbers and descriptions may be entered into the appendices until approved by DOE FFACO Administrator.

2.7.1.1.1 Numbering of CASs on the NNSS, TTR, and NTTR

Numbers assigned to CASs on the NNSS usually have three sets of two-digit numbers separated by hyphens. The first two digits or letters are the NNSS area. If the area is unknown, the number entered is “00.” The second set of two-digit numbers is the functional category (see [Attachment A, Functional Categories and Associated Numbers](#)). The final two digits are assigned sequentially based on existing CASs within the same area with the same functional category.

An example of an NNSS CAS is CAS 25-05-04, Leachfield, which is

- in Area 25 of the NNSS,
- in the Leachfield functional category (coded as 05), and
- the fourth site with a Leachfield functional category in Area 25 to be entered into the FFACO.

The TTR CAS numbers may include alphanumerics of four segments, instead of just three. The first segment indicates the general TTR area in which the CAS is located. (If the area is unknown, the number entered is “00.” Older TTR sites have the designator “TA” [Target Area] or “RG” [Range]). The second segment is the functional category of the CAS, and the third segment is a sequential counter. The additional fourth and fifth segments (which are sometimes combined) are a more specific area location. See [Attachment B, Alphanumeric TTR CAS Abbreviations](#), for the meanings of the abbreviations used for the general and specific areas.

An example of an alphanumeric TTR CAS number is TA-55-001-TAB2, which is

- in the Target Area of the TTR,
- in the Buried Ordnance Site functional category (coded as 55),
- the first site in this area and functional category, and
- in a specific area designated as Target Area, Bunker 2 (B2).

The NTTR CAS numbers have three segments. The first designates the location. The second designates the functional category. The third is a numeric sequence. An example of an alphanumeric NTTR CAS number is NAFR-23-01, which is

- on the NTTR,
- in the Radiation (Rad) Contamination functional category (coded as 23), and
- the first site in this area and functional category.

Each CAS is numbered based on the knowledge at the time of creation. Once a number is assigned for a specific site, the number remains unchanged, even if information is later revealed that would have led to a different designation.

For example, when CAS 25-26-22 Lead Sheets (2) was created, it was thought this site was located in Area 25. However, in early 2000, it was determined that the site was located in Area 26. The “DOE Area” field in the FFACO dataset was updated to reflect the new information; however, the CAS number remained the same.

2.7.1.1.2 Numbering of CASs on the CNTA and PSA

Numbers assigned to sites on the Offsites locations (i.e., the CNTA and PSA) have three sets of two-digit numbers separated by hyphens. The first two digits are either “57” if on the PSA or “58” if on the CNTA. The second set of two-digit numbers is the functional category (see [Attachment A](#)). The final two digits are assigned sequentially based on existing CASs within the same area with the same functional category. An example of an Offsites CAS is CAS 57-06-01, Muckpile, which is

- in Area 57 (i.e., the PSA),
- in the Muckpile functional category (coded as 06), and
- the first site with a Muckpile functional category in Area 57 to be entered into the FFACO.

2.7.2 CAU Numbering

Two-, three-, or four-digit numbers are used to identify CAUs. Numbers are assigned by the FFACO Support Group in ascending order. Numbers for CAUs are never reused.

All CAU descriptions are assigned and changed through the modification process (see Section 7.0 for more details).

The creation of a CAU must be approved by NDEP, DOE, or DoD (the approval level required is discussed in per Section 7.1.1.1) before the CAU number may be entered into the appendices.

2.7.2.1 CAU 4000, No Further Action Sites, and CAU 5000, Archived Corrective Action Sites

Two CAUs in Appendix IV of the FFACO have four-digit CAU numbers: CAU 4000, No Further Action Sites; and CAU 5000, Archived Corrective Action Sites.

CAU 4000, No Further Action Sites, contains CASs that are found to have no remaining contamination (e.g., because of natural attenuation or historical corrective actions); that is, these sites exist but require no further actions to be closed. Previously, these sites were kept in their original CAU throughout the corrective action process (even though the sites were not undergoing corrective action) or were transferred to a similar CAU that was previously closed and promoted to Appendix IV. Both these methods were confusing, so CAU 4000 was created as a central repository for sites that require no further action ([letter from NDEP to NNSA/NSO dated May 11, 2004](#)). Sites are moved to CAU 4000 before beginning either the Streamlined Approach for Environmental Restoration (SAFER) Plan or the Corrective Action Plan (CAP) through the modification process (see Section 7.0 for details). Sites in which the SAFER Plan or the CAP has begun need to be referred to the DOE AL before they can be moved to CAU 4000 to verify the appropriateness of the modification and gain DOE AL approval. Sites transferred out of CAU 4000 will be handled on a case-by-case basis.

CAU 5000, Archived Corrective Action Sites, contains the following:

- **CASs that become or were always active.** Because the FFACO addresses only currently inactive sites, active sites are removed from the Agreement.
- **CASs that do not exist or are duplicative of other CASs.** No action is needed for these sites, so they are archived in CAU 5000.

Sites are moved to CAU 5000 through the modification process (see Section 7.0 for details). Sites transferred out of CAU 5000 will be handled on a case-by-case basis.

2.8 Activities

All CAUs and CASs in the Agreement are assigned to the following:

- **DTRA.** Sites planned for remediation by DoD (DTRA).
- **Industrial Sites.** DOE sites where activities were conducted that supported nuclear testing and weapons delivery system activities.
- **Underground Test Area (UGTA).** DOE sites where underground nuclear tests were conducted.
- **Soils.** DOE sites of surface or subsurface contamination that resulted from atmospheric and safety experiments.
- **Nevada Offsites.** DOE sites of historical testing activities off the NNSS (i.e., on the CNTA or PSA). **Note:** As of October 1, 2006, the Nevada Offsites have been transferred

to and are under the purview of LM; however, they remain part of the FFACO and are governed by the Agreement.

2.9 Appendices

The FFACO has the following six appendices:

- Appendix I, *Description of Facilities*, is a description of the facilities addressed by the FFACO (i.e., the NNSS, CNTA, PSA, and parts of the TTR and NTTR).
- Appendix II, *Corrective Action Sites/Units*, includes CASs and CAUs that have been identified to be addressed through the FFACO, but have not yet been prioritized for remediation and milestone assignment.
- Appendix III, *Corrective Action Investigations/Corrective Actions*, is a list of CAUs currently undergoing corrective actions tied to milestones enforceable through the FFACO.
- Appendix IV, *Closed Corrective Action Units*, is a list of CAUs and CASs closed through the FFACO or requiring no further corrective action. Sites requiring a use restriction (UR) or long-term monitoring are specifically annotated.

Note: Sites are closed when NDEP issues a Notice of Completion for a CAU and authorizes its promotion to Appendix IV.

- Appendix V, *Public Involvement Plan*, provides information about how information related to the FFACO will be disseminated to the public. Many public involvement strategies are implemented by or in coordination with the Nevada Site Specific Advisory Board (NSSAB). The Public Involvement Plan is reviewed and updated as the program changes and new methods are identified to make public involvement activities more efficient.
- Appendix VI, *Corrective Action Strategy*, is the technical basis for the remediation work. Appendix VI defines the process for implementing corrective actions pursuant to the FFACO. The strategy has four steps: (1) identify CASs, (2) group identified CASs into CAUs, (3) prioritize CAUs for remediation, and (4) implement corrective actions.

2.10 FFACO Database and the EMIS

A dataset of information critical to the implementation and recordation of the FFACO is maintained by the FFACO Support Group on behalf of DOE and the other Agreement signatories. The dataset is used to populate the FFACO appendices and other facets of the Agreement implementation.

The dataset is currently contained in the FFACO database and can be accessed via the FFACO website, which is a part of the Environmental Management Information System (EMIS). All

reports and data supporting the Agreement may be accessed via EMIS through the FFACO website.

2.11 Maps of CAU and CAS Locations Pertaining to URs

In August 2006, ArcGIS replaced the GeoMedia website, and maps (aerial photos) of CASs that have URs became available. These maps have been linked to the corresponding CAS URs in the FFACO database, which is accessible via the FFACO website.

3.0 **Communication Process**

Signatories to the Agreement use a number of formal communication processes to communicate with one another, including the following:

- FFACO annual meeting
- *Ad hoc*/topical meetings
- Field activity reports
- Correspondence

Additionally, the Information Exchange process is used to communicate FFACO issues and policy to DOE, DoD, and their contractors.

The following sections detail these processes.

3.1 **Annual Meeting Requirements**

The FFACO annual meeting is typically held on the first Wednesday of February. The meeting allows the signatories to discuss issues related to the FFACO and its implementation in a formal setting.

3.1.1 **Required Meeting Topics**

In addition to other agenda items, Part XII.4 of the FFACO requires certain topics to be addressed at the annual meeting:

- The parties propose CAU milestones for the fiscal year (FY)+2 (i.e., the two FYs from the current FY) based on target and planning funding levels, as appropriate (milestones that require funding above the target level will be designated as such).

Note: Per the FFACO Part XII.4.a (Letter Agreement Change of January 2007), DoD cannot commit to enforceable FY+2 dates.

- The parties review and reconsider established priorities, milestones, due dates, and deadlines for the current FY.
- The parties consider approved funding program.
- The parties consider prioritization criteria.

Per the March 17, 2010, modification to the FFACO, the FY+1 milestone chart will be distributed to all stakeholders in August of each year. Stakeholders will then review and

reconsider established priorities, milestones, due dates, and deadlines based on the corrective action strategy (i.e., Appendix VI of the FFACO) and the budget/milestones for FY+1.

3.1.2 Meeting Agendas and Minutes

Agenda items for annual meetings are provided by DOE, NDEP, and DoD. The DOE, DoD, and their contractors can suggest items for the agenda or meeting topics via the DOE FFACO Administrator or the FFACO Support Group.

Draft minutes are developed by the FFACO Support Group and circulated for review by DOE, NDEP, and DoD in accordance with the agreement reached at the [FFACO meeting on May 14, 1997](#). Final agendas, handouts, signed agreements, and minutes are available on the FFACO website.

3.2 Ad Hoc/Topical Meetings

As needed, the signatories can schedule formal meetings to discuss and resolve specific policy and implementation issues. Past meetings have addressed a myriad of topics including the following:

- Document outlines
- The data quality objective (DQO) process
- Closure procedures for sites located on U.S. Air Force (USAF) property
- Substantially deficient document criteria

3.2.1 Calling Meetings and Minutes

When calling an *ad hoc* or topical meeting, DOE, DoD, or their contractors should suggest meeting topics to the DOE FFACO Administrator or the relevant DOE AL, or the NDEP FFACO Coordinator. If an *ad hoc* meeting is called, the FFACO Support Group will assist in setting up and recording minutes at the meeting.

Draft minutes for *ad hoc* meetings will be developed by the FFACO Support Group and circulated for review by NDEP, DOE, and DoD. Final minutes are available on the FFACO website.

3.3 Field Activity Reports

Part VII.4 of the FFACO requires that DOE and DoD submit reports detailing the planned field activities for the current month and following two months.

The field activity reports contain information related to fieldwork, DQO meeting schedules, document submittals, and post-closure monitoring (PCM) activities. The reports are compiled for DOE and DoD by the FFACO Support Group. Reports are posted on the FFACO website.

The reports must conform to a set format that was agreed upon at the [February 12, 1997, FFACO meeting](#).

To be added to or removed from the distribution list of field activity reports, contact the DOE FFACO Administrator or the FFACO Support Group.

3.4 Correspondence

All correspondence regarding or related to the FFACO is retained as part of the administrative record on the FFACO website.

Properly completed letters of submittal must accompany all documents to NDEP. When a document is ready for submittal to NDEP, the FFACO Support Group should be notified via email; a submittal letter will then be prepared using the templates available on the FFACO website. When the letter is complete, it will be sent to the originating contractor for distribution. These templates are the most recent versions and are changed within 48 hours of any notification of personnel or policy changes.

Correspondence can be found by searching on the “Correspondence” or “CAU” query of the FFACO website.

3.5 Information Exchange

Information Exchange meetings were started in October 1996 by DOE and DoD personnel and their contractors. The Information Exchange was developed to help

- facilitate coordination,
- provide a forum for discussing FFACO issues and possible solutions, and
- ensure compliance with the FFACO.

Since February 2000, no face-to-face Information Exchange meetings have been convened, and email has become the method used in this process. An email is sent out biannually by the FFACO Support Group: (1) after minutes from the annual meeting are complete and (2) again in August. The Information Exchange is intended to communicate relevant information from the annual FFACO meeting and any other topics that may have arisen since the last Information

Exchange notification. To be added to or deleted from the Information Exchange email list, contact the DOE FFACO Administrator or the FFACO Support Group (FFACO@nv.doe.gov).

Historical agendas and minutes from Information Exchange meetings are available on the FFACO website.

4.0 Corrective Action Process

The FFACO provides the framework for defining, scheduling, and documenting the corrective action process. Per the Agreement, a corrective action is defined as “an action or series of actions taken to correct deficiencies in the disposal or containment of pollutants, hazardous wastes, and solid wastes to prevent releases and/or potential releases into the environment or discharges and/or potential discharges of such materials into waters of the state in accordance with the approved corrective action plan. A corrective action may range from no action to clean closure” (FFACO, Part IV.11).

The primary guide for FFACO corrective actions is Appendix VI of the FFACO, *Corrective Action Strategy*. Agreements and correspondence among the signatories generated during the implementation of the Agreement also guide the corrective action process.

All aspects of potentially contaminated sites will be dealt with in the FFACO CAUs, decontamination and decommissioning (D&D) planning, or the Sectorized Clean-up Work Plan (see Section 4.3.1.2) per the agreement reached at the [FFACO meeting dated May 5, 1999](#).

Corrective actions for CAUs within the FFACO can range from no further action to clean closure depending on the technical challenge of the site, extent and type of contamination (if any), and the geographic environment.

4.1 Selection of Corrective Action Process

The corrective action process for an Appendix II site is selected at planning meetings held between DOE/DoD and NDEP based on existing site knowledge and historical corrective actions. Current planned corrective action processes for Appendix II sites can be found on the FFACO website.

When a site is promoted into Appendix III (per the process in Section 7.0), DOE/DoD proposes at least one enforceable milestone for establishment under the FFACO. Approval of this milestone by NDEP is considered tacit approval of the corrective action process.

4.2 Prioritization and Selection of CAUs for Corrective Action

Appendix II contains CAUs planned for future corrective action under the FFACO. Those CAUs ready to undergo corrective action are promoted to Appendix III using the FFACO modification process (see Section 7.0) via a letter or with the submission of the FY+ 2 milestone chart. In some cases, the relevant DOE/DoD AL/Manager may propose promotion of CAUs to

accommodate funding. Assigned milestones are proposed by DOE/DoD to NDEP for approval with the completion of at least one document associated with the given corrective action process.

4.2.1 Prioritization of CAUs

In the past, corrective actions were prioritized through the approved FFACO Prioritization Model. The model applied a series of mathematical values and weights to Appendix II CAUs based on a series of questions regarding the CAUs. The resulting score was used to inform decision makers regarding which CAUs should be promoted to Appendix III.

The Prioritization Model and scores were formerly maintained by the FFACO Support Group. For information pertaining to current prioritization methods and procedures, personnel from NDEP, DOE, DoD, and their contractors may contact the DOE FFACO Administrator or the FFACO Support Group (FFACO@nv.doe.gov).

4.3 Corrective Action Processes

There are three primary FFACO corrective action processes: housekeeping, SAFER, and complex. An overview of each process is provided in the following subsections. The processes are also outlined in the FFACO, Appendix VI, Part 1.5.

4.3.1 Housekeeping Process

The housekeeping process (Appendix VI, Part 1.5.1) applies to “CASs that do not require further investigation before the corrective action is completed.” Contaminated soil in excess of 30 cubic yards may not be removed from a housekeeping site without specific NDEP approval per the Sector Clean-up Work Plan (see Section 4.3.1.2).

4.3.1.1 Housekeeping CASs with Stained Soil

The CASs in the FFACO that are being remediated using the housekeeping corrective action process and contain soil staining of unknown contaminants will be handled as follows:

- First, the stained soil will be given a new CAS number with the same location as the original CAS number and grouped into an Appendix II CAU in either the Industrial Sites or Soils Activity.
- Second, the original housekeeping CAU will be submitted for closure (per an agreement reached at the [FFACO meeting dated August 15, 1996](#)).

4.3.1.2 Sectored Clean-up Work Plan

The [Sectored Clean-up Work Plan for Housekeeping Category Waste Sites](#) provides a process by which one or more existing housekeeping sites are remediated as individual sites or, when appropriate, grouped into a sector for cleanup. This increases effectiveness and efficiencies in planning, labor, materials, equipment, cost, and time. The latest plan is available from DOE, the M&O contractor, or characterization contractor, or may be found on the FFACO website.

4.3.1.3 Documenting Housekeeping Corrective Actions

Closure of a housekeeping site is documented in a closure report (CR), or in the appropriate CR for complex or SAFER corrective actions.

4.3.2 SAFER Process

The SAFER process (Appendix VI, Part 1.5.2) “will be employed at CAUs where the parties agree that enough information exists about the nature and extent of contamination to propose an appropriate corrective action before a [Corrective Action Investigation] CAI is completed.”

4.3.2.1 Documenting the SAFER Corrective Actions

The CAUs closed using the SAFER process require that the following two documents be submitted to NDEP:

- **SAFER Plan.** This document provides the proposed method for characterizing and undertaking corrective action at a given site in conformance with the approved FFACO Outline as discussed in Section 5.1.2. A SAFER Plan may have decision points incorporated into it for multiple corrective actions depending upon the type and extent of contamination.
- **CR.** Once corrective actions are completed, a CR in conformance with the approved FFACO Outline as discussed in Section 5.1.2 is submitted to NDEP that describes the corrective action activities and verifies closure results. Any URs or PCM required for any of the sites contained in the CAU will also be documented in the CR.

4.3.3 Complex Process

Per Appendix VI, Part 1.5.3, the complex process is used for CAUs where additional information is needed for the evaluation of possible corrective action alternatives.

4.3.3.1 Documenting Complex Corrective Actions

With the exceptions noted in Section 4.3.3.2, the complex process requires the submittal of four documents to NDEP:

- **Corrective Action Investigation Plan (CAIP).** This document provides or references all the specific information for planning investigation activities. The CAIP must conform to the approved FFACO Outline as discussed in Section 5.1.2 and is developed using the DQO process. The CAIP must include or reference all information needed to conduct the investigations in compliance with established procedures and protocols.
- **Corrective Action Decision Document (CADD).** This document provides the results of the characterization, multiple corrective action alternatives, and the recommended corrective action alternative (based on the characterization results) and the rationale for its selection. The rationale for the selected alternative includes an analysis of the possible alternatives and may reflect a decision ranging from no action to clean closure. The CADD must conform to the approved FFACO Outline as discussed in Section 5.1.2.
- **CAP.** This document provides the plan for implementing the selected corrective action for a CAU. This plan must conform to the approved FFACO Outline as discussed in Section 5.1.2 and will contain a detailed description of the proposed actions that will be taken to achieve the degree of containment set forth in the NDEP-approved CADD.
- **CR.** This document provides an overview of the corrective actions implemented at a CAU, the results of the corrective actions, any deviations from the approved CAP, closure verification information, and UR and monitoring requirements (when applicable). The CR must conform to the approved FFACO Outline as discussed in Section 5.1.2.

4.3.3.2 Alternative Methods for Documenting Complex Corrective Actions

The two alternative documents that are accepted by NDEP for complex corrective actions are as follows:

- **CADD/CR.** This document is used for CAUs where no further corrective actions are needed following completion of the CAI. This may include minor corrective actions as agreed to by NDEP. The document must conform to the approved FFACO Outline as discussed in Section 5.1.2 and provide rationale for no further corrective action, and may recommend closure with or without URs or long-term monitoring. This document is submitted to fulfill a CADD milestone. However, if approval is granted, this document would also fulfill the CR milestone, and the CAP milestone would no longer be required (agreements resulting from the [FFACO meeting dated May 13, 1998](#), and the [June 2012](#) approved document outline).
- **CADD/CAP.** This document uses site knowledge gained through characterization and similar historical corrective actions to provide a plan for corrective action. The CADD/CAP must conform to the approved FFACO Outline as discussed in

Section 5.1.2. This document is submitted to fulfill a CADD milestone. However, if approval is granted, the CAP milestone also is completed.

4.3.4 Closure of Underground Storage Tanks

Per an agreement that resulted from the [August 15, 1996, meeting](#), the following method will be used for closing an underground storage tank (UST) (under any corrective action process):

- The DOE should complete the tank pull.
- If a spill is discovered and it can be addressed under current procedures or work plans, then the contaminated soil will be removed and confirmatory sampling performed.
- If the spill is large, DOE will propose that the CAS be removed from the CAU and closed later using a more complex process.
- All information related to verifying the closure of the UST will be included in the CR.

5.0 Documentation of Corrective Actions and Milestones

As established in the FFACO, Appendix VI, Part 1.4, a series of documents designed to plan and guide the CAI and corrective action activities will be prepared (Section 4.3). Most documents are associated with a milestone established and enforceable through the Agreement.

5.1 Document Development Process

All FFACO-required documents (i.e., CAIPs, CADDs, CADD/CRs, CADD/CAPs, SAFER Plans, CAPs, CRs, and Post-closure Reports) pass through three development stages: draft, final, and NDEP-approved. Each stage has specific requirements for distribution, review, revision, and approval.

Some FFACO documents require amendments or additions subsequent to NDEP approval. In this case, an addendum, errata sheet, or ROTC is required. These additions to an NDEP-approved document must also be reviewed and distributed in accordance with Sections 5.1.5.2 and 5.1.5.3. The errata sheets do not need NDEP approval; however, DOE/DoD may choose to seek oral concurrence from NDEP.

5.1.1 Multiple CAUs in One Document

Each of the following groups of CAUs—CAUs 101 and 102; CAUs 230 and 320; CAUs 406 and 409; CAUs 461 and 495; and CAUs 530, 531, 532, 533, 534, and 535—was addressed concurrently in the same FFACO documents. However, it is NDEP's stated policy that multiple CAUs should not be addressed in a single document but, instead, CASs should be moved between CAUs to create more effective groupings as needed. The policy is clearly stated in an [August 31, 1998, letter from NDEP to DOE](#).

Any exceptions must be handled on a case-by-case basis and must receive EM OAM and NDEP approval before work starts on the document.

5.1.2 Document Outlines

All documents (draft or final) must conform to the approved FFACO Outlines. The FFACO Outlines provide the order and titles of sections required in the document, as well as guidelines for the type of information required in each section. The FFACO Outlines are a key element in the determination of a substantially deficient milestone. Section 5.2.1.1 contains the details regarding substantially deficient documents.

The latest versions of the FFACO Outlines are located on the FFACO website.

5.1.3 Draft Stage Documents

A document is considered draft before its formal submittal to NDEP.

Draft documents are reviewed by DOE and/or DoD, NDEP, contractor personnel, and the FFACO Support Group.

Before distributing a draft document for review, the PM of the originating contractor should verify the document

- is considered by the originating contractor to be complete,
- is formatted with a header template for the controlled copy distribution,
- does not refer to the originating contractor on the title page, and
- has been reviewed by a Derivative Classifier of the originating contractor.

The FFACO does not require submittal of draft documents to NDEP. However, DOE/DoD submit a draft document to solicit preliminary comments from NDEP to increase the chances of document approval and decrease the likelihood of the document being deemed substantially deficient. If DOE and/or DoD sends a draft document to NDEP for review, the sender also ensures the document

- is distributed as an unsigned and uncontrolled document,
- front cover is marked “DRAFT,” and each internal page has the required “DRAFT” watermark,
- includes a footer with the following statement “This is a draft, predecisional U.S. Department of Energy document and is not releasable to the public.” on the front cover and all internal pages, and
- has been reviewed by a Derivative Classifier of the originating contractor.

The FFACO Support Group will prepare a distribution letter using the FFACO letter template for submitting documents to NDEP. The signed submittal letter will be returned to the document’s originating contractor for distribution per the cc list on the letter.

5.1.3.1 Distribution of Draft Documents

5.1.3.1.1 Technical Information Review Program

As part of the final draft distribution, copies of the final draft document are sent by the originating contractor to the Technical Information Review Program (TIRP), which consists of a

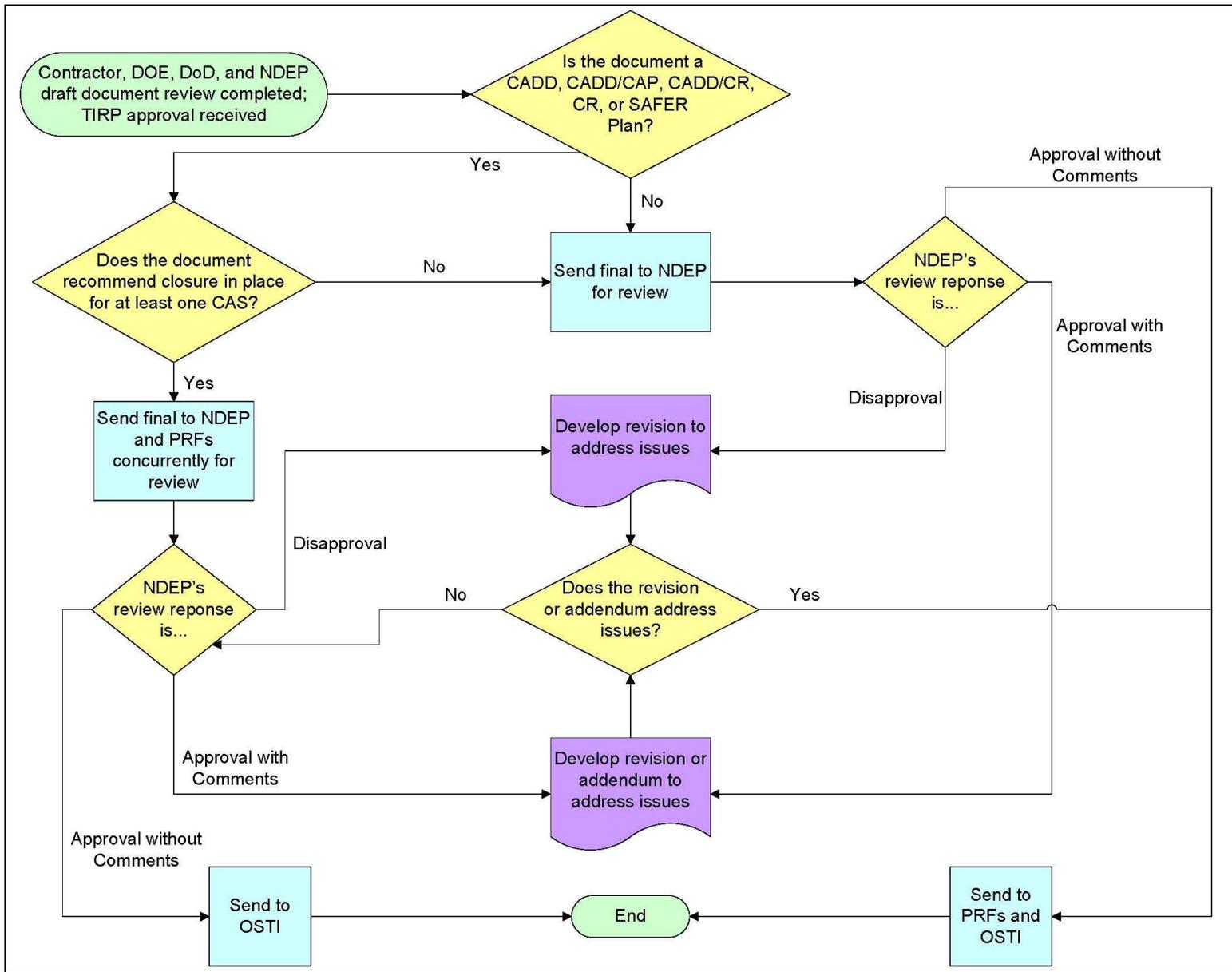
Technical Information Specialist within the NNSA Office of Safety and Security, the NFO Office of Public Affairs, a Copyright and Patent Reviewer, and an NFO Classification Officer. TIRP must approve every product intended for external distribution or public release. TIRP requires a review period of at least 30 calendar days. After TIRP reviews the product, any changes resulting from comments received from the TIRP review must be resubmitted to TIRP before the product is finalized and approved for public release. TIRP will grant final approval based on its review of the comments and responses contained in completed Document Review Sheets (DRSs), that all the comments have been addressed satisfactorily. TIRP will then assign a product number to the final approved product (the product number must appear on the cover and all pages of the document in the upper right hand corner of the document. TIRP review and approval is also required for addenda, errata sheets, any revisions, and ROTCs to an approved document.

5.1.3.1.2 *Draft Document Comments*

All DOE/DoD, non-originating contractor, and NDEP review comments must be recorded on DRSs. If NDEP supplies comments on the draft, then these comments must be documented on DRSs along with a comment response and included as an appendix in the final document.

5.1.4 *Final Stage Documents*

To obtain NDEP approval, DOE/DoD must submit a document to NDEP in final format before the deadline listed in Appendix III of the FFACO. The first submittal of a final document is Revision 0; subsequent submittals are designated with sequentially higher revision numbers. An overview of this process can be found in Figure 5-1.



**Figure 5-1
Final FFAO Document Issuance Overview**

5.1.4.1 Distribution of Final Documents

Before a final document may be submitted to NDEP, the following process and actions must be completed:

- The draft review process as described in Section 5.1.3
- Mandatory review by the NFO FFACO Administrator
- Receipt of approval from TIRP for public distribution

The FFACO Support Group will prepare a submittal letter to NDEP. The final, signed submittal letter will be returned to the originating contractor for appropriate distribution.

Before a final document is submitted to NDEP, the cover letter and document should be reviewed for the following:

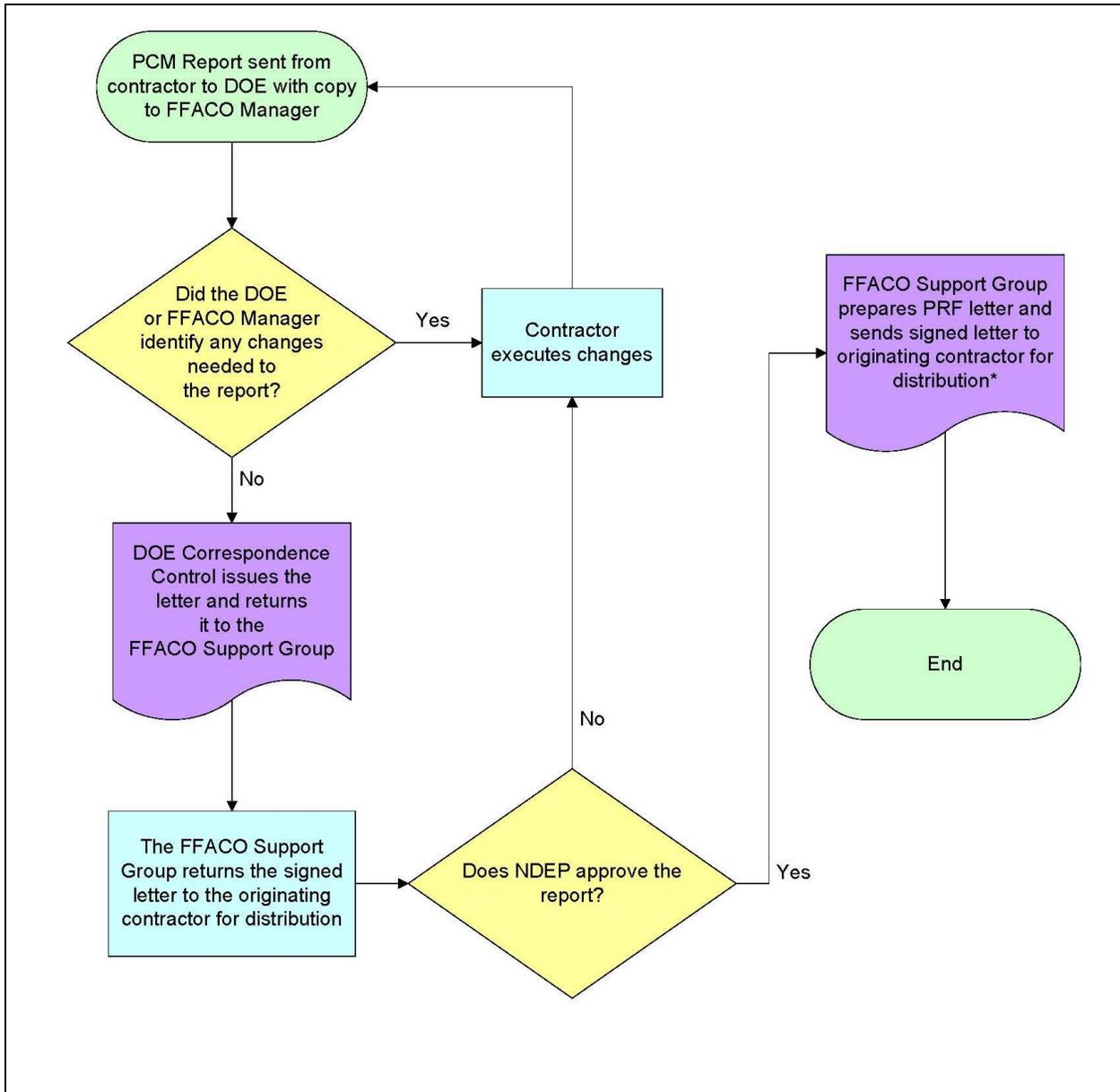
- The title and description of the CAU on the correspondence subject line match the title and description of the document cover page.
- The date and revision number of the document are included on the subject line and match the date and revision number on the document cover page.
- The Library Distribution is in the back of the document.
- For ROTCs, the document revision and date in the subject line of letter matches the date and revision number on the document it is amending (not the ROTC date).
- For ROTCs, the ROTC number is the next sequential number for the given document.
- The letter has an issuance date stamped on it.

Figure 5-1 provides a detailed flowchart for the issuance of final FFACO documents.

5.1.4.1.1 Post-closure Monitoring

Some CRs require PCM to be documented in a Post-closure Monitoring Report. PCM should conform to the process depicted in the Post-closure Monitoring Report Flowchart (Figure 5-2) and should use the appropriate letter template on the FFACO website .

Post-closure Monitoring Reports are distributed like a draft or final document, as appropriate.



**Figure 5-2
Post-closure Monitoring Letter Report Flowchart**

5.1.4.2 NDEP Review of Final Documents

NDEP will review a final document and determine whether it meets the requirements of the given FFACO milestone.

There are four possible outcomes of the NDEP review of a final document:

- Approved
- Approved with comments
- Disapproved with comments
- Substantially deficient

If a document is approved, it is considered ready for final distribution (see Section 5.1.6).

If a document is approved with comments, NDEP may require an addendum, errata sheet, revision, or ROTC (see Section 5.1.5), or have the comments included in the subsequent document in the corrective action process. For example, a comment on a CAIP may need to be addressed in the CADD.

If a document is disapproved with comments, a revision will be needed (see Section 5.1.4.3).

If a document is found to be substantially deficient, a revision will be needed (see Section 5.1.4.3), and fines and penalties may be levied (see Section 5.2.1.1).

5.1.4.3 Revisions of Final Documents

When NDEP informs DOE/DoD that a document is disapproved for any reason, additional revisions of the document will be required.

The first revision of a document is designated “Revision 1,” excluding UGTA documents, and subsequent revisions are designated with sequentially higher revision numbers.

UGTA draft documents are designated as “Revision 0,” and the final version is “Revision 1.” The first revision of the final document will then be designated as “Revision 2,” and subsequent revisions are designated with sequentially higher revision numbers.

5.1.4.3.1 Requirements for Revisions of Final Documents

Revised documents must meet the following requirements:

- Address NDEP comments (if any).
- Be reviewed and approved by TIRP.

- Be reviewed by the DOE FFACO Administrator.
- Be reviewed by the DOE EM AL/OAM or the DoD Manager.

5.1.5 Addenda, Errata Sheets, or ROTCs

Additions or amendments to formal documents can take the form of addenda, errata sheets, or ROTCs. Per the [June 1, 2002, Information Exchange email](#),

- addenda are used when extensive corrections/additions to a section or multiple sections of an FFACO document are necessary;
- ROTCs are used when correcting limited technical information; and
- errata sheets are used when correcting limited, non-technical information, such as typographical errors.

If there is a change to the scope of the investigation or remediation that was approved in the CAIP, CADD, CAP, or CR, the contractor must contact the DOE/DoD AL/Manager immediately. The DOE/DoD AL/Manager will provide written notification of the ROTC via scanning and email to NDEP. Then NDEP will provide written concurrence with the ROTC via scanning and email to DOE/DoD. Once written concurrence is received from NDEP, DOE/DoD will give the contractor approval to continue work. Lastly, DOE/DoD will issue a controlled copy of the ROTC in accordance with the [NNSA/NSO letter to NDEP dated April 13, 2000](#).

5.1.5.1 ROTC Numbering

To help ensure consistency in ROTC development, DOE approved a numbering system for all ROTC documents in August 2004. The sequential number of an ROTC will be preceded by the document number of the document the ROTC is modifying. For instance, the third ROTC issued to modify the document numbered DOE/NV--XXX will be numbered DOE/NV--XXX ROTC-3.

5.1.5.2 ROTC Issuance Process

To issue an ROTC, follow these steps:

Step 1. The contractor works with the DOE/DoD AL/Manager to develop a final draft of the proposed ROTC (i.e., it is ready for transmission to NDEP) and obtain TIRP review and approval of the draft ROTC.

Step 2. The contractor sends the draft ROTC electronically to the FFACO Support Group (FFACO@nv.doe.gov) for review. The email will indicate the associated DOE/DoD

AL/Manager. Any attachments should be sent with the email, which should state that paper copies of the attachments are being delivered to the FFACO Support Group.

Step 3. The FFACO Support Group reviews the draft ROTC and works with the contractor to resolve any issues or comments.

Step 4. Once the FFACO Support Group has completed its review, it performs the following:

- Enters the ROTC number.
- Has the DOE/DoD AL/Manager and EM OAM sign the ROTC.
- Sends the ROTC to NDEP for approval and signature (via email or fax).
- Drafts the DOE/DoD submittal letter using the appropriate template for ROTC distribution/submittal.

Step 5. The FFACO Support Group forwards the submittal letter to the originating contractor for distribution of the signed controlled copy of the ROTC, including distribution to the Public Reading Facilities (PRFs) and the Office of Scientific and Technical Information (OSTI). The originating contractor makes distribution in accordance with the original document distribution (final and NDEP-approved) (agreement resulting from the [FFACO meeting dated February 11, 1998](#)). The ROTC is transmitted to the PRFs and OSTI per Section 5.1.6.

5.1.5.2.1 ROTC Submittal to NDEP Flowchart

Figure 5-3 provides a detailed flowchart for the issuance of ROTC submittals to NDEP.

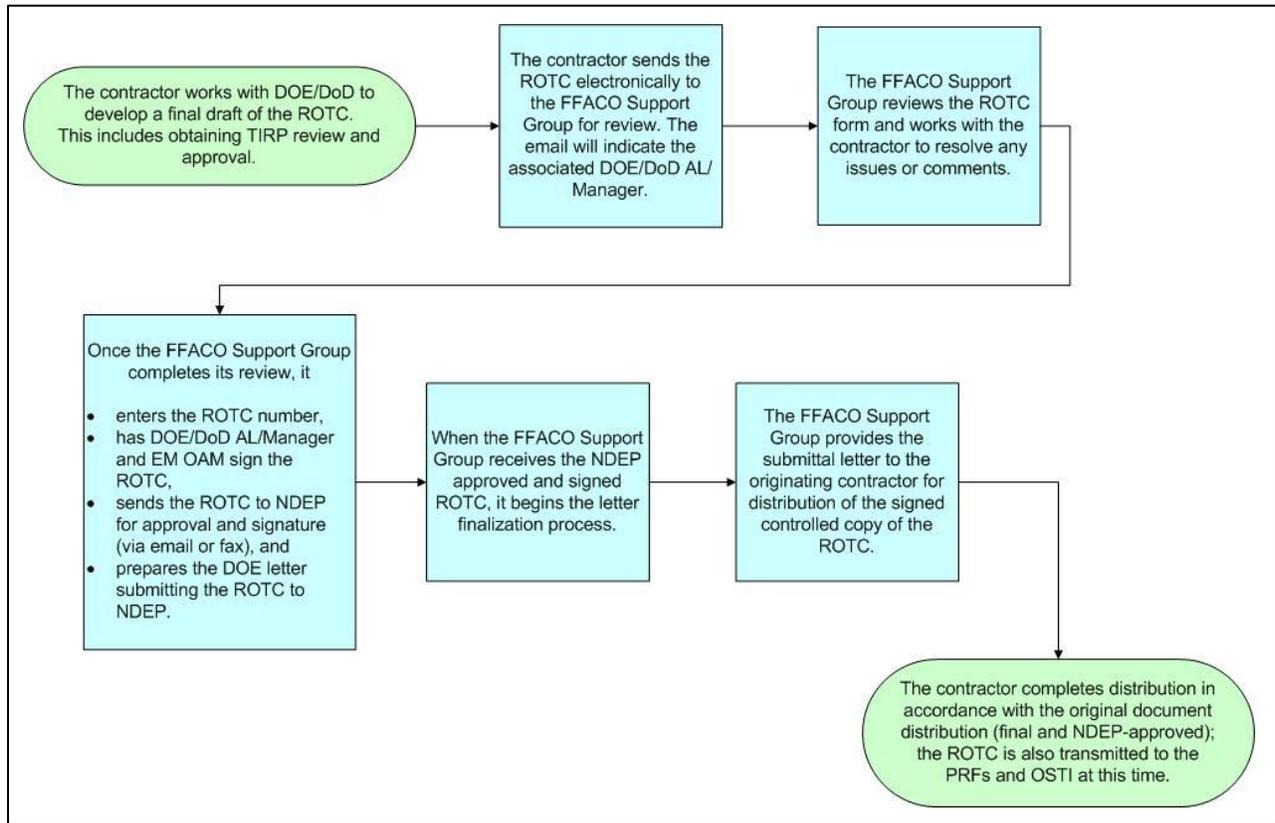


Figure 5-3
ROTC Submittal to NDEP

5.1.5.3 Distribution of Addenda and Errata Sheets

All addenda and errata sheets require TIRP approval and a review by the FFACO Support Group before distribution. After receipt of the TIRP review, the distribution must proceed as follows:

Step 1: It is suggested that DOE and/or DoD obtain verbal NDEP concurrence before the addenda or errata are finalized.

Step 2: The FFACO Support Group prepares the submittal letter for distribution of copies and forwards the letter to the originating contractor.

Step 3: The FFACO Support Group provides the submittal letter to the originating contractor for distribution with the document. Distribution will be made in accordance with the original NDEP approved document.

Step 4: The originating contractor distributes the letter to the PRFs and OSTI per Section 5.1.6.

5.1.6 Distribution of NDEP-Approved Documents to the PRFs and OSTI

Per Part XVII.3 of the FFACO, DOE supports two PRFs, one in northern Nevada and one in southern Nevada. After NDEP officially notifies DOE/DoD that a document is approved, the document is transmitted to the PRFs and OSTI. The FFACO Support Group prepares a submittal letter to the PRFs using the appropriate FFACO letter template located on the FFACO website. [Attachment C](#) provides the current Library Distribution List. The current Library Distribution List is also available on the FFACO website. The final, signed submittal letter is then given to the authoring contractor of the document for appropriate distribution.

All NDEP-approved FFACO documents must be submitted to OSTI. Each contractor has a specific point of contact who loads documents to OSTI. A final approved document that does not have closure in place as the closure strategy is submitted by the authoring contractor to OSTI and the PRFs at the same time via the aforementioned PRF letter. A closure document recommending closure in place as the closure strategy is sent by the authoring contractor to the PRFs when the final document is sent to NDEP for approval; this affords the public the required 30-day review period to comment on the document. If the closure document is approved by NDEP with no required changes, it is unnecessary for the authoring contractor to send the document again to the PRFs. Because the final approved document must still be uploaded to the OSTI database, once approval from NDEP is received, the following process will be followed to submit the document to OSTI:

Step 1. The FFACO Support Group notifies the authoring contractor by email (see [Attachment D](#)) that the document has been approved and should now be submitted to OSTI.

Step 2. The authoring contractor's OSTI point of contact posts the document on the OSTI website.

Step 3. Once the authoring contractor completes Step 2, the authoring contractor will notify the FFACO Support Group by email that the posting/distribution is complete.

Step 4. The FFACO Support Group posts the email from the authoring contractor to the FFACO database as record.

5.2 Milestones

A milestone, as defined in Part IV.30 of the FFACO, is “an important or critical event, goal, task, and/or activity that must occur in order to achieve the objective(s) for that corrective action unit.” Typically, the milestone is tied to the submittal of a document, such as a CAIP, CADD, CAP, SAFER Plan, or CR. However, it can also be tied to an activity such as the start of well drilling. Milestones have established deadline dates for when the milestones are due to be delivered to NDEP (Part IV.21 of the FFACO). Failure to meet a deadline may result in assessment of fines and penalties by NDEP against DOE or DoD (see Section 5.3). It is important to note that only milestones between NDEP and DOE/DoD are considered FFACO milestones.

5.2.1 Milestone Completion

Upon satisfactory completion of a milestone, NDEP will issue a Notice of Completion, per Part XXV.1 of the FFACO. If a document was submitted to fulfill a milestone, NDEP will determine whether the document is

- approved,
- approved with comments,
- disapproved with comments, or
- substantially deficient (see Section 5.2.1.1).

When a document also completes the corrective action for a given CAU (i.e., a CR or CADD/CR), NDEP will also issue a Notice of Completion for the CAU, thereby approving the CAU’s transfer to Appendix IV of the FFACO, Closed Corrective Action Units, in accordance with Part XXV.2 of the FFACO.

Please note that UGTA interim milestones are not “approved” by NDEP; these milestones will only receive a Notice of Completion stating that the milestone was satisfied.

5.2.1.1 Substantially Deficient

NDEP can find document submittals to be substantially deficient. The three criteria NDEP uses to identify substantially deficient milestone submittals are as follows:

- An element (i.e., a numbered section), or the content of an element required in the agreed-upon document outlines, is missing.

- The NDEP review comments on a final document that NDEP approved with comments were not incorporated in a subsequent version, and/or the document uses work products prepared for the scope of work that NDEP has previously determined to be so lacking that they are factually nonexistent.
- The document contains technical deficiencies that render the entire document severely flawed.

If a milestone is found substantially deficient, NDEP will issue a Notice of Deficiency, citing the deficiencies of the milestone submittal. The DOE or DoD will have 21 calendar days from receipt of the Notice of Deficiency to resubmit or complete the milestone submittal (the period may be extended past 21 days at the discretion of NDEP).

If the submittal is still found to be substantially deficient by NDEP, NDEP can assess penalties from the date the Notice of Deficiency was received by the affected agency (see Section 5.3).

5.2.2 Milestone Extensions

Per Part X of the FFACO, NDEP has the option of extending a milestone deadline upon the receipt of a timely, written request by DOE or DoD. A letter requesting a deadline extension must include the following:

- The milestone proposed for extension (Part X.1.a)
- The length of extension sought (Part X.1.b)
- The good cause(s) for the extension (Part X.1.c)
- All related schedule impacts (Part X.1.d)

NDEP is required to respond in writing to a request for an extension within 30 calendar days of the request. NDEP can approve the extension for the time requested, approve the extension with a different extension duration than requested, or deny the request. If NDEP chooses to approve the extension but with a different date than the one requested, or denies the extension, NDEP will include a statement justifying its decision in its response to the extension request.

5.2.2.1 Good Cause Defined

Part X.2 of the FFACO defines good cause for an extension as follows:

- An event listed under Force Majeure in Part XXII of the FFACO (e.g., natural disasters that impact the availability of materials or labor, restraint by a court order, or a strike or labor dispute out of the Agreement party's control).
- A delay caused by or that will most likely be caused by the extension of another, interrelated milestone.

- Any other event or series of events mutually agreed to by DOE and/or DoD and NDEP as constituting good cause.

5.3 Missed Milestones

If DOE or DoD misses an established milestone, NDEP may assess penalties.

If a milestone is allegedly missed, NDEP will provide written notice to the appropriate agency detailing the evidence supporting the case that a milestone was missed. The receiving agency then has 30 calendar days from receipt of the notice to respond to the allegations. If NDEP accepts the agency's defense, no penalty will be assessed. However, if NDEP rejects the defense, NDEP has the right to assess penalties starting from the date the milestone was missed. If the DOE or DoD defense is rejected, the agency may appeal per Section IX.2 of the FFACO.

5.3.1 Stipulated Penalties

The penalties for a missed or substantially deficient milestone are as follows:

- \$5,000 for the first week or part thereof
- \$10,000 for the second week or part thereof
- \$15,000 for each successive week or part thereof

6.0 Use Restrictions

Sites closed using the SAFER or complex process may require the establishment of URs to ensure the protection of human health, safety, and the environment. Two types of URs can be established: FFACO URs and Administrative URs. FFACO URs are established at CASs where the “Industrial Area” exposure scenario (continuous industrial use of a site) is used to calculate final action levels (FALs). FFACO URs require warning signs to be posted at the perimeter corners of the CAS. Additionally, URs may be instituted at sites where contamination is below regulatory limits, but other concerns related to human health, safety, and the environment still warrant their establishment. Other protective measures (fences, landfill boundary monuments, and polychlorinated biphenyl [PCB] or radiation postings) may also be implemented at FFACO URs. Specific guidance has been developed for documenting and posting FFACO URs. Administrative URs are established at sites where the “Remote Work Area” or “Occasional Use Area” exposure scenarios are used to calculate FALs. The above exposure scenarios assume non-continuous and occasional work activities at the site. Administrative URs prevent future, more intensive land use (e.g., change in land use scenario). Administrative URs do not require onsite postings or other physical barriers and do not require periodic inspections.

6.1 Administrative URs

Administrative URs differ from FFACO URs in that they do not require onsite postings (i.e., signs) or other physical barriers (e.g., fencing, monuments), and they do not require periodic inspections (see Section 6.2 of the [Industrial Sites Project Establishment of Final Action Levels, Rev. 0, DOE/NV--1107](#)).

Administrative URs are applicable to sites where the “Remote Work Area” or “Occasional Use Area” land use scenarios are used to calculate a FAL. An Administrative UR is used in these scenarios to protect workers from future work activities that could cause an exposure exceeding that used in the calculation of the FAL (e.g., in the event a building is later planned at the location, changing the land use to the “Industrial Area”). This Administrative UR establishes the exposure assumption used in the FAL calculation as the exposure limits for the UR. Any proposed activity within this use-restricted area that potentially causes an exposure exceeding the exposure limits requires NDEP approval.

All requirements in the remainder of Section 6.0 apply to both FFACO and Administrative URs except for Section 6.4, Posting Requirements.

6.2 Documenting a UR

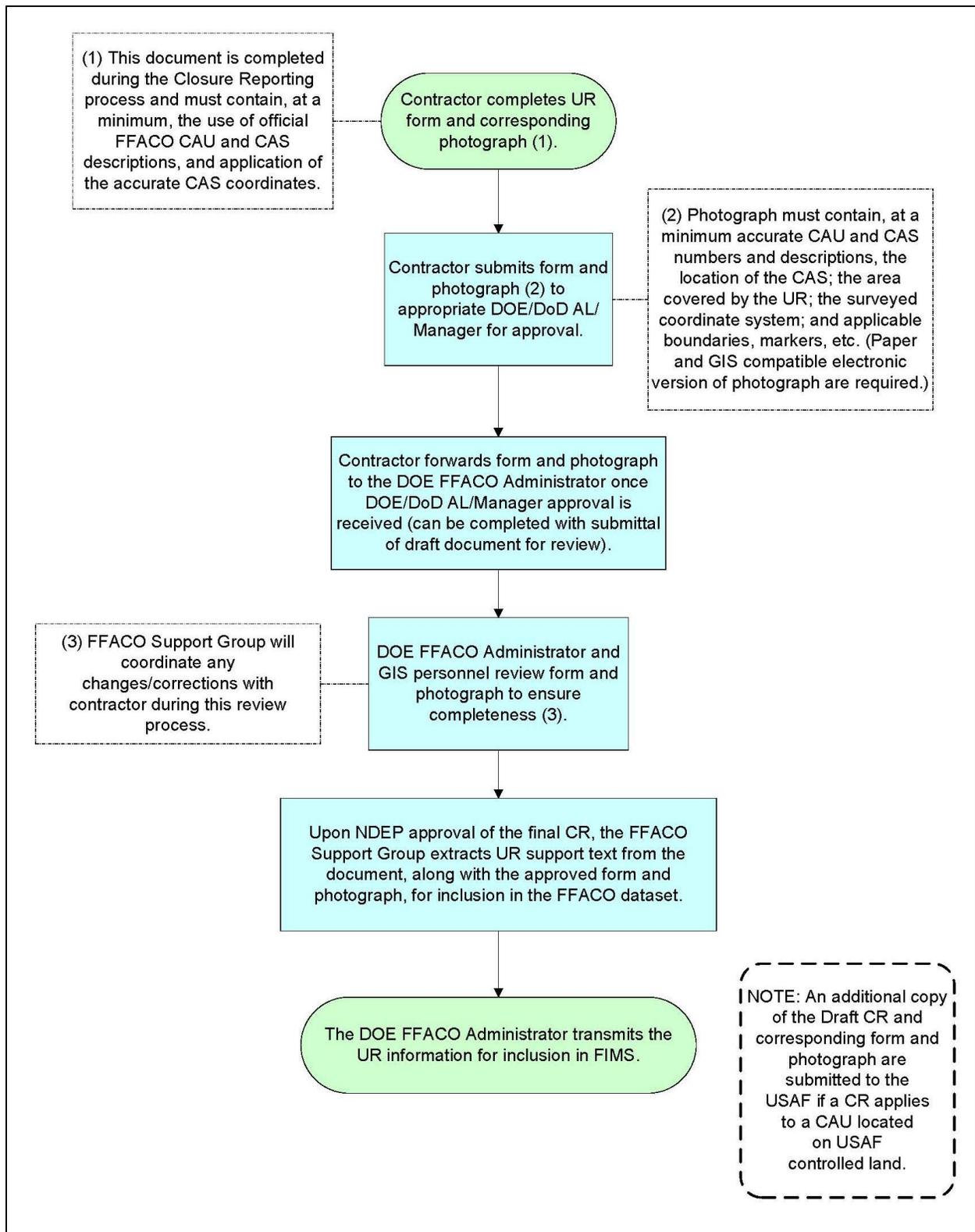
The closure of a CAU that includes a CAS or CASs where contamination above action levels has been left in place is required to include a UR form and an aerial photograph with coordinates of the UR. The form and the aerial photograph are the official records documenting sites where contamination remains in place after closure. The DOE, the Bureau of Land Management (BLM), and USAF will maintain UR records for as long as the land is under their jurisdiction. Consequently, the documentation must be complete, accurate, and self-explanatory. The form and photo are filed, as appropriate, in the management and operating contractor's Geographic Information Systems (M&O GIS), the FFACO database, the DOE CAU/CAS files, the BLM, and the USAF GIS files. Prior to March 2013, the Facility Information Management System (FIMS) was used to record all FFACO URs. In response to a request from NNSA/NFO, NDEP concurred with the transfer of UR information for all sites closed under the FFACO from FIMS into the M&O GIS which is maintained by the M&O contractor on [March 22, 2013](#).

6.3 Documentation Process

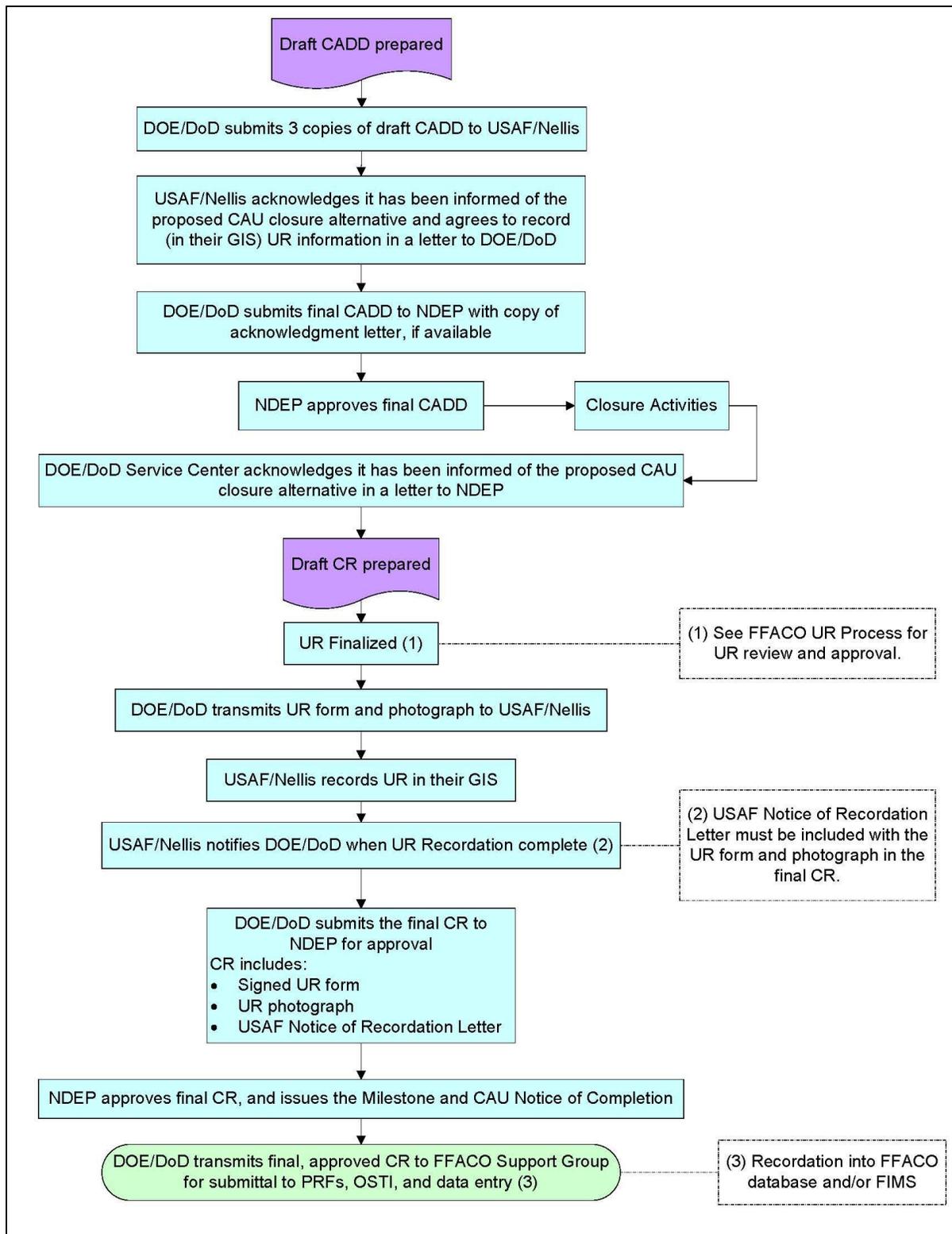
The UR documentation process begins with the preparation of a UR form and aerial photograph (see Sections 6.3.1 and 6.3.2) for each CAS (see [Attachment E](#)) by the appropriate contractor during the development of the draft CR.

The UR form and aerial photograph are then submitted to the DOE/DoD AL/Manager. Once the DOE/DoD AL/Manager approves the UR form and aerial photograph, they will be submitted by the relevant contractor to the DOE FFACO Administrator (this submittal can be made in the review copy of the draft CR). The DOE FFACO Administrator will review the form and aerial photograph with GIS personnel for completeness and accuracy, and will provide any comments to the DOE/DoD AL/Manager and the originating contractor.

Once NDEP approves the final CR, the FFACO Support Group extracts UR support text from the appropriate document, and the approved UR form and aerial photograph for inclusion in the FFACO dataset. The DOE FFACO Administrator transmits the UR information for inclusion in M&O GIS. If the given CAU/CAS is on USAF and/or BLM land, an additional copy is sent to the USAF Environmental Management (EM) Office or the BLM for inclusion in the USAF/BLM GIS. The M&O GIS and BLM/USAF GIS submittal processes are documented in Figures 6-1 and 6-2, respectively. The USAF recordation process was approved by NDEP via a [March 3, 1998, letter to NNSA/NSO](#).



**Figure 6-1
FFACO Use Restriction Process**



**Figure 6-2
USAF Recordation Process**

6.3.1 UR Form Requirements

The current approved UR form can be found in [Attachment E](#) and on the “FFACO, Modifications, Policies and Guidance” page under “Use Restrictions” on the FFACO website. Information for completing the UR form can be found in the closure document. NDEP-approved changes to URs may require a new UR form to be developed (which will require an ROTC to the closure document). The appropriate DOE/DoD contractor will ensure complete and accurate information is provided on the UR form using the following instructions:

CAU Number/Description. Enter the CAU number and name as listed in the FFACO.

Applicable CAS Number/Description. Enter the CAS number and name as listed in the FFACO (a separate UR form must be completed for each CAS).

Contact (DOE AL or DoD Manager). Enter the name of the DOE/DoD AL/Manager, followed by the Activity name (i.e., Soils, Industrial Sites [EM or Defense Program (DP)], or UGTA).

Physical Description

– **Surveyed Area of UR (Universal Transverse Mercator [UTM], Zone 11, North American Datum of 1983 [NAD 83], meters).** Enter the coordinates for the area of the UR providing coordinates in a clockwise manner beginning at the most southeast coordinate. Six lines are provided on the form; if you need additional lines, you must contact the FFACO Support Group for assistance with the form.

– **Depth.** Enter the depths included in the UR. If only subsurface contamination is present, the UR may not include the surface but restrict excavation or drilling at some depth. If only surface contamination is present, the UR may be limited to the surface down to a specific depth.

– **Survey Source.** Enter the data source that the UR coordinates are stored in (e.g., Global Positioning System [GPS], GIS).

Basis for UR(s)

– **Summary Statement.** Write a summary statement that includes the reason for the UR; type of UR (i.e., FFACO or Administrative); and limitations imposed (e.g., exposures greater than 50 hours per year, surface activities are permitted but no penetrations greater than 2 feet [ft] are allowed).

– **Contaminants Table.** Complete the contaminants table, including CAU number and CAS number and title, ensuring that all the maximum detected concentrations of site contaminants are listed. Six lines are provided on the form; if you need additional lines, you must contact the FFACO Support Group for assistance with the form.

Site Controls. Enter site controls (e.g., fencing, signs, postings, monuments) that are required as part of the UR.

*****Duplicate Physical Description and Basis for UR sections are provided for both FFACO and Administrative URs, and should be populated accordingly.***

UR Maintenance Requirements

– **Description.** Describe requirements for establishing administrative controls and maintaining the UR including entering required information into M&O GIS, the USAF or BLM GIS system, and the FFACO database.

– **Inspection/Maintenance Frequency.** Describe the current frequency of inspection/maintenance requirements (quarterly, semiannual, annual, biennial). Provisional changes to the requirements such as changes in monitoring based on time or condition would require that a new UR form be submitted (which will require an ROTC to the closure document). Describe the type of inspection performed (e.g., visual inspections to ensure signs are in place and readable, no evidence of surface intrusion is visible, and/or fencing in good condition and requires no repairs).

When filling out the form, do not edit the approved UR language that reads as follows:

The future use of any land related to this Corrective Action Unit (CAU), as described by the above surveyed location, is restricted from any DOE or Air Force activity that may alter or modify the containment control as approved by the state and identified in the CAU CR or other CAU documentation unless appropriate concurrence is obtained in advance.

Comments. Enter pertinent comments that may be necessary to clarify information not accounted for above.

Submitted by. Leave space for the DOE/DoD AL/Manager to sign.

Date. Enter the date the form is completed.

*****All fields must be complete before the UR may be distributed for external draft review. Any exception must be approved by the appropriate DO/DoD AL/Manager.***

6.3.2 UR Aerial Photograph Requirements

An example of an UR aerial photograph can be found in [Attachment E](#). At a minimum, aerial photographs have the following requirements:

- Include applicable CAU and CAS numbers and descriptions.
- Identify each CAS location.
- Indicate areas covered by the UR and provide geographical coordinates for these areas.
- Identify boundary marker (e.g., fencing, monuments, posts/signs).
- Indicate the coordinate system used.
- Be verified by a GIS Engineer.

6.4 UR Posting Process

This section does not apply to Administrative URs (Section 6.1).

The purpose of the UR posting process is to establish a standardized method for posting FFACO CASs with established URs.

6.4.1 Introduction

This process is applicable to all FFACO CASs where a UR covering all or part of the CAS has been established as part of a corrective action. The final, approved posting requirements must be included with the formal UR in the CAU CR and in the appropriate databases.

Posting decisions must consider all applicable state and federal laws, and the FFACO.

6.4.2 Responsibilities

The following personnel are responsible for implementing all or part of the UR posting process:

- The contractor PM is responsible for proposing recommendations in regard to posting and other protective measures to the DOE/DoD AL/Manager.
- The DOE/DoD AL/Manager is responsible for reviewing the contractor PM's recommendations and approving.
- The DOE/DoD AL/Manager is responsible for reviewing the UR form and, if in agreement with the recommendations, the DOE/DoD AL/Manager signs and dates it. The DOE/DoD AL/Manager is also responsible for modifying the results of this guidance to accommodate special circumstances.

6.4.3 Process

Section 6.4.3.1 presents postings that are applicable to all FFACO URs. Section 6.4.3.2 presents additional protective measures that may be implemented in addition to those presented in Section 6.4.3.1. Figure 6-3 presents a decision flowchart for formulating posting recommendations.

- After the need for a UR has been established, the contractor will use this guidance to design UR posting requirements (Figure 6-4).

Note: The existence of more than one waste stream may require consideration of multiple paths from the flowchart.

- The contractor will recommend a posting scenario to the DOE/DoD AL/Manager.

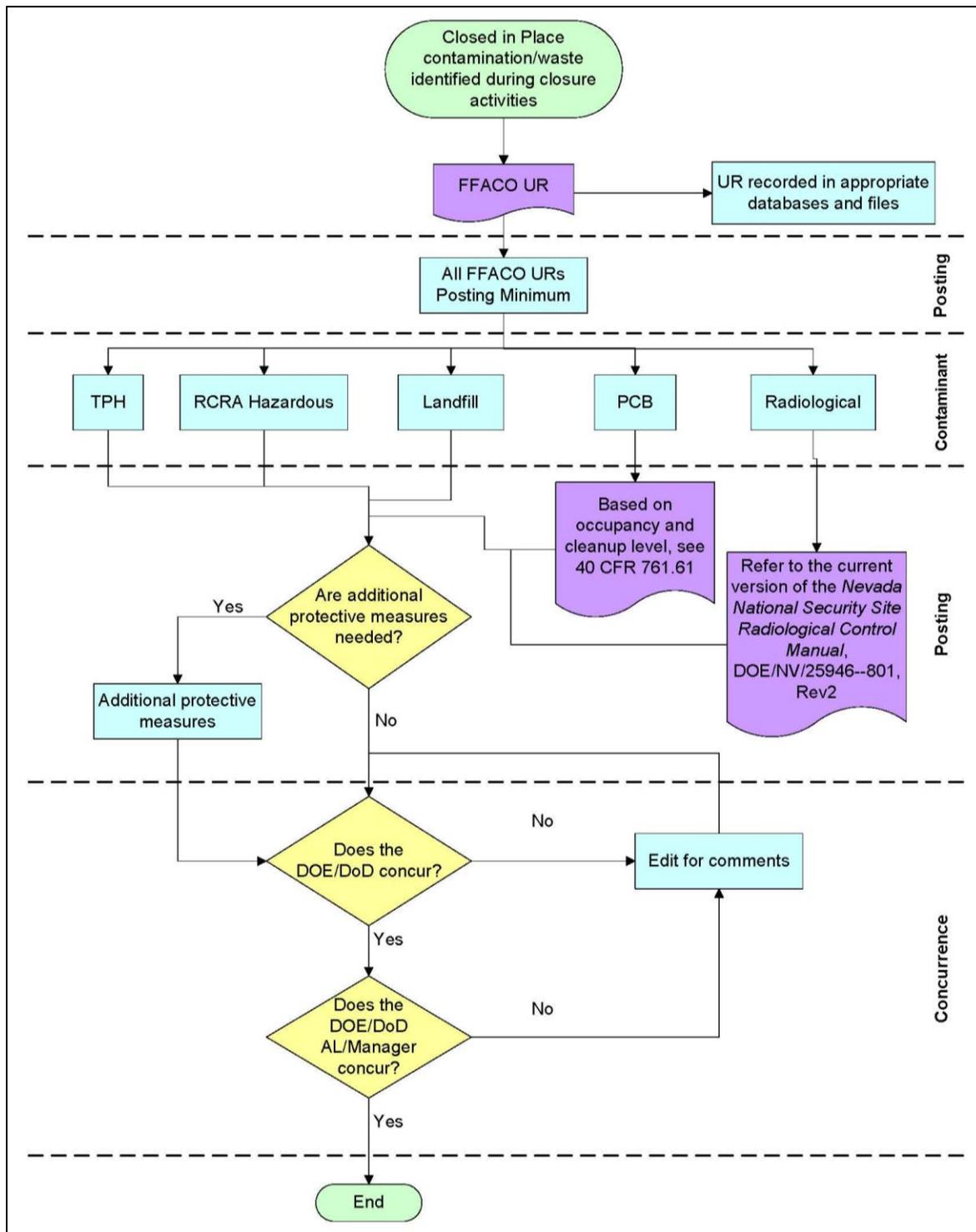


Figure 6-3
Flowchart of Use Restriction Posting Process

- The contractor will propose a PCM method and duration to the DOE/DoD AL/Manager. Post-closure monitoring is conducted to ensure the integrity of the signage and any other closure methods.
- The DOE/DoD AL/Manager will establish the final posting requirements based on the contractor recommendation, the type of contamination, and/or the contaminated media.
- If special circumstances apply to the UR, the DOE/DoD AL/Manager may make an exception per Section 6.3.4.
- Posting decisions will be documented in the final CR for the CAU.

Note: A UR or Post-closure Monitoring is not considered final until it is documented in the CAU CR, and NDEP has approved the CR's UR and Post-closure Monitoring Plan.

6.4.3.1 All FFACO URs - Posting Minimum

This section applies to all URs defined during the FFACO closure process. Although the closure considerations and remediation processes may be very different for the waste streams, the general guidance for posting, a closed-in-place site is the same. These are the minimum requirements:

- Warning signs will be posted at the perimeter corners or midpoint on the sides.
- Warning signs will be spaced no more than once every 200 ft around the perimeter of the UR.
- If the UR is in an active area or around buildings/structures, warning signs will be visibly posted within 10 ft of the most likely entrance/egress to the area as designated by the DOE/DoD AL/Manager.
- The design and content of the warning signs is as follows and as shown in Figure 6-4:
 - Sign dimensions are 2 ft high by 3 ft wide and background color white.
 - First word is "WARNING" in 3-inch (in.) red letters
 - Balance of text is 1.5-in. black letters
 - General status of the material/contamination closed in place (e.g., surface, subsurface)
 - Site identification and CAS description (e.g., FFACO Site CAU 342/CAS 23-56-01, Former Mercury Fire Training Pit)
 - Warning against unauthorized activities in the UR area
 - Point of contact and telephone number (i.e., Real Estate Services, 295-2528)

WARNING

UNDERGROUND CONTAMINATION
FFACO SITE CAU **XXX**/CAS **YY-YY-YY**
CAS **YY-YY-YY** description (name)

No activities that may alter or modify the containment control including excavation or disturbance of material, are permitted in this area without U.S. Government permission

Before working in this area
Contact Real Estate Services at 295-2528

Figure 6-4
Sample Warning Sign

- If the UR perimeter is less than 100 ft, posting requirements must be proposed by the DOE/DoD AL/Manager.
- Posting requirements may be modified by the DOE/DoD AL/Manager based on site-specific, local, and topographic conditions of the UR area.

6.4.3.2 Additional Protective Measures

This section may be implemented if the DOE/DoD AL/Manager determines the need for increased protection is warranted. Additional protective measures will be implemented in addition to the minimum posting requirements outlined in Section 6.4.3.1.

- Additional protective measures may include, but are not limited to, enclosing the UR area by a fence. The fence design may range from, but is not limited to, simple post-and-wire-strand fencing to chain-link fencing of variable height.
- Landfill boundaries may be marked with either monuments in low-traffic areas or pads at grade in high-traffic areas. Each monument will be a truncated square pyramid extending no less than 3 ft above grade. A typical precast monument is 6 ft high; the side length is 10 in. at the top and 2 ft at the base of the monument. The pads at grade will be

approximately 2 by 2 ft square and 1 ft deep. Brass markers will be affixed to the monuments and pads.

- The following text will be stamped on the brass markers (use acronyms to reduce verbiage):
 - Site identification (i.e., CAU/CAS numbers)
 - Coordinates of the marker (i.e., Northing, Easting, and Elevation in UTM, Zone 11, NAD 83, meters)
 - Responsible organization (i.e., DOE or DoD)

6.4.3.3 Polychlorinated Biphenyls

In addition to FFACO and any other applicable posting and closure requirements, the UR process for sites containing PCBs will include the following:

- Closure and post-closure requirements are dictated by *Title 40 of the Code of Federal Regulations* (CFR) , Part 761.61 and outlined in the [Guidance Booklet on Storage and Disposal of Polychlorinated Biphenyl \(PCB\) Waste, DOE/EH-413-9914, Attachment F](#) provides an example of this information as extracted from the November 1999 version of the guidance. The most current version of the CFR and DOE guidance must be referenced before application.
- The period for the PCM will be defined in the NDEP-approved CR. This monitoring will ensure the integrity of the signage and fencing and comply with any applicable state and federal laws and the approved CR.

6.4.3.4 Radiation

In addition to FFACO and any other applicable posting and closure requirements, the UR process for sites containing radioactive contamination will include the following:

- Posting requirements for radiation controlled areas as documented in the [Nevada National Security Site Radiological Control Manual, DOE/NV/25946--801, Rev. 2](#). See Chapter 2, Part 3, “Posting.” The most current version of the manual must be referenced before application.
- The period for the PCM will be defined in the NDEP-approved CR. This monitoring will ensure the integrity of the signage and fencing and comply with any applicable state and federal laws and the approved CR.

6.4.4 Exceptions to the UR Posting Process

The posting requirements may be modified by the DOE/DoD AL/Manager to accommodate any special circumstances. The modification will be recorded in the FFACO database and included in the final, approved CAU CR.

7.0 Modifications

Additions or changes to the FFACO (including the creation of new CAUs, CASs, or milestones) or FFACO data require a modification to be processed using the process detailed below. Any questions about modifications should be directed to the DOE FFACO Administrator or the FFACO Support Group.

7.1 The Modification Process

The following process is used to propose, review, approve, and enter modifications. Generally, the modifications will be to

- create or delete milestones, CAUs, and/or CASs;
- change the description or other key characteristics of a CAU or CAS;
- promote a CAU to Appendix III;
- change the remediation process; and/or
- move a CAS to a different CAU (if the CAU is in Appendix III).

7.1.1 Step One: Initiating the Modification

The modification process begins with the proposal of a modification by the DOE/DoD AL/Manager, or the M&O or Characterization contractors. The contractor prepares the modification on a Modification Form (see [Attachment G](#)). Any documentation needed to support the review of the proposed modification should be attached to the form.

The Modification Form and backup information are submitted to the FFACO Support Group for review. The FFACO Support Group ensures that the form and proposal conform to all of the requirements of the FFACO, especially the level of approval required (see Section 7.1.1.1).

Initiators of modifications should also ensure that their proposals conform to any specific guidance in Section 7.1.1.2.

7.1.1.1 Level of Approval

Modifications have two levels of approval based on the FFACO and official guidance agreed to by the signatories. A modification can be finalized through the approval of the relevant federal agency (i.e., DOE or DoD), or it needs to be formally proposed to NDEP for approval.

The following actions require NDEP approval:

- Establish, extend, or delete a milestone.
- Create, delete, or move a CAS in Appendix III.

- Create, delete, or move a CAU in Appendix III.
- Change a CAU or CAS description in Appendix III.
- Transfer a CAS into CAU 4000 or CAU 5000.
- Promote or move a CAU or CAS into Appendix III or IV.

The following actions do not require NDEP approval:

- Create, delete, or move a CAS in Appendix II.
- Create, delete, or move a CAU in Appendix II.
- Change a CAU or CAS description in Appendix II.

7.1.1.2 Other Considerations for Specific Types of Modifications

Specific guidance exists for certain types of modifications. Initiators need to conform with this guidance as appropriate.

7.1.1.2.1 CAU Promotions/Demotions

Per an agreement at the [FFACO meeting on May 14, 1997](#), DOE/DoD will review all CASs within a CAU being proposed for promotion to Appendix III. The CAUs should be reviewed to address any CAS grouping concerns NDEP may have.

Per an agreement at a meeting on February 6, 2002, a CAS can be demoted from Appendix III to Appendix II with proper justification ([NNSA/NSO letter to NDEP dated February 21, 2002](#)). See [Attachment H, Justification for CAS Demotion from Appendix III to Appendix II Form](#).

7.1.1.2.2 New CAS and Housekeeping Waste

Newly discovered sites that contain only litter, construction debris, and sanitary waste, and that contain no hazardous waste components will be addressed using DOE's zonal cleanup program. (Work will be performed per the agreement reached at the [FFACO meeting on February 11, 1998](#)).

7.1.1.2.3 Approval of a New CAS

The DOE/DoD does not need NDEP concurrence to create new CASs in Appendix II of the FFACO, per a [January 3, 2002, letter from NDEP to NNSA/NSO](#).

7.1.1.2.4 Transferring CASs to CAU 4000, CAU 5000, and Appendix III Sites Requiring No Further Action

CASs found to have no remaining contamination because of natural attenuation or historical corrective actions should be transferred to CAU 4000, No Further Action Sites. Sites that were or

are active, do not exist, or are duplicates of other existing CASs should be transferred to CAU 5000, Archived Corrective Action Sites.

Appendix III CASs that have been identified as requiring no further action may be detailed in the CADD (instead of being transferred to CAU 4000). This allows the CAS to remain in the original CAU and be tracked throughout the remaining documentation process. The CAS would then be transferred to Appendix IV as part of the original CAU following the CAU closure process.

7.1.1.2.5 Archived CAUs

CAUs that no longer contain CASs, because they have been transferred to other CAUs, should be proposed to NDEP for archiving. If approved, archived CAUs are moved to Appendix IV and have “Archived -” added at the start of the CAU description. For example, the description for CAU 488 before archiving was Davis Gun Site - Mellan (TTR); after archiving, the description became Archived - Davis Gun Site - Mellan (TTR).

7.1.1.2.6 UGTA Out-Year Milestones

Per Part XII.5 of the FFACO for the UGTA Activity, at all times there may be

- one milestone with an associated due date or deadline beyond FY+2 for the completion of the UGTA Activity, and
- one other milestone with an associated due date or deadline besides the completion milestone beyond the FY+2 window.

7.1.2 Step Two: DOE/DoD Review and Approval

The FFACO Support Group routes a proposed modification to the appropriate contractor PM for approval. If the PM concurs with the change, he/she signs the form. If the PM does not agree, he/she can choose not to sign the form. However, as long as the modification is supported by either of the contractor (M&O or Characterization) PMs, it will be presented to the DOE/DoD AL/Manager for review. If the DOE/DoD AL/Manager approves the change, one of two things happens:

- If the change *does not* require NDEP approval (Section 7.1.1.1), the modification is considered approved, and Step Five occurs (see Section 7.1.5).
- If the change *does* require NDEP approval (Section 7.1.1.1), the modification is considered ready for proposal to NDEP (see Section 7.1.3).

7.1.3 Step Three: Proposal to NDEP

Once a modification requiring NDEP approval (Section 7.1.1.1) is signed off by DOE/DoD, it is routed to TIRP for review. Once it is approved by TIRP, it is proposed to NDEP. Proposals can be transmitted to NDEP via any of the following:

- A letter from DOE/DoD to NDEP
- Presentation at the annual FFACO meeting
- As part of the FY+2 milestone submittal in April

7.1.3.1 Transmittal of Modifications from DOE/DoD to NDEP via Letter

After DOE/DoD approves a modification, the FFACO Support Group develops a letter requesting the modification. At a minimum, the letter will include the following:

- The CAU and relevant CAS numbers and descriptions in the subject
- A description and justification of the modification requested
- Any backup data, information, figures, and tables necessary for NDEP to make a decision on the proposed change

Once the DOE/DoD AL/Manager is satisfied with the letter, the letter will be forwarded to DOE EM administrative staff for issuance.

7.1.3.2 Transmittal of Modifications from DOE/DoD to NDEP via an Annual Meeting

Modifications that need NDEP approval but do not have urgency or are proposed around the time of an annual meeting can be included as part of the meeting per Part XII.3 of the FFACO. Modifications to be proposed at an annual meeting must be approved by the DOE/DoD AL/Manager, include all supporting documentation, and be submitted to the FFACO Support Group no later than 10 business days before the annual meeting. Contractors will receive an email reminding them of this deadline.

NDEP has the standard 30-day review time for modifications proposed during the annual meeting.

7.1.3.3 Transmittal of Modifications from DOE/DoD to NDEP via the FY+2 Milestone Submittal

Per Part XII.4.b of the FFACO, DOE/DoD is required to propose milestones for the FY+2 time frame at the annual meeting. The FY+2 milestones will be tied to target and planning funding

levels, as appropriate. If DOE/DoD chooses to include milestones above the target funding level, the milestones supported by the additional funding should be clearly designated. The final list of FY+2 milestones should be set by NDEP within 30 days of request.

7.1.4 Step Four: Approval or Rejection by NDEP

NDEP has 30 calendar days from the date it receives a request for modification via any of the methods described above to accept or reject the proposed modification. NDEP notifies the DOE/DoD of approval or rejection in writing.

7.1.5 Step Five: Update of the FFACO Dataset

When the FFACO Support Group receives a letter stating NDEP has approved a request for modification, the FFACO Support Group will update the FFACO dataset to reflect the change. Modifications that are approved by the DOE/DoD AL/Manager and do not require NDEP approval will be included in a handout that the FFACO Support Group prepares and distributes at the subsequent annual meeting. If a proposed modification fails to receive necessary approval, no change will be made to the FFACO dataset.

7.2 Data and Milestone Status

The changes listed below are made to the FFACO dataset outside the modification process detailed in Section 7.1. These changes are entered into the FFACO dataset when received by the FFACO Support Group.

- Electronic copies and data associated with FFACO-related correspondence
- Status of established milestones (i.e., the submittal, approval, and Notices of Completion associated with milestones)
- Approved UR photos, forms, and coordinates
- New CAS coordinates
- Final documents linked to milestones

8.0 Public Involvement

Appendix V of the FFACO identifies the Public Involvement Plan, which provides information about how the public can learn about, and become involved in, the DOE EM Operations Activity.

8.1 Nevada Site Specific Advisory Board (NSSAB)

One of the elements defined in the Public Involvement Plan is the establishment of the NSSAB, which consists of Nevada residents and liaisons who are responsible for representing specific organizations such as county and state governments. The NSSAB provides a mechanism for individuals or organizations to explore public participation opportunities that focus on topics such as environmental restoration, transportation, waste disposal, and budget. Those wishing to become aware or informed of these topics may attend NSSAB meetings without actively participating in discussions or question-and-answer sessions. Anyone with a keen interest in specific activities or projects may take a more active role. The NSSAB holds meetings every other month. For more information, interested parties should visit <http://nv.energy.gov/nssab/>.

8.1.1 FFACO Public Notification of Corrective Actions

Any decision document that recommends closure in place for a specific EM CAU is sent to the PRFs 30 days in advance of final publication. In addition, a notice is included in NSSAB full board meeting agendas. The 30-day advance notice allows members of the public to request a copy of—and comment on—the specific EM document recommending closure in place before NDEP approval of the document.

Attachment A

Functional Categories and Associated Numbers

Functional Categories and Associated Numbers
(Page 1 of 2)

Description	Number
Aboveground Storage Tank	1
Underground Storage Tank	2
Sewage Lagoon	3
Septic Tank	4
Leachfield	5
Muckpile	6
Decon Pad	7
Waste Dump	8
Mud Pit	9
Shaker Plant	10
Steam Cleaning Facility	11
Boiler	12
Generator	13
Transformer	14
Sanitary Landfill	15
Construction Waste Landfill	16
Hazardous Waste Site	17
Chemical Storage	18
Waste Disposal Site	19
Injection Well	20
Waste Disposal Trench	21
Barrels/Drums/Buckets/Cans	22
Rad Contamination Area	23
Batteries	24
Oil/Fuel Spills	25
Lead	26
PCB	27
Tunnel Portal Area	28
Abandoned Chemicals	29
Drillhole	30
Vent Hole	31
Cable Hole	32
Building	33
Magazine/Bunker	34
Burn Cage/Pit	35
GCP Well	36
Sump (Cellar)	37
Tunnel Pond	38
Pu Contaminated Soils	39

Functional Categories and Associated Numbers
(Page 2 of 2)

Description	Number
Radioactive Waste Management Site	40
D&D Facility	41
Conditional Release Storage	42
Epoxy Tar Site	43
Other Spill Site	44
Craters	45
Compressed Gas Cylinders	46
Other Ponds/Lagoons	47
Tunnel	48
Shaft	49
Miscellaneous Trash and Debris	50
Underground Discharge Point	51
DU Surface Debris	52
Sludge Burial Pit	53
Solid Propellant Burn Site	54
Buried Ordnance Site	55
Fire Training Area	56
Underground Test/Detonation Cavity	57
Drill Cuttings Debris	58
Septic System	59
Surface Release Point	60
Ordnance Site	61
Contaminated Soil Site	62
Decon Pad Discharge Piping	63
Decon Area	64
Housekeeping Waste	98
Other	99
Facility	00

Attachment B

Alphanumeric TTR CAS Abbreviations

Alphanumeric TTR CAS Abbreviations

General Area Abbreviations

TA	Target Area
RG	Range
03	Area 3
09	Area 9
NAFR	Nevada Test and Training Range (formerly Nellis Air Force Range)
71	Range 71

Specific Area Abbreviations

01CS	Clean Slate I
02CS	Clean Slate II
03CS	Clean Slate III
0356	Building number in Area 3
05PT	Five Points Intersection
0952	Possible Building number in Area 9
36	Gate 36E
A301	Landfill Cell A3-1: Area 3, Sequential number
AL	Antelope Lake
B2	Bunker 2
BA	Burn Area
CR	Cactus Repeater
CS	Cactus Spring Ranch
DT	Double Tracks
FN	Abbreviation is unknown
GR	Unknown, presumed to be grazing because it was used for an area at Cactus Springs Ranch that housed animals that had grazed in a radioactive field
HS	H-Site Road
L2	Launcher 2
MG	Magazine
ML	Main Lake
MN	Mellan
NL	NEDS Lake
PL	Pedro Lake Target
RC	Roller Coaster
RD24	Radar 24 Site
RV	Ralston Valley Road
SE	Southeast (e.g., 09SE = Southeast of Area 9)
SWXX	Septic Waste System, Sequential number

Attachment C

Library Distribution List

The following distribution list should appear as an appendix in every FFACO document:

Library Distribution List

	<u>Copies</u>
U.S. Department of Energy Office of Scientific and Technical Information P.O. Box 62 Oak Ridge, TN 37831-0062	1 (Uncontrolled, electronic copy)
Southern Nevada Public Reading Facility c/o Nuclear Testing Archive P.O. Box 98521, M/S 400 Las Vegas, NV 89193-8521	2 (Uncontrolled, electronic copies)
Manager, Northern Nevada FFACO Public Reading Facility c/o Nevada State Library & Archives 100 N. Stewart St. Carson City, NV 89701-4285	1 (Uncontrolled, electronic copy)

Attachment D

Example OSTI Notification Email

To: Contractor OSTI Point of Contact/Document Production/Central Files

From: FFACO

Subject: Notification of Approved Document to be Posted to OSTI

The *Federal Facility Agreement and Consent Order* (FFACO) requires that the *Enter Document Name* be available to the public through the FFACO Public Reading Facilities. The electronic copies were previously transmitted to the Public Reading Facility in accordance with the FFACO Agreement on *Enter date document sent to the PRF*. The final document was approved by NDEP without comments on *Enter date document was approved by NDEP*.

Electronic copies should be distributed as follows:

1. Office of Scientific and Technical Information (OSTI): one electronic copy for posting to OSTI

Please respond to this email as verification to the FFACO Group that posting/distribution is complete.

Attachment E
Use Restriction Form

Use Restriction Information

CAU Number/Description: _____

Applicable CAS Number/Description: _____

Contact (DOE/DoD AL/Manager): _____

FFACO Use Restriction Physical Description:

Surveyed Area (UTM, Zone 11, NAD 83, meters):

UR Points	Northing	Easting
Southeast		

Depth: _____

Survey Source (GPS, GIS, etc.): _____

Basis for FFACO UR(s):

Summary Statement: _____

Contaminants Table:

Maximum Concentration of Contaminants for CAU XXX CAS XX-XX-XX, Title			
Constituent	Maximum Concentration	Action Level	Units

Site Controls: _____

Administrative Use Restriction Physical Description*:

Surveyed Area (UTM, Zone 11, NAD 83, meters):

UR Points	Northing	Easting
Southeast		

Depth: _____

Survey Source (GPS, GIS, etc.): _____

*Coordinates for the Administrative Use Restriction exclude the area defined by the FFACO Use Restriction coordinates.

Basis for Administrative UR(s):

Summary Statement: _____

Contaminants Table:

Maximum Concentration of Contaminants for CAU XXX CAS XX-XX-XX, Title			
Constituent	Maximum Concentration	Action Level	Units

Site Controls: _____

UR Maintenance Requirements (applies to both FFACO and Administrative UR(s) if Administrative UR exists):

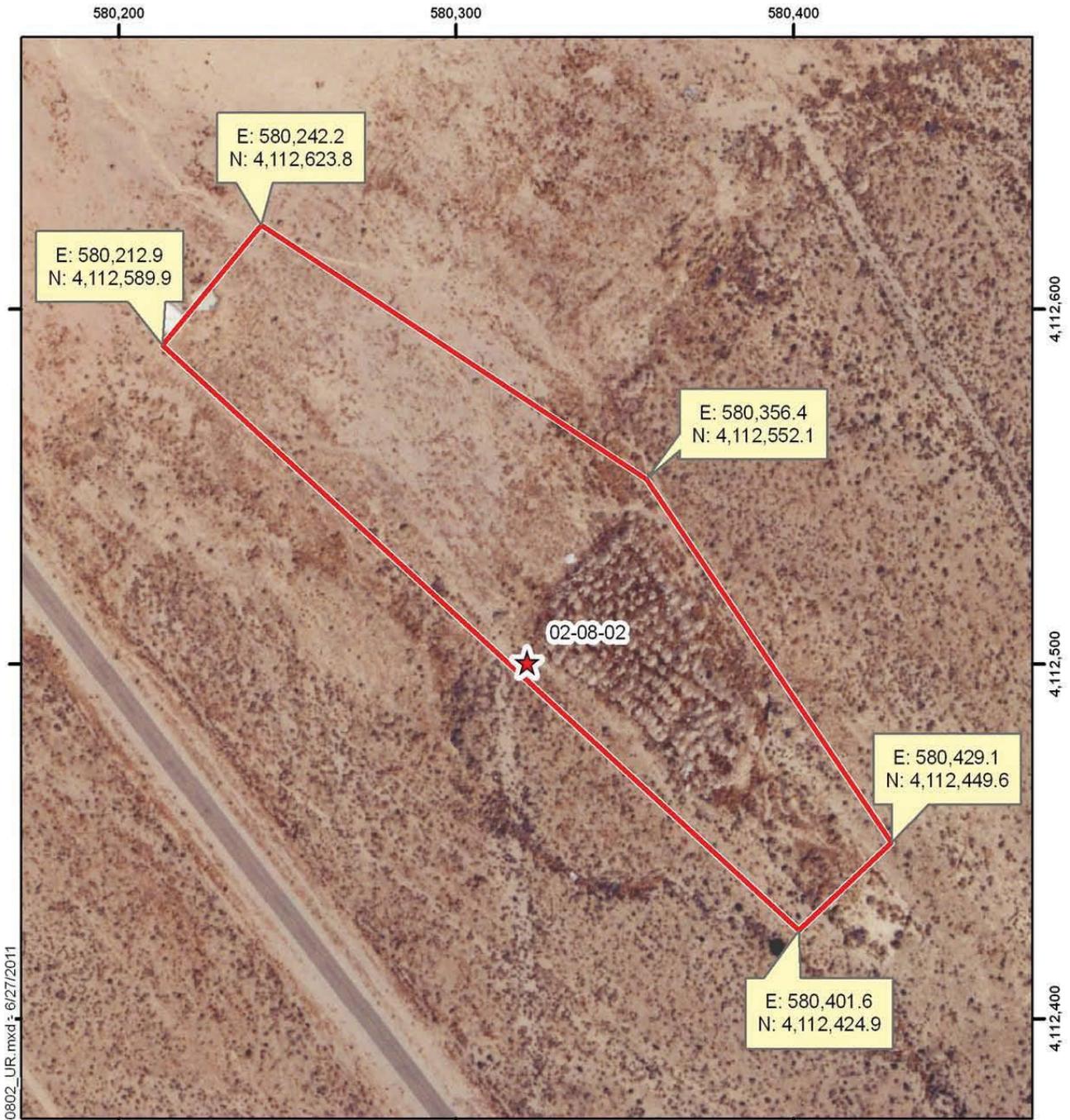
Description: _____

Inspection/Maintenance Frequency: _____

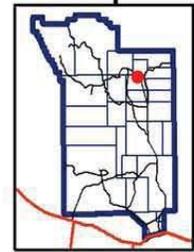
The future use of any land related to this Corrective Action Unit (CAU), as described by the above surveyed location, is restricted from any DOE or Air Force activity that may alter or modify the containment control as approved by the state and identified in the CAU CR or other CAU documentation unless appropriate concurrence is obtained in advance.

Comments: _____

Submitted By: _____ Date: _____

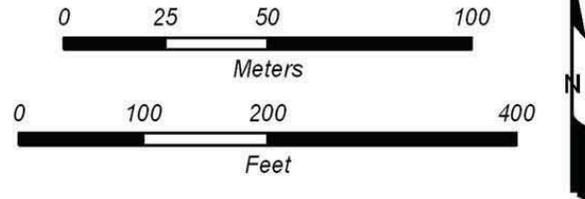


H:\561\CADD_CR\561_CADD\CR_020802_UR.mxd; 6/27/2011



Source: N-I GIS, 2011; RSL, 1999

- Explanation**
-  CAS Marker
 -  UR Boundary



UNCONTROLLED When Printed

Coordinate System: NAD 1927 UTM Zone 11N, Meters

Attachment F
PCB Posting Example

PCB Posting Example

The following table was extracted from the *Guidance Booklet on Storage and Disposal of Polychlorinated Biphenyl (PCB) Waste*, DOE/EH-413-9914, November 1999, and is consistent with 40 CFR 761.61. See 40 CFR 761.3 for complete definitions of the “Types of PCB Remediation Wastes.”

The most recent version of the CFR and Guidance must be referenced before application.

Table of Cleanup Requirements for Non-liquid PCB Remediation Waste

Type of PCB Remediation Waste	Occupancy	Cleanup Level for PCBs	Condition
Bulk PCB Remediation Waste (soil, sediment, dredged materials, debris, muds, PCB sewage sludge, and industrial sludge)	High	#1 ppm	No further conditions
	High	>1 ppm and #10 ppm	Cap the site; deed restriction**
	Low	#25 ppm	Deed restriction**
	Low	>25 ppm and #50 ppm*	Fence the site with signs bearing M _L mark; deed restriction**
Non-porous Surface (smooth, unpainted solid surface that limits penetration of liquid with PCBs)	High	#10 µg/100 cm ²	No further conditions
	Low	<100 µg/100 cm ²	Deed restriction**
Porous Surfaces (a surface that allows PCBs to penetrate or pass into itself)	High	#1 ppm	No further conditions
	High	>1 ppm and #10 ppm	Cap the site; deed restriction**
	Low	#25 ppm	Deed restriction**
	Low	>25 ppm and #50 ppm*	Fence the site with signs bearing M _L mark; deed restriction**
	Low	>25 ppm and #100 ppm*	Cap the site; deed restriction**

Note: High-occupancy areas are areas occupied ≥840 hours/year (≥ average of 16.8 hours/week) for nonporous surfaces, and ≥335 hours/year (≥ average of 6.7 hours/week) for bulk PCB remediation waste and porous surfaces. All other areas are low-occupancy areas.

* Please note these options are exclusive of each other. That is, for a low-occupancy site with concentrations between >25 ppm and ≤100 ppm, the site can be either fenced with signs and a use restriction, or capped and a use restriction.

** Please note for FFAO, a use restriction is used instead of a deed restriction.

Attachment G
Modification Form

**Modification Form
FFACO Database Modification Request**

Modification Initiated By: _____ **Modification Date:** _____

Activity:

Industrial Sites: EM DP DoD Soils UGTA Offsites

CAU Owner: DOE DoD DOE/DoD LM

FFACO Appendix: II III IV

CAU Number(s): Description(s)

CAS Number(s): Description(s)

Description of Modifications:

Justification:

Contractor Approval (Characterization): _____ Date: _____

Contractor Approval (M&O): _____ Date: _____

DOE Approval: _____ Date: _____

Classification Officer Approval _____ Date: _____

NDEP Approval Required: Yes No If Yes: Immediate Letter Next FFACO Meeting

Compliance with FFACO: Reviewed by _____ Date: _____

Change Control No.: _____

Attachment H

**Justification for CAU Demotion
from Appendix III to Appendix II Form**

JUSTIFICATION FOR CAU DEMOTION FROM APPENDIX III TO APPENDIX II

CAU
CAS

SECTION I: RATIONALE FOR DEMOTION

This CAU requires changes to cost and / or schedule based on the following determinations:

- Technology is not currently available to characterize the site.
- Conceptual model has changed significantly.
- Contaminants defined for the CAS have changed significantly.
- Site cannot be concurrently characterized with other CASs in the CAU.
- Technical attributes of the site differ from the original CAS description.
- Volume of contaminated media to be characterized is considerably larger than original estimates.
- Site should be transferred
- Other: Provide a description of "other."

SECTION II: BACKGROUND INFORMATION

Provide background information, and specifically discuss the new information that justifies the rationale presented in Section I.

SECTION III: TECHNICAL JUSTIFICATION

Provide concise statements that justify the rationale that should be directly tied to the background information provided in Section II.

SECTION IV: FUNDING IMPACTS, OPPORTUNITIES

This section should include data on the relationship between the technical justification and the final funding output that resulted in the necessity to transfer the CAU from Appendix III to Appendix II.

SECTION V: RECOMMENDATIONS

Provide relevant FFACO recommendations and CAU disposition information. Also include the life-cycle baseline and schedule implications for the transfer.

Obligations and Commitments
Federal Facility Agreement and Consent Order (FFACO)
(March 15, 1996, Final Version)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
Deadlines			
DOE/DoD	Deadlines may be established for the submittal of work plans, CADDs, CAPs, and completion of corrective actions within the FY+2 planning window. If actions fall outside of the planning window, interim deadlines may be established. (UGTA deadlines may also be established for activities other than these plans.) XII.4, p. 18		
DOE/DoD	Provide NDEP with requested existing quality-assured data from sampling, tests, and other activities. XIII.1, p. 20	Within 30 calendar days from request	
DOE/DoD	Provide NDEP with budgets and costs for activities covered by the Agreement. VII.3, p. 12	Within 60 calendar days from NDEP request	
DOE	Provide NDEP with a written response to requests for information related to the Agreement for which DOE has determined that a "need to know" is not justified. The response shall be complete and specific as to the information that is nondisclosable. XXI.1, p. 30	Within 10 business days	
Additional deadline descriptions listed in the "Corrective Actions/Milestones" section			
Obligations Tied to Agreement Signing			
DOE/DoD	Provide copies of this Agreement to all prime contractors performing work related to the Agreement. I.3.a, p. 2	Within 30 calendar days of the effective date of the Agreement	

* The obligations in this table are abridged. Please refer to the FFACO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
Parties	Notify each other in writing of the names and addresses of their respective Agreement coordinators, corrective action coordinators, and principal support staff. XVI.5, p. 27	Within 30 calendar days of the effective date of the Agreement	
Parties	Meet and concur on assignment of CAUs to appendices. Establish due dates and deadlines for Appendix III. Following this meeting, the quarterly meeting process will begin. XII.1, p. 17	Within 60 calendar days of the effective date of the Agreement	
DOE/DoD	Provide NDEP with draft version of Appendix V, Public Involvement Plan. V.6, p. 10	Within 60 calendar days of the effective date of the Agreement	
Annual			
DOE	Make a deposit with NDEP sufficient to meet obligation for oversight of DOE activities. XV.4, p. 23	Within 30 calendar days after October 1 of each year	
Parties	Establish deadlines for CAUs in Appendix III based on DOE/DoD's proposed due dates and deadlines (FY+2). XII.4.b, p. 19	By March 15 of each year	
NDEP	Project the cost differences between previous year's estimated costs/fees and the actual costs/fees. XV.6, p. 24	By April 1 of each year	
NDEP	Reconcile all expenditures for the prior state fiscal year. XV.6, p. 24	By September 1 of each year	
DOE	Provide NDEP with the portions of the ER report that relate to conditions or activities undertaken by DOE/NV. VII.5, p. 12	Within 30 calendar days following submittal of annual environmental restoration report to Congress	

* The obligations in this table are abridged. Please refer to the FFACO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
NDEP	Determine the base obligation of DOE/DoD for NDEP to oversee activities related to this Agreement and transmit them to DOE/DoD in a timely manner. Estimates of base obligations for the four succeeding out-years shall also be provided. XV.3, p. 23	Prior to the start of each state fiscal year	
DoD	Pay NDEP oversight fees through and in accordance with DSMOA/CA. XV.5, p. 23	Annually	
DOE/DoD	Provide NDEP with briefings on proposed budget requests. Provide NDEP with the opportunity to review, comment, and make recommendations on the budget request. XV.8, p. 24	Prior to submission of DOE's FY+2 budget and DoD's five-year planning budget to the respective headquarters	
DOE	Revise FY+2 budget requests (to the degree that is appropriate) to address or resolve NDEP's comments. Notify headquarters of any unresolved NDEP comments. XV.9, p. 24	Annually	
DOE/HQ	Forward budget requests to the Office of Management and Budget for consideration, along with any unresolved NDEP comments. XV.10, p. 24	Annually	
DoD/HQ	Forward FY+2 budget requests to the DUSDES. XV.11, p. 25	Annually	
DOE/DoD	Provide NDEP with sections of the President's budget Request to Congress pertaining to the Facilities' environmental management programs. NDEP shall also be notified of any differences between the proposed FY+1 budget requests and the actual requests in the President's budget. XV.13, p. 25	In a timely manner	
Parties	Evaluate the need for additional Public Reading Rooms. XVII.3, p. 28	Annually	
Additional obligations listed in the "Reports/Quarterly Meetings" and "Funding" sections			

* The obligations in this table are abridged. Please refer to the FFAO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
Reports and Quarterly Meetings			
DOE/DoD	Submit a written or electronic progress report that contains: (1) sufficient detail to clearly and accurately convey the manner and extent to which the requirements and schedules are being met, (2) cost and schedule variances exceeding the established thresholds, and (3) actions and issues of concern. VII.1, VII.2, p. 12	Within 30 calendar days following the end of every calendar quarter following the Agreement date	
DOE/DoD	Provide NDEP with a three-month advance schedule of field activities. VII.4, p. 12	Within 30 calendar days following the end of every calendar quarter following the Agreement date	
DOE/DoD	Provide NDEP a two-week field schedule with specific dates for field activities. VII.4, p. 12	Biweekly [starting February 15, 1996]	
Parties	Attempt to resolve issues during quarterly meetings; resolutions will be documented. Discuss unresolved issues at, or before, the next meeting. VII.6, p. 13	At quarterly meetings	
Parties	Review and update Appendices II through IV: add newly identified sites, incorporate approved changes to milestones, and transfer CAUs to appropriate appendices. XII.3, p. 18	All quarterly meetings	
Parties	Reconsider established priorities, milestones, etc., for current FY, taking into account the AFP. XII.4.a, p. 18	First quarter meeting	
Parties	Initiate a process to establish milestones for FY+2 and associated due dates and deadlines for FY+2. XII.4.b, p. 19	Second quarter meeting	
Parties	Seek input from the public and the CAB on proposed priorities. XIII.4.b, p. 19	Subsequent to developing proposed FY+2 prioritization	

* The obligations in this table are abridged. Please refer to the FFACO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
DOE/DoD	List prioritized CAUs with their associated due dates and deadlines in Appendix III. XII.4.b, p. 19	Following NDEP establishment of deadlines	
Parties	Reconsider established priorities, milestones, etc., for FY+1 considering the President's budget. XII.4.c, p. 19	Fourth quarter meeting	
Additional Quarterly activities listed in the "Annual" section			
Corrective Actions and Milestones			
DOE/DoD	Prioritize CAUs based, in part, on risk, priorities of the parties, and stakeholder input. XII.2, p. 17		
Parties	List CAUs prioritized for corrective action activities along with milestones and associated due dates and deadlines in Appendix III. V.4, p. 10		
DOE/DoD	Deadlines may be established for the submittal of work plans, CADDs, CAPs, and completion of corrective actions within the FY+2 planning window. If actions fall outside of the planning window, interim deadlines may be established. (UGTA deadlines may also be established for activities other than these plans.) XII.4, p. 18		
DOE/NDEP	The UGTA subproject may have two, out-year milestones: one for the completion of the project and a rolling milestone between FY+2 and the completion date. XII.5, p. 19		
DOE/DoD	Submit a CADD to NDEP. NDEP may seek public comment. XII.7, p. 20	After completion of a CAI	

* The obligations in this table are abridged. Please refer to the FFACO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
Party corrective action coordinators	Oversee day-to-day implementation of the Agreement. <p align="right">XVI.6, p. 27</p>		
NDEP corrective action coordinators	May take samples, make sure that work is done in accordance with approved plans, observe all activities, take photographs, and review all records, files, and documents related to the Agreement. <p align="right">XVI.9, p. 27</p>		
DOE/DoD corrective action coordinators	May implement modifications to the field work, but must notify NDEP. <p align="right">XVI.10, p. 28</p>		
NDEP	Transmit Notice of Completion to DOE/DoD. <p align="right">XII.9, p. 20</p>	Upon NDEP approval of corrective action	
NDEP	Issue Notice of Completion. <p align="right">XXV.1, p. 33</p>	Upon satisfactory completion of a CAU milestone	
DOE/DoD	Transfer closed CAUs to Appendix IV. Appendix IV shall also identify CASS/CAUs requiring long-term monitoring. <p align="right">XXV.2, p. 33; XII.9, p. 20</p>	After receipt of an NOC from NDEP	
NDEP	Provide written notice to DOE/DoD to terminate this Agreement. <p align="right">XXV.3, p. 33</p>	After terms and conditions of this Agreement are satisfactorily met	
Plans and Documents			
DOE/DoD	Establish timeframes for submittal, activities, and tasks in the work plans and/or site-specific work plans. <p align="right">XII.6, p. 20</p>		
DOE/DoD	Identify timeframes for initial availability of quality-assured sampling and monitoring results in work plans or CAPs. <p align="right">XIII.1, p. 20</p>		

* The obligations in this table are abridged. Please refer to the FFAO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
DOE/DoD	Forward documents to NDEP offices located in both Carson City and Las Vegas. <p align="right">XVI.1, p. 26</p>	In a manner designed to be received by the due date	
Parties	Formal requests by any party to the Agreement of any other party to the Agreement shall be in writing. <p align="right">XVI.1, p. 26</p>		
Parties	Send documents to agreement coordinators. <p align="right">XVI.2-4, p. 26</p>		
NDEP	Provide approval, with or without comments, on the submittal; disapproval with comments; or a timeframe within which comments shall be provided. <p align="right">XII.8, p. 20</p>	Within 30 calendar days from receipt of a submittal	
Informal Dispute Resolution			
Parties	Make reasonable efforts to informally resolve outstanding issues and/or disputes. Meetings will occur as often as necessary. <p align="right">IX.1, p. 15</p>		
Parties	If resolution of issues cannot be reached at the agreement coordinator level, efforts may be elevated to immediate supervisor or agency executive level. <p align="right">IX.1, p. 15</p>		

* The obligations in this table are abridged. Please refer to the FFACO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
Extensions			
Parties	Specify in writing requests for deadline extensions: deadline that is sought to be extended, length of extension sought, the good cause(s) for the extension, and any and all related schedules or deadlines that would be affected by granting the extension. X.1, p. 16		
NDEP	Grant reasonable extension of a deadline if NDEP determines good cause exists. X.1, p. 16	Upon receipt of a timely written request by DOE/DoD	
NDEP	Grant or deny a written request, in writing, for an extension and include an explanation of the basis for its decision. X.3, X.5, p. 17	Within 30 calendar days from receipt of the written request	
Sampling and Access			
Parties	Provide other parties, upon request, split or duplicate samples of all collected samples. Requesting parties responsible for sample management and analysis. XIII.2, p. 20		
NDEP	May enter CAU work sites and DOE/DoD locations with or without advance notification if NDEP personnel have appropriate safety and security clearances. XIV.1, p. 21		
NDEP	Notify DOE/DoD before entering contractor locations to review applicable records and information. XIV.1, p. 21		
NDEP	May inspect and have copies, subject to certain restrictions, of any and all records, files, photographs, documents, and writings pertaining to activities subject to the Agreement. XIII.3, p. 21		

* The obligations in this table are abridged. Please refer to the FFACO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
NDEP	Sign a release of liability. XIV.2, p. 21	Before making an unescorted visit to a restricted site	
DOE/DoD	Allow reasonable access to NDEP personnel with appropriate certifications and clearances. XIV.3, p. 21		
DOE/DoD	State reasons for denying NDEP personnel access to any of the CAU locations. XIV.3, p. 21	Within 1 business day	
Classified Information			
DOE/DoD	Not claim analytical data, except data determined to be classified for reasons of National Security, as confidential. XXI.2, p. 31		
DOE/DoD	Identify any materials determined to be exempt from public disclosure. XXI.3, p. 31	Upon submission to NDEP	
NDEP	Notify appropriate party of intent to release information. XXI.3, p. 31	Within 30 days of intent to release information	
Public Involvement and Records			
DOE/DoD	Ensure that the Public Involvement Plan contains a mechanism for continually providing information and actively seeking public input. XVII.1, p. 28		
Parties	Establish Public Reading Rooms in northern and southern Nevada, and ensure that the reading rooms contain information as specified in this Agreement. XVII.3, XVII.4, p. 28-29		
DOE/DoD	Establish and maintain a compilation of all work plans, data reports, numerical model reports, monitoring results, and other writings generated pursuant to this Agreement. XVIII.1, p. 29		

* The obligations in this table are abridged. Please refer to the FFAO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
DOE/DoD	Make information listed in XVIII.1 available to NDEP upon request. XVIII.2, p. 29		
NDEP	Maintain the Administrative Record. XVIII.2, p. 29		
DOE/DoD	Notify NDEP of proposed destruction or disposal of documents or records specified in XVIII.1. XVIII.3, p. 30	At least 180 calendar days prior to action	
Funding			
DOE/DoD	Make available scope of work and budgets to be used in implementing the terms of this Agreement to NDEP. Upon NDEP request, provide to NDEP the identity, scope of work, and Agreement-related restoration budgets of any entity or agency performing work related to this agreement. XV.7, p. 24		
NDEP	Will not release confidential budget information to anyone prior to submission of the President's Budget Request to Congress. XV.12, p. 25		
Parties	Review level of available appropriated funds and the estimated cost of meeting all obligations and requirements of this Agreement. XV.14, p. 25		
DOE/DoD	Transmit to NDEP for its review a proposed alternate schedule and level of activities in the event Congress fails to appropriate the requested funds. XV.14, p. 25		
Additional funding obligations listed in the "Annual" section			
Appeal Process			

* The obligations in this table are abridged. Please refer to the FFAO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
DOE/DoD	Request an informal administrative hearing if they wish to appeal an NDEP determination. IX.2.a, p. 15	Within 15 calendar days following receipt of written NDEP determination	
DOE/DoD	Provide NDEP with a witness list, list of exhibits, and summary of evidence to be presented. IX.2.a, p. 15	7 calendar days prior to requested administrative hearing	
NDEP	Hold a DOE/DoD-requested administrative hearing. IX.2.a, p. 15	Within 30 calendar days of request for administrative hearing	
DOE/DoD	Submit an SEC Form #3 if DOE/DoD wishes to appeal the NDEP administrator's final determination. IX.2.b, p. 16	Within 20 calendar days following receipt of NDEP administrator's final decision	
NDEP	Conduct an SEC hearing at DOE/DoD's request. IX.2.c, p. 16	Within 20 calendar days after NDEP receipt of SEC Form #3	
Parties	May appeal the SEC decision by filing a petition for judicial review. IX.3, p. 16		
Force Majeure			
DOE/DoD	Provide verbal and written notification to the State agreement coordinator to assert a claim of Force Majeure. Failure to do so shall constitute a waiver of the right to dispute any denial of an extension request or assessment of stipulated penalties on the basis of the event giving rise to the Force Majeure. XXII.4, p. 32	After DOE/DoD becomes aware of the effect of an event on their ability to meet Agreement obligations	
NDEP	Transmit to DOE/DoD its written acceptance, acceptance in part, or rejection of a claim of force majeure. XXII.5, p. 32	Within 14 calendar days of receipt of written notice of claim	
Missed Deadlines and Stipulated Penalties			

* The obligations in this table are abridged. Please refer to the FFAO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
DOE/DoD	Incur stipulated penalties if an established deadline is missed. VIII.1, p. 13		
NDEP	Notify DOE/DoD in writing of any alleged failure to meet an established deadline. VIII.3, p. 13		
DOE/DoD	Supply evidence to NDEP for alleged defense on missed deadlines. VIII.3.a, p. 13	Within 30 calendar days from receipt of NDEP's written notice of a missed deadline, unless otherwise agreed	
NDEP	Issue Notice of Deficiency for substantially deficient milestones. VIII.3.b, p. 13		
DOE/DoD	If DOE/DoD accepts NDEP's Notice of Deficiency for a deadline, DOE/DoD can resubmit or complete the milestone for which the deadline was established. VIII.3.b, p. 13	Within 21 calendar days from receipt of NDEP's Notice of Deficiency, or longer as specified by NDEP	
NDEP	Suspend accrual of stipulated penalties during NDEP review process. VIII.4, p. 14	Any period in excess of 14 days	
DOE/DoD	Pay stipulated penalties for time determined to be deficient. Penalties are to be paid upon final determination of deficiency. VIII.4, p. 14		
DOE/DoD	Accrue interest if stipulated penalties are not paid. VIII.8, p. 14	30 calendar days after a stipulated penalty is due, unless parties agree otherwise	
NDEP/DoD	NDEP believes that DoD must pay interest on late stipulated penalties; DoD believes they are immune from paying interest. VIII.9, p. 15		
Access Agreements			

* The obligations in this table are abridged. Please refer to the FFACO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
DOE	Use the maximum extent of its influence and authority to obtain access agreements to property not owned by the Parties. XIV.4, p. 22		
DOE	Provide NDEP with a copy of any signed access agreements. XIV.4, p. 22	Within 10 calendar days of signing access agreements	
DOE	Use best efforts to obtain agreements providing that no conveyance of title, easement, or other interest in the property be consummated without provisions for continued operation of Agreement-related actions. XIV.5, XIV.5.a, p. 22		
Owners of property where Agreement-related installations are located	Notify DOE by certified mail of intent to convey any interest in the property (to be negotiated by DOE into access agreement). XIV.5.b, p. 22	Within 90 calendar days prior to conveyance of property	
DOE	Notify NDEP of provisions made for continued operations of Agreement-related installations. XIV.5.c, p. 22		
DOE	Provide NDEP with certified copies of agreements for continued operation of Agreement-related facilities. XIV.5.d, p. 22	Within 10 calendar days of execution of agreements concerning non-DOE property	

* The obligations in this table are abridged. Please refer to the FFAO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
Contractors			
DOE/DoD	Ensure that contractors conduct activities in conformance with the requirements of Agreement. I.3, p. 2		
DOE/DoD	Provide copies of the Agreement to all newly retained prime contractors. I.3.b, p. 2	Within 10 calendar days after retention of contractors	
DOE/DoD	Make copies of Agreement available to all other contractors and subcontractors retained to perform work under this Agreement. I.3.c, p. 2		
Additional obligations listed in the "Obligations tied to Agreement signing" section			
Conveyance of Ownership			
DOE/DoD	Provide notice of this Agreement (including appendices and amendments) to every successor in interest or any successor agency. I.2, p. 1	Prior to transfer of ownership or operation of real property	
DOE/DoD, their contractors, and subcontractors	No conveyance of title, easement, or other interest shall be consummated without provision for continued maintenance of Agreement-related installations. XIX.1, p. 30		
DOE/DoD	Notify NDEP of provisions for continued operation of Agreement-related installations prior to any proposed conveyance. XIX.2, p. 30	At least 120 calendar days prior to action	
As Required			
Parties	Notify each other if Agreement coordinators or corrective action coordinators change. XVI.8, p. 27	Within 10 calendar days following change	

* The obligations in this table are abridged. Please refer to the FFACO for the complete description.

Obligations and Commitments
(continued)

Responsible Party	Obligation*	Due Date, Deadline, or Timeframe	Date Completed
Parties	May propose amendments and modifications to the Agreement. XI.1, p. 17		
Parties	Modifications to Agreement must be in writing and signed by all parties. XI.3, p. 17		

* The obligations in this table are abridged. Please refer to the FFACO for the complete description.

**Minutes, FFACO Meeting
4th Quarter, FY 1996
August 15, 1996, Las Vegas**

ATTENDEES:

State of Nevada (NDEP): Paul Liebendorfer, Clint Case, Karen Beckley, Dean Mireau,
Jon Taylor, Clem Goewert, Harry van Drielen

Department of Energy (DOE): Steve Mellington, Dave Shafer, Patti Hall, Pete Sanders,
Clayton Barrow, Bobbie McClure, Bob Bangerter, Monica Sanchez, Sabine Curtis,
Frank Maxwell, Kevin Cabble, Tom Greene, Sheila Arceo, Jon Pickus, Pam Adams,
Barbara Deshler

Defense Special Weapons Agency (DSWA): Dave Bedsun, Wayne Griffin

These minutes are not meant to be a word for word description of the meeting but are meant to reasonably represent the positions of the parties present at the meeting.

Note: ## denotes a new action item; ** denotes a new agreement.

HANDOUTS:

- Agenda
- Summary of Agreements from January 25, May 30, and June 20, 1996 meetings
- Action Items from June 20, 1996 60-day meeting
- Appendix III milestone summary
- Proposed due dates for Appendix III milestones
- Proposed modifications to appendices
- Quarterly Field Report, July - September
- Generic DOE/NDEP document review process

REVIEW OF AGREEMENTS FROM JANUARY 25, MAY 30, AND JUNE 20, 1996 MEETINGS (ATTACHMENT I):

DOE proposed the following changes to the summary of agreements made during the last three Federal Facility Agreement and Consent Order (FFACO) meetings (*Attachment I*).

26. All agreed to use the existing well network on the NTS as much as possible to accomplish the UGTA corrective action strategy. In addition, all agreed that plume chasing would not be done. However, NDEP is concerned that the level of certainty they will want cannot be met by relying solely on existing wells (June 20, 1996).
27. All agreed to the following changes to paragraph 12 of section 3-2 of the Corrective Action Strategy: "Monitoring compliance with the CAU boundaries will be accomplished through measurement of appropriate physical and chemical parameters in wells within the modeled

region. Appropriate physical and chemical parameters remaining within the range of measurements used in the flow model will be an indication that the conditions have not significantly changed. Sensitivity analysis of parameters relevant to the groundwater gradient will indicate the extent that appropriate physical and chemical parameters can vary before the acceptable confidence limit for the model is exceeded (June 20, 1996).

- ** All agreed to add "However, NDEP is concerned that the level of certainty they will want cannot be met by relying solely on existing wells." to the end of item number 26 in the summary of agreements and to delete "gradient" from the last paragraph of section 3.2 in Appendix IV, Corrective Action Strategy.
- ** All agreed to sign the summary of agreements from the January 25, May 30, and June 20, 1996 FFACO meetings once the modifications to items 26 and 27 are incorporated.
- ## DOE will edit Appendix IV, the Corrective Action Strategy, by removing the word "gradient" from the last paragraph of section 3.2.

ACTION ITEMS FROM JUNE 20, 1996, 60-DAY MEETING (ATTACHMENT II):

1. DOE will list the agreements made by the parties during the January 25, 1996, the May 30, 1996, and the June 20, 1996 FFACO meetings and distribute to the parties for signature.
Complete. The agreements from the last three meetings were combined into one document. They were sent to the parties for review on July 15 and distributed as final on July 29. Items number 27 and 28 of attachment 1 (the list of agreements) were discussed at the August 15 meeting and changes interactively made (see discussion above). The parties signed the summary indicating that the agreements made during the last three FFACO meetings were acceptable.
2. DOE (Barrow) will review the procedures developed by DSWA for completing housekeeping Corrective Action Units (CAUs), to see if they are satisfactory for the DOE housekeeping work plan. The DOE work plan will be submitted to NDEP by June 28, 1996.
Complete. DOE will submit to NDEP the final version of the Housekeeping Work Plan after an IMD number is issued on August 16.

Liebendorfer stated that NDEP concurs on the process used to validate closed housekeeping sites. van Drielen is concerned that although the document is good, there may be problems with the quality of field decisions and the training of field personnel. Curtis replied that the plan incorporates van Drielen's and Mireau's comments to date. If there are additional comments, they need to be submitted in a formal manner because the document will be controlled.

3. NDEP will review the procedure for closing DSWA housekeeping CAUs and return informal comments to Bedsun by June 28, 1996. Formal comments will be returned if there are issues in the procedure that require it. DSWA will finalize their procedure by June 28, 1996.
Complete. See item number 2 above.
4. NDEP will send a formal response to DOE/DSWA about the closure status of the CAUs in Appendix IV by July 15, 1996.
On-going. NDEP sent a letter to DOE on July 15 approving the status of all the CASS/CAUs in Appendix IV except for those specifically noted in the letter. DOE sent a response detailing the conditions of the questioned Corrective Action Sites (CASS)/CAUs on August 1. DOE has not received a response from NDEP. See page 8, these minutes, for additional information.
5. NDEP will cross check the 10 landfill CAUs now in Appendix III with closure letters that state the landfills have been closed in accordance with approved closure plans. A letter will be distributed to the parties documenting whether closures are complete and that the CAUs can be moved to Appendix IV.
On-going. NDEP sent a letter on July 9 outlining the process for closing these CAUs. DOE responded on August 14 requesting that one landfill (CAS 03-16-01) be moved to Appendix II and that the other 11 be removed from under the FFACO and closed under existing approved work plans. See page 7, these minutes, for additional information.
6. DOE (Sanders) will meet with NDEP (van Drielen) to discuss the status of the landfill located in a crater. This site will remain in an inactive status and will be closed under solid waste regulations outside of this agreement.
On-going. DOE proposed that CAS (03-16-01) remain in CAU 43 and that the CAU be moved to Appendix II. The other CAS currently in the CAU will be removed and listed with the 10 other landfills proposed for removal from the FFACO. See page 7, these minutes, for additional information.
7. DOE (Barrow) will send additional documentation to NDEP on the cleanup status of 8 landfills that are now listed in Appendix II and have been requested by DOE as approved for closure. NDEP will review the information and formally determine the correct classification of the CAUs.
On-going. NDEP sent a letter to DOE on July 8 requesting additional documentation on the nature and extent of the contamination. DOE sent an August 14 letter to NDEP requesting that DOE/Environmental Restoration Division (ERD) assume responsibility for closing these CAUs, and that the CAUs remain in Appendix II until prioritized for activity.
8. Mellington will discuss the status and funding of the 8 landfills now in Appendix II with Environmental Protection Division (EPD) in the context of the current ERD organization.
Complete. See number 7 above.

9. DOE (Hall) will submit a letter to NDEP detailing a revised schedule for completion of the Public Involvement Plan (PIP). A new draft of the PIP will be submitted to NDEP around the end of July.

Complete. A new draft of the PIP was hand delivered to NDEP on August 7 but a formal submittal of a draft has not been made. DOE would like input from NDEP before another version is produced, because the document may need reorganization.

- ## At the request of DOE, NDEP and DOE will meet, possibly on the afternoon of August 15, to discuss the Public Involvement Plan. DOE will also send a copy of the draft PIP to Dave Bedsun.**

10. DOE (Hall) will send a letter to NDEP by June 28, 1996 listing which CAUs may have changes to milestones or status between the June 10, 1996 version of the appendices and the finalized Baseline. The letter will state that DOE would like a delay in the establishment of deadlines for these CAUs until baseline is complete in mid July.

Complete. DOE sent a letter to NDEP on July 2 requesting that deadlines not be established for the specific CAUs detailed in the letter because of upcoming changes in baseline. NDEP accepted the request in a July 9 letter and established deadlines for all other CAU milestones listed in Appendix III. DOE submitted proposed due dates for that did not have established deadlines on August 1.

NDEP sent a letter to DOE dated August 14 establishing milestone deadlines for the CAUs listed in the July 2 letter.

11. DOE will make a copy of the baseline available to NDEP when complete, approximately July 15, 1996.

Complete. DOE sent the baseline to NDEP on July 19, 1996.

Liebendorfer commented that he has noticed that the schedules in baseline do not necessarily match the proposed due dates and that is to be expected. The baseline schedule should be significantly shorter than the DOE proposed due dates to allow for schedule slips. The baseline does give NDEP an indication of when documents will be arriving.

12. NDEP will send a letter to DOE/DSWA stating that, except for those CAUs mentioned specifically by DOE in the letter requesting an extension, the deadlines for milestones listed in Appendix III are as follows:

- a due date scheduled for the middle of the month will have a deadline at the end of the same month
- a due date for the end of the month will have a deadline at the end of the following month
- a due date for September 30 of any year will remain on September 30 of that same year.

Complete. NDEP sent the letter on July 9, 1996.

13. DOE (Barrow) will submit the CADD for the EPA Farm CAU as scheduled.

Complete. The CADD will not be submitted because of priority work at the Engine Maintenance And Disassembly (EMAD) Facility. CAU 95 will be moved back to Appendix II as requested by DOE in a letter dated July 2 and approved by NDEP in a July 9 letter.

**** All agreed that CAU 95, EPA farm may be transferred back to Appendix II without submitting the CADD.**

14. DOE (Hall) will write a separate letter requesting that the EPA Farm CAU be transferred from Appendix III back to Appendix II because of priority decontamination work at EMAD.

Complete. See number 13 above.

15. DOE (Curtis) will revise the quarterly activity schedule to match federal fiscal quarters. The report will be submitted to NDEP 2 weeks before the beginning of the quarter.

A new schedule covering activities through the end of September was distributed during the August 15 quarterly meeting. The next activity report will be distributed on September 15 and will cover the first quarter of FY 97.

PROPOSED DUE DATES FOR APPENDIX III MILESTONES (ATTACHMENT III):

NDEP issued a letter to DOE on August 14 establishing deadlines for the CAU milestones listed in Attachment III.

PROPOSED MODIFICATIONS TO FFACO APPENDICES (ATTACHMENT IV):

CAU 95 (EPA Farm)

DOE proposed that the CAU be moved back to Appendix II because of priority work at the EMAD Complex. NDEP concurred with a move in a letter dated July 9. See discussion under action item number 13, above.

**** All agreed that CAU 95, EPA farm may be transferred back to Appendix II without submitting the CADD.**

CAU 382 (Housekeeping)

DOE requested in a August 9 letter that several CASs be moved out of CAU 382 because of site complications.

Liebendorfer proposed an alternative solution to the problem of complicated housekeeping sites. He stated the problem as being that once the containers are removed from the site that occasionally stained soil remains. Because if the contaminants of the stain are unknown, it no longer fits the housekeeping classification. He suggests identifying the stained soil as a new CAS with the same location as the original waste and grouping the new CAS into an Appendix II CAU to await prioritization. The original housekeeping CAS will be submitted for closure because the containers are gone.

- ** All agreed that housekeeping CASs with soil staining of unknown contaminants will be handled in the following manner: the stained soil will be given a new CAS number with the same location as the original, The new CAS will be grouped into an Appendix II CAU to await prioritization. The original housekeeping CAS would be submitted for closure.**

Curtis stated that some of the CASs mentioned in the August 9 letter to NDEP had access complications that are not easily resolved. DOE requested that they be moved from CAU 382. Liebendorfer replied that if there are access issues then DOE needs to request to move them from CAU 382 and into a more applicable one. DOE will supply the documentation necessary to justify the transfer.

- ## DOE (Curtis) will review the status of the CASs in housekeeping CAU 382 that were listed in a letter to NDEP dated August 9. If soil staining remains after the debris was removed, then the CAS will be closed. The stained soil will be given a new CAS number and placed in Appendix II. If the CASs listed in the letter do not fit into this category, then it will be requested, in writing, and with justification to NDEP, that they be moved to another CAU.**

CAU 43 (landfills)

DOE requested in an August 14 letter that CAS 03-08-01 be transferred out of CAU 43 and included with the 10 landfills (CAUs 37- 42, 364, and 399) for which EPD is proposing removal from under the FFACO and closing under separate closure plans.

DOE requested that CAS 03-16-01 (a landfill in a crater) remain in CAU 43 and that the CAU be transferred to Appendix II.

Liebendorfer asked who will be responsible for the long-term monitoring for these landfills, and the status of the monitoring plans. Mellington replied that eventually all long-term monitoring will be the responsibility of EPD, even the monitoring of Waste Management sites. It will be most efficient if one DOE organization oversees one contractor to do all long-term monitoring. He explained that ERD will perform the monitoring for several years to ensure that the network is appropriate, then it will be turned over to EPD. Liebendorfer replied that he does not have a problem with EPD performing the monitoring but he needs to

be assured that it will be performed and tracked correctly. He understands that the monitoring transition will not happen soon, but because DOE is asking to remove these landfills from the FFACO, he wants to review the monitoring programs.

- ## DOE will send the long-term monitoring plan for the eleven landfills (CAUs 37 - 42, 364, 399, and CAS 03-08-01) to NDEP for review.**
- ## NDEP will review the letter from DOE dated August 14 and determine the following three things: 1) CAS 03-08-01 may be removed from CAU 43, 2) CAU 43 may be moved back to Appendix II, and 3) the CAUs containing the eleven landfills may be removed from under the FFACO.**
- ## NDEP will make a determination on the DOE requests to leave the 8 other landfills in Appendix II and for ERD to assume the responsibility for the closures (letter to NDEP dated August 14).**

CAU 416, Project Shoal Area (PSA)

DOE proposed splitting the PSA CAU into two CAUs, one for surface and another for subsurface CASS.

Liebendorfer asked if this modification was ever requested in writing. Beckley replied no, the action was discussed in a meeting between DOE and NDEP. Liebendorfer said that it seems to be a logical approach, and DOE should formally request the change.

- ## DOE will send a letter to NDEP requesting that CAU 416 (Project Shoal) be split into surface and subsurface CAUs.**

CAU 323 (Pull Test Facility)

DOE requested that the CAU Notice of Completion date be changed to July 24, 1996. The original closure date was listed as the date when NDEP issued a "No further Action" letter, June 2, 1995. The closure of the CAU was questioned during the NDEP review of Appendix IV, and DOE responded with the closure documentation. NDEP issued a Notice of Completion for the CAU on July 34, 1996.

- ** All agreed that the Notice of Completion date for CAU 323 (Pull Test Facility) should be changed to July 24, 1996.**

CAU 452 (Historically Closed Underground Storage Tanks)

Based on an NDEP review of Appendix IV, DOE requested that the historically closed underground tanks listed in a August 6, 1996 letter to NDEP be placed in a CAU and put in Appendix IV.

Liebendorfer has identified a problem with some of the documentation on the closure of

underground storage tanks. The sites cannot be closed under the Underground Storage Tank/Leaky Underground Storage Tank (UST/LUST) regulations unless both the tank and associated spills are clean closed. Historically, NDEP allowed DOE to remove the tank and then clean up the spill at a later time. This practice does not comply with regulations. It has also created a problem with documentation and record keeping. The documentation for the tank removals is often not in the same physical file as the documentation for the closure of the spill. To close the site under the UST/LUST regulations the documentation must be together in one package and this is often not the case with the NDEP records. Does DOE have copies of records for the tank and the spill removals? Sanders replied that if the work has been done, then DOE should have the documentation, but it is likely that the tank documentation is not in the same place as the spill documentation. Liebendorfer said he would appreciate DOE's efforts to go through their files.

DOE (Curtis and Sanders) will review the files on removed underground storage tanks to make sure that supporting documentation on the tank removal and the data verifying clean closure has been sent to NDEP.

NDEP will review their underground storage tank files to make sure that they contain the necessary documentation to verify clean closure under the UST/LUST regulations.

Curtis asked about the proposal to put the historic tank closures in a CAU in Appendix IV, as described in an August 6 letter to NDEP. Liebendorfer replied that its OK to put them in Appendix IV even though they were closed before the effective date of the Agreement. It will simply be an accounting of the ER Bingham sites.

**** All agreed to put the underground tanks closed before the effective date of the Agreement, and listed in an August 6 letter to NDEP, in a new CAU in Appendix IV.**

DOE will create a new CAU in Appendix IV for the historically closed underground tanks.

Mireau asked about the nine tanks in CAU 418 that were removed in May. Three of the tanks had associated spills that could not be addressed during the tank pull. DOE was planning on proposing that the spills be assigned separate CASs so that the original tank CAS/CAU could be closed. Liebendorfer replied that he would like the tank and associated spill in one CAS. Hall summarized the a new process for closing tank CASs

- DOE completes the tank pull

- If a spill is discovered, and it can be addressed under current procedures or work plans, then the contaminated soil will be removed with the bulldozer and confirmatory sampling performed

- If the spill is large, then DOE propose that the CAS be removed from the CAU and closed at a later time using a more complex process

- All documentation necessary to verify the clean closure of the tank and any associated

spill will be sent to NDEP with the closure report.

- ** All agreed to use the following process for closing underground storage tanks:**
 - DOE completes the tank pull
 - If a spill is discovered, and it can be addressed under current procedures or work plans, then the contaminated soil will be removed with the bulldozer and confirmatory sampling performed
 - If the spill is large, then DOE propose that the CAS be removed from the CAU and closed at a later time using a more complex process
 - All documentation necessary to verify the clean closure of the tank and any associated spill will be sent to NDEP with the closure report.

DOE (Curtis) will review the status of the nine underground tanks pulled in May (CAU 418). DOE will send the data and documentation necessary to verify clean closure to NDEP. DOE will evaluate the three tanks that had additional contamination and perform the corrective actions, if they can be finished before the deadline for the closure report (September 30, 1996), or request that the CAS be transferred back to Appendix II and prioritized for activity in the future.

CAU 435 (DSWA Housekeeping Sites)

- ** All agreed to move closed CAS 16-22-05 from CAU 435 (Appendix III) to CAU 64 (Appendix IV) because the CAS was incorrectly categorized as being a DSWA responsibility.**

APPENDICES APPROVAL

Hall stated that the last agreed to version of Appendices II-IV is the June 10 issue. When will the parties agree that another version is final? DOE would like to distribute controlled copies of the FFACO and its appendices as soon as possible. The distribution is waiting on the finalization of Appendices II-IV.

Liebendorfer stated that the June 10 version appendices as amended at the June 20, and August 15 meetings will be the next final version. Action still needs to be taken on CAUs 382, 37- 43, 364, 399, 416, and 452. When these issues have been resolved then NDEP or if it is determined that long-term action is needed, then NDEP will issue a letter approving the finalization of the appendices.

- ** All agreed that modifications to CASs/CAUs approved at the June 20 and August 15 FFACO meetings will be made to the June 10 version of Appendices II-IV. When the issues are resolved or determined to be on-going for CAUs 382, 37- 43, 364, 399, 416, and 452, then NDEP will issue a letter approving the finalization of the appendices.**

NDEP will issue a letter stating that, after the changes accepted during the August 15 are made, Appendices II-IV are final, except for those CAU/CAS issues still outstanding.

QUARTERLY ACTIVITY REPORT (ATTACHMENT V)

Liebendorfer asked if the NDEP personnel understand that the quarterly report is just a projection of the expected field work; the biweekly report will be more accurate. There has been a problem with the NDEP personnel not being able to reach the DOE Project Managers to confirm field activities and it has lead to confusion. Mellington replied that if DOE PROJECT MANAGERS have not responded to NDEP calls within 24 hours then the NDEP personnel may call the DOE Agreement Coordinator for answers.

**** All agreed that if DOE Project Managers have not responded to NDEP requests concerning field activity corrndination within 24 hours of NDEPs call, then the NDEP personnel may call the DOE Agreement Coordinator for information.**

PRESENTATION OF DOCUMENT REVIEW PROCESS (ATTACHMENT VI)

Hall gave a presentation on the document review process designed to clarify and streamline the review and completion of documents submitted to NDEP. She gave an overview of the review process and a more detailed explanation of each step (Attachment VI).

Mellington asked why this presentation is necessary. Shafer replied that there have been problems in the review process and DOE thought a systematic approach would help clear them up. Sometimes approval letters have ambiguous comments, and DOE needs letters that say the document is approved. Liebendorfer added that NDEP was not necessarily being internally consistent when it reviewed documents. Reviews and comments will now be coordinated through the NDEP Point of Contact (POC). Mellington summarized by saying that the parties are trying to formalize the reviews to ensure that the process is consistent.

Liebendorfer noted that if DOE submits a document to NDEP for the first time just before the deadline, then DOE runs the risk that it will be declared substantially deficient. Then DOE will have no time to correct the problems. If DOE would like an NDEP review before the deadline, then it can be submitted for formal review. It must go through an official process for this review. Mellington added that this draft review is optional.

**** All agreed that documents do not have to be 100% percent correct to meet the requirements of the deadline, the document just cannot be substantially deficient.**

**** All agreed that if DOE would like a formal review of a document before the deadline,**

the submittal of the draft will be listed in the activity reports.

Liebendorfer stated that the Project Shoal CAIP would have been declared substantially deficient because the fluid management section was not correct. Mellington replied that DOE made a good faith effort to work with an official representative of the state to develop a plan NDEP agreed with. There is no way a review board would declare this plan substantially deficient. Just because it has lots of comments does not make it substantially deficient. Just because the plan says there will be 5 samples taken and you want 8 samples does not mean it is deficient.

Liebendorfer stated that the parties must be able to answer the important questions if the plan is followed. It is necessary to describe how waste management activities will be addressed. The processes must be laid out in the approved characterization plan (for example, exceptions to the 90-day storage provisions), otherwise RCRA strictly applies.

**** All agreed to send 2 copies of all documents to the NDEP Carson City office and 1 copy to the Las Vegas office.**

OFF-SITE ACCESS OF DIGITAL DATA

Pickus presented an update on computer access to pertinent ERD digital data. The database is in the process of being updated and will be transferred to NDEP when it is complete. There will be an Internet server so that all stakeholders will be able to access data. The database is 65% complete, the Internet server is running now, and the access application is close to being complete. Everything should be finished in approximately 2 months.

Pickus presented a handout of the hardware and software order that was compiled to meet NDEP's computer needs. If the order is missing a tool that NDEP needs, then let Pickus know. The order has been approved and the hardware should arrive in a few months.

UPDATE ON NDEP CORRECTIVE ACTION AND COST/FEE REGULATIONS

Liebendorfer gave a status of the proposed corrective action and cost/fee regulations. The commission will be hearing them in an open hearing on September 10 in Carson City. The proposed regulations now contain changes that were based on DOE review comments. Mellington asked if Liebendorfer thought the commission will pass the regulations. Liebendorfer replied that he does not see a problem with their passage. If DOE would like to get on the Commission's mailing list for public hearings, then write the Commission and request to get on the list.

OTHER ISSUES/QUESTIONS

CAU location maps

The maps of CAU locations that were produced in accordance with the RCRA Permit are now out of date. DOE proposed updating them twice a year and then posting them on the Internet. DOE will start updating the maps in October, 1996

**** All agreed that the CAU location and status maps will be updated twice a year. DOE will start producing a new version in October, 1996.**

Minutes

Binders containing minutes from all of the FFACO negotiation meetings have been prepared by DOE and will soon be distributed to NDEP and DSWA. These are being provided for reference only, and it is understood that language in the body of the Agreement or any of the appendices supersedes discussions held during the negotiation meetings.

Binders are also being prepared to house the minutes, agreements, handouts and other related documents from FFACO required meetings. When the minutes from each meeting are finalized and the agreements made during the meeting signed by the parties, then copies of these documents will be provided to DOE, DSWA and both of the NDEP offices.

Approval and review of higher level plans

Liebendorfer initiated the discussion of a problem NDEP is having with general work plans and the higher level documents that are being reference in the CAIPs. The issues is over how much NDEP concurrence is required for documents like the Quality Assurance Project Plan (QAPP), and the Health and Safety Plans (HASPs). For instance, NDEP has conditioned some of their CAIP review comments on the requirements in the QAPP, but they do not have a copy of the QAPP in their offices. It also appears that the coordination between the two levels of documents was not necessarily complete. The Tonopah Test Range CAU Work Plan contains essentially background information, so it is not controlling information, but requirements detailed in the QAPP are controlling.

The parties need to agree on what requirements will be included in the CAIPs. It is not always easy to determine if the QAPP requirements are met. If NDEP requests sampling data, and the data have not been evaluated with respect to the QAPP requirements, it appears that the QAPP procedures have not been followed. Sometimes it looks like DOE just refers to the higher tier plans without necessarily meeting the site-specific needs. Does DSWA have similar issues? Bedsun thought that they probably will. NDEP is going to have to review the higher level plans.

Liebendorfer also stated that NDEP is to drafting generic approval letters to see if they are sufficiently unambiguous. Mellington asked if DOE got approval of the Spill Test Facility CAIP. Shafer replied yes, but that he was not sure if the approval letter would be unambiguous to a future reader. Liebendorfer stated that the letter being referred to contained many contractor issues and that NDEP is still in transition on how to format the

approval letters.

Next Quarterly Meeting (First Quarter, FY97): November 14, 1996, 9:30 am

There was preliminary discussion of coordinating the Agreement In Principal, the FFACO, and the Federal Facility Compliance Order - Compliance Act quarterly meetings. More discussion will follow.

Meeting adjourned at 12:10

PETER C. MORROS, Director

L.H. DODGION, Administrator

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STATE OF NEVADA

BOB MILLER

Governor



Waste Management
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DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION

333 W. Nye Lane, Room 138

Carson City, Nevada 89706-0851

July 16, 1998

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RE: Signature Authority

The Nevada Division of Environmental Protection, Bureau of Federal Facilities (NDEP) staff has received numerous requests to provide a clear delineation of signature authority within the Bureau of Federal Facilities. In an effort to clarify this issue, the following explanation is being provided.

All final determinations must be signed off by me or by my staff, for me, using my signature block. Any correspondence signed by my staff utilizing their signature block, is for the purpose of project coordination, identification of project issues, or potential programmatic concerns, but are not final determinations. The correspondence sent by NDEP staff to DOE/NV may be on official NDEP letterhead, a memo, or a record of communication form. Any issue which NDEP believe requires a formal response from DOE will be transmitted in a letter on official letterhead. The other forms of communication are intended to keep DOE apprised of NDEP activities and observations. If DOE/NV feels that other forms of correspondence received from NDEP staff is unwarranted, burdensome, or inappropriate, the issue

ACTION
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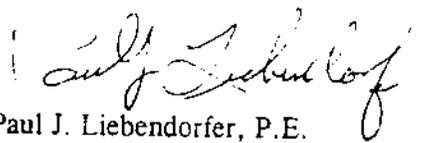
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Ms. Runore C. Wycoff, Director
July 16, 1998
Page 2

should be directed to Karen Beckley or me for further discussion/clarification.

If you have any further questions, please feel free to contact Karen Beckley at 687-4670 extension 3033 or me at 687-4670 extension 3039.

Sincerely,



Paul J. Liebendorfer, P.E.
Chief
Bureau of Federal Facilities

PJL/KKB/js

cc: Supervisor, NDEP/LV/BFF
S. Mellington, DOE/EM
D. Bedsun, DSWA
P. Hall, DOE/ERD

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Facsimile 687-6396

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION

333 W. Nye Lane, Room 138
Carson City, Nevada 89706-0851

May 30, 2000

Ms. Runore Wycoff, Director
Environmental Restoration Division
U. S. Department of Energy
Nevada Operations Office
P. O. Box 98518
Las Vegas, NV 89193-8518

RE: Signature Authority

Dear Ms. Wycoff:

As discussed in the FFACO quarterly meetings, as a result of changes in NDEP staff and their associated duties, DOE has requested clarification of who has signature authority to grant DOE approval for various types of documents and field activities. This letter should provide that clarification.

Correspondence requiring the signature block of Paul J. Liebendorfer, P.E.:

- * Any regulatory determination; i.e., a change to a permit condition, waiver of requirements, determination of compliance, changes to compliance schedules;
- * Any FFACO modification; i.e., movement of CAUs, Appendix III changes in CAU scope, establishment of or deadline changes;
- * Approval for any final document outlined in the FFACO;
- * Approval for any major changes to an already approved FFACO final document. As DOE submits Records of Technical Change (ROTCs), the NDEP project person will determine if it constitutes a major change to the document/project or if the final proposed outcome can still be achieved;
- * Concurrence with budget reprogramming and funding requests; and
- * Formal requests for information under Part XIII of the FFACO.

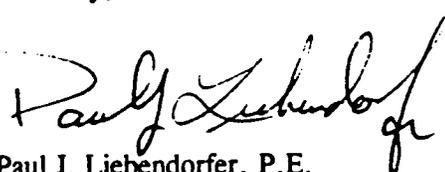
Both Michael D. McKinnon and Karen K. Beckley have authorization to sign letters under my signature block in my absence. Other correspondence should be signed by the NDEP project manager.

ACTION	_____
INFO	ERD AMEM ESHD
MGR	_____
AMBFS	_____
AMTS	_____
AMNS	_____
AMEM	_____

Runore C. Wycoff, Director
May 30, 2000
Page 2

If you have any questions, please feel free to contact Mike McKinnon at (702) 486-2874, Karen K. Beckley at (775) 687-4670 extension 3033 or me at (775) 687-4670 extension 3039.

Sincerely,



Paul J. Liebendorfer, P.E.
Chief
Bureau of Federal Facilities

PJL/KKB/MDM/js

cc:

P. Hall, DOE/EM
D. Bedsun, DTRA
K. Hoar, ESHD

STATE OF NEVADA
KENNY C. GUINN
Governor

PETER G. MORROS, Director
ALLEN BIAGGI, Administrator
(775) 687-4670
TDD 687-4678

Administration
Water Pollution Control
Facsimile 687-5856

Mining Regulation and Reclamation
Facsimile 684-5259



Waste Management
Corrective Actions
Federal Facilities

Air Quality
Water Quality Planning
Facsimile 687-6396

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION

333 W. Nyè Lane, Room 138
Carson City, Nevada 89706-0851

June 19, 2000

Ms. Runore C. Wycoff, Director
Environmental Restoration Division
U.S. Department of Energy
Nevada Operations Office
P.O. Box 98518
Las Vegas, Nevada 89193-8518

RE: Signature Authority

Dear Ms. Wycoff:

The Nevada Division of Environmental Protection's (NDEP) May 30, 2000 letter identified correspondence which needed to be transmitted under my signature block. There has been some confusion over whether all formal requests from NDEP for information related to the FFACO needed to be from me. This was not the intent of the last statement in that letter, *Formal Requests for information under Part XIII of the FFACO*. Requests for information under Part XIII.1 of the FFACO, where there is a DEADLINE established and it has been explicitly stated in that request, must be transmitted under my signature block. For all other information requests it has always been the intent of NDEP that staff should be able to communicate both informally and formally to obtain information relative to the projects they are assigned.

If there is a need for any further clarification of the above issue please feel free to contact me at (775) 687-4670 Ex. 3039.

Sincerely,

Paul J. Liebendorfer, P.E.
Chief
Bureau of Federal Facilities

PJL/js
cc list on page 2

ACTION	_____
INFO	ERD ESHD AMEM
MGR	✓
AMBFS	_____
AMTS	✓
AMNS	_____
AMEM	✓
AMPIA	_____

Ms. Runore C. Wycoff, Director
June 19, 2000
Page 2

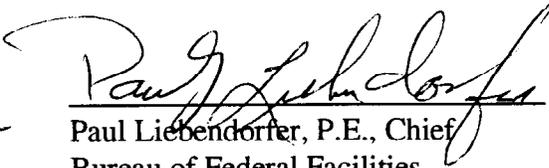
cc: Dave Bedsun, DTRA
Ken Hoar, DOE/ESHD
Patti Hall, DOE ERD
Robert M. Bangerter, DOE/ERD
Janet Appenzeller-Wing, NDEP/ERD
Karen Beckley, NDEP/CC
Mike McKinnon, NDEP/LV

JUN 21/00 PM 2:35

Agreements
FFACO Meeting
February 12, 1997, Las Vegas

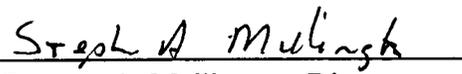
1. All agreed that the following statement will be listed with each of the 10 landfill CAUs residing in Appendix IV: "The appropriate DOE/NV organization closed, registered, and will perform long-term monitoring in accordance with Nevada Solid Waste Regulations."
2. All agreed to empower a team of appropriate personnel to finalize the standardized document outlines.
3. All agreed Appendices II-IV will be updated semi-annually, beginning when DOE receives approvals for the November 20, 1996, and February 12, 1997, proposed modifications.
4. All agreed that the new format for bi-weekly field report is satisfactory and that DOE will continue to fax the latest version to NDEP.

State of Nevada


Paul Liebendorfer, P.E., Chief
Bureau of Federal Facilities

5/14/97
Date

Department of Energy:


Stephen A. Mellington, Director
Environmental Restoration Division

5/14/97
Date

Defense Special Weapons Agency:


David A. Bedsun, Chief
Technical Compliance Division

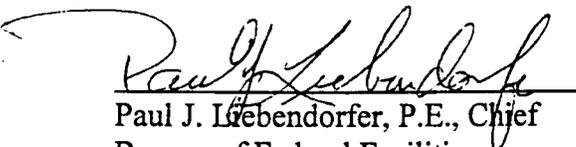
5/14/97
Date

**Letter Agreement to Modify the
Federal Facility Agreement and Consent Order**

The U.S. Department of Energy, Nevada Operations Office (DOE/NV), the Nevada Division of Environmental Protection (NDEP) and the Department of Defense (DoD) have agreed that paragraph XI.3 of the May 10, 1996, version of the Federal Facility Agreement and Consent Order requires revision. In the interim until the Agreement itself is resigned, the parties intend to comply with a revised provision as described below. This change will allow DOE and NDEP to make changes consistent with the current needs of the Underground Test Area (UGTA) project, specifically it will allow us to update assumptions, the project end date, and the number of Corrective Action Units (CAUs) that can be opened at any one time. All of these subsequent changes to the UGTA strategy would be made following discussions and agreements between the affected Parties. Paragraph XI.3 shall be changed to read as follows:

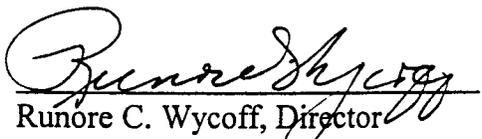
“XI.3. This Agreement shall not be modified unless such modification is in writing and signed by all affected parties. Changes to Appendices V, Public Involvement Plan, Appendix VI, Corrective Action Strategy (in order to address and incorporate new technical information per Paragraph XII.5), and the movement of CAUs between appendices as specified in Part V, Description of Appendices, and as specified in Part XII, Corrective Action Investigations/Corrective Actions, shall not be considered modifications of this agreement.”

State of Nevada:


Paul J. Liebendorfer, P.E., Chief
Bureau of Federal Facilities
and FFACO Agreement Coordinator

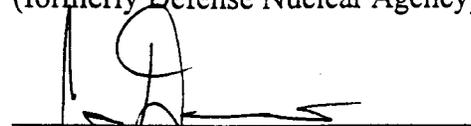
7/19/00
Date

U.S. Department of Energy:


Runore C. Wycoff, Director
Environmental Restoration Division
and FFACO Agreement Coordinator

7/21/01
Date

Defense Threat Reduction Agency:
(formerly Defense Nuclear Agency)


Dr. Jay Davis
Director

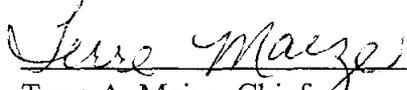
8/30/00
Date

Letter Agreement to Modify the
Federal Facility Agreement and Consent Order

The National Nuclear Security Administration Nevada Site Office (NNSA/NSO), the Nevada Division of Environmental Protection (NDEP) and the U. S. Department of Defense (DoD) have agreed that paragraph VII.4 of the May 10, 1996, version of the Federal Facility Agreement and Consent Order (FFACO) requires revision. In the interim until the Agreement itself is resigned, the parties intend to comply with a revised provision as described below. This change affects the reporting requirement to the NDEP as is related to the reporting of field activities. The reporting requirement is changed from a frequency of "bi-weekly" to "monthly." In addition all other guidance related to and citations of the reporting requirements of field activities shall be changed as previously mentioned, including standardized document outlines. Paragraph VII.4 shall be changed to read as follows:

"VII.4. DOE and DoD shall include in their quarterly reports a three-month advance schedule outlining field activities (including the field activities of their respective contractors, subcontractors, operators, and agents), proposed to be implemented under this Agreement. A more detailed schedule shall be provided to NDEP on a *monthly* basis, and shall provide the specific dates for conducting these activities for the subsequent *month*, thereby enabling NDEP to select those activities it deems appropriate to observe."

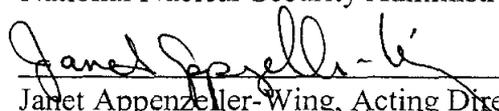
State of Nevada:



Terre A. Maize, Chief
Bureau of Federal Facilities
and FFACO Agreement Coordinator

4/5/04
Date

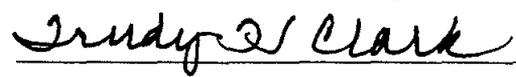
National Nuclear Security Administration:



Janet Appenzeller-Wing, Acting Director
Environmental Restoration Division
and FFACO Agreement Coordinator

3/31/04
Date

Defense Threat Reduction Agency:



Trudy H. Clark, Major General, USAF
Acting Director

22 Mar 04
Date

Letter Agreement to Modify the Federal Facility Agreement and Consent Order

The National Nuclear Security Administration Nevada Site Office (NNSA/NSO), the Nevada Division of Environmental Protection (NDEP) and the U. S. Department of Defense (DoD) have agreed to modify the May 10, 1996 version of the Federal Facility Agreement and Consent Order. In the interim until the Agreement itself is resigned, the parties intend to comply with the revised provisions as described below. This modification reflects the understanding and commitments between the parties regarding activities at the Central Nevada Test Area (CNTA) and at the Project Shoal Area (PSA). Although these two sites are considered 'Offsite' from the Nevada Test Site proper, the CNTA and PSA will be transferred to the Office of Legacy Management (LM) within the Department of Energy on October 1, 2006. LM is the component of DOE tasked with long-term surveillance and maintenance for CNTA and PSA.

Scope: The Nevada sites, specifically CNTA and PSA, will continue to be addressed through the FFACO in cooperation with LM. In recognition of the cooperative effort between LM and EM on the management of CNTA and PSA, specific duties and responsibilities of the parties are detailed below:

The following describes the roles of NNSA NSO; DOE/LM; and the State of Nevada (NDEP) with regard to this effort:

Nevada Division of Environmental Protection (NDEP) will:

- Continue to be a Party to the FFACO regarding the Offsites, specifically CNTA and PSA, and continue all previous obligations under the FFACO dated May 10, 1996 as amended.

National Nuclear Security Agency Nevada Site Office (NNSA NSO) will:

- Provide sensitive or classified information to appropriately cleared NDEP staff (consistent with national security requirements under the Atomic Energy Act of 1954, as amended); brief personnel about classified aspects of the project; and perform a classification review on prepared NDEP documents, when necessary.

Department of Energy, Office of Legacy Management (DOE/LM) will:

- Assume all DOE responsibility, and implement all DOE requirements outlined in Appendix VI Section 5.0 'Offsites', more specifically the Corrective Action Strategy and the Implementing Corrective Action Investigations and Corrective Actions of the FFACO.

State of Nevada:

 For

Leo M. Drozdoff, Administrator
Department of Conservation and Natural Resources
Division of Environmental Protection

6/20/2006
Date

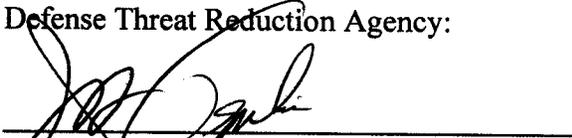
National Nuclear Security Administration:



Jay H. Norman, Acting Manager
Nevada Site Office

7/6/06
Date

Defense Threat Reduction Agency:



James A. Fegnotia
Director

5/23/06
Date

Department of Energy:



Michael Owen, LM-1
Office of Legacy Management

6/15/06
Date

Letter Agreement to Modify the Federal Facility Agreement and Consent Order

In March 1999 and March 2005 the National Nuclear Security Administration Nevada Site Office (NNSA/NSO), the Nevada Division of Environmental Protection (NDEP) and the U. S. Department of Defense (DoD) agreed to changes in the May 10, 1996 version of the *Federal Facility Agreement and Consent Order* (copies of these two letter agreement modifications are included for your reference). The March 1999 modification was signed to change language in paragraph XII.4.b, from “...*setting of deadlines by NDEP by March 15.*” to read “...*that NDEP will establish deadlines within 30 days of receipt of the final proposed DOE and/or DoD milestones...*”. The March 2005 modification was intended to change the language throughout the Agreement from “...*Quarterly Meetings*” to “...*Semi-Annual Meetings*”. This modification was signed with the editing markups still visible in the modification, and inserted the previous “..*March 15*” date (which had been removed by the March 1999 modification) as well as the revised verbiage stating “...*within 30 days of receipt...*”

The NNSA/NSO has discussed the error with their Office of Chief Counsel and upon their recommendation, we are requesting that the March 1999 and March 2005 Letter Agreements to Modify the *Federal Facility Agreement and Consent Order* be rescinded and the attached Letter Agreement Modification replace the two previous Modifications.

In the interim, until the Agreement is revised, the parties intend to comply with the provisions as described below. These changes affect the timeframe for NDEP to establish deadline dates for final proposed milestones as well as the frequency and required topics of meetings. The parties have agreed to hold meetings Semi-Annually (instead of quarterly) in February and August. Additionally, the meeting requirements have been changed to accommodate the new schedule.

Paragraph VII.1 shall be changed to read as follows:

Following the effective date of this Agreement, DOE and DoD shall, on or before the 30th calendar day following the end of each calendar quarter, submit a written or electronic progress report to NDEP that describes the actions taken during the calendar quarter just ended. This information will serve as a partial basis for the discussions at the semi-annual meetings discussed in paragraph XII.4.

Paragraph VII.6 shall be changed to read as follows:

Semi-annual meetings will be held in February and August of each Fiscal Year in part to discuss any issues raised in or by the quarterly progress reports. These meetings will also serve to initiate the prioritization discussions identified in Part XII, Corrective Action Investigations/Corrective Actions. Parties will attempt to resolve issues during the semi-annual meetings or through other meetings per Paragraph VII.7. Resolution of issues will

be documented, and unresolved issues will be discussed at or before the next semi-annual meeting.

Paragraph VII.7 shall be changed to read as follows:

Parties may meet at times other than the semi-annual meetings as required, for example, if there are events, such as changes in available funding that might affect milestones, especially if those milestones are in the current fiscal year.

Paragraph XII.1 shall be changed to read as follows:

Within sixty (60) calendar days following the signing of this Agreement by the last party to do so, the parties shall meet to review Appendices II-IV and concur on the classification of all presently identified CAUs to insure all known CAUs are placed in the appropriate appendix, and where appropriate, due dates and deadlines established for existing and proposed activities. Following this initial meeting, the semi-annual meeting process outlined in paragraphs XII.3 and XII.4 will begin.

Paragraph XII.3 shall be changed to read as follows:

The parties shall review and update Appendices II through IV as required at semi-annual meetings or through formal correspondence. DOE and DTRA:

XII.3.a. Shall provide NDEP with a list of appendices changes not requiring NDEP approval made since the last semi-annual meeting;

XII.3.b. At any semi-annual meeting or through formal correspondence, may propose changes to the milestones in Appendix III, Corrective Action Investigations/Corrective Actions; move CAUs or CASs from Appendix II, Corrective Action Sites/Units or Appendix III, Corrective Action Investigations/Corrective Actions, to Appendix IV, Closed Corrective Action Units; or request any other changes affecting CAUs or CASs in Appendix III, Corrective Action Investigations/Corrective Actions or Appendix IV, Closed Corrective Action Units.

Paragraph XII.4 shall be changed to read as follows:

Following the transfer of a CAU from Appendix II, Corrective Action Sites/Units, to Appendix III, Corrective Action Investigations/Corrective Actions milestones, associated due dates and deadlines may be proposed by DOE and/or DoD but shall be established by NDEP according to the following semi-annual meeting schedule listed in paragraphs XII.4.a through XII.4.b or through formal correspondence. Except as noted in paragraph XII.5, deadlines may be established for the submittal of work plans, CADDs, CAPs, and completion of corrective actions within the FY+2 planning window. For those work plans, CADDs, CAPs, and corrective actions for which completion may fall outside the planning window (FY+2), interim deadlines may be established within the FY+2

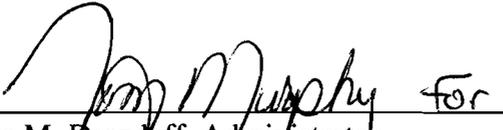
planning window. All deadlines other than those set forth explicitly in this Agreement shall be established pursuant to paragraphs XII.4 and XII.5.

XII.4.a. During the first semi-annual meeting held during the fiscal year, the parties shall review and reconsider established priorities, milestones, and associated due dates and deadlines for the current fiscal year, taking into consideration the Approved Funding Program and the factors listed in section 1.3 of Appendix VI, Corrective Action Strategy. The parties shall also initiate the process to establish priorities, milestones, and associated due dates for CAUs for FY+2. At this meeting, DOE will propose CAU milestones for target and planning funding levels, as appropriate. DOE may choose to develop milestones above the target funding level, but shall identify which proposed milestones are above the target case. NDEP, under its authority, may establish deadlines for any milestones for DOE and DoD activities subsequent to the prioritization process established in Appendix VI, Corrective Action Strategy. DoD asserts it is not able to commit to these FY+2 enforceable dates. Prioritized CAUs with their associated milestones, due dates, and/or deadlines shall be listed in Appendix III, Corrective Action Investigations/Corrective Actions. Parties reserve the right to invoke paragraph IX.1 if an issue is not resolved. Subsequent to this meeting, input on the proposed priorities will be sought from the public and the Community Advisory Board. DOE and DoD, in cooperation with NDEP, will develop a final prioritization of CAUs for CAIs and corrective actions. NDEP will establish deadlines within 30 days of receipt of the final proposed DOE and/or DoD milestones for all prioritized CAU activities it asserts must be incorporated into the FY +2 Budget Request. If the parties cannot agree on deadlines, then Part IX, Informal Dispute Resolution and Appeal Procedure, may be invoked.

XII.4.b. During the second semi-annual meeting held during the fiscal year, the parties shall review and reconsider established priorities, milestones, and associated due dates and deadlines for CAUs considering factors established in Appendix VI, Corrective Action Strategy, and the President's budget for FY+1. Parties reserve the right to invoke paragraph IX.1 if an issue is not resolved.

XII.4.c. This section is no longer applicable and will be deleted. Requirements from this section have been incorporated in Section XII.4.b.

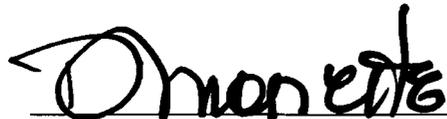
State of Nevada:



Leo M. Drozdoff, Administrator
Department of Conservation and Natural Resources
Division of Environmental Protection

12/6/2006
Date

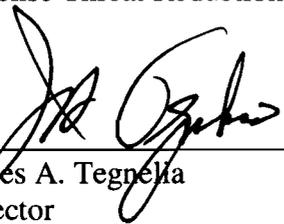
National Nuclear Security Administration:



Jay H. Norman, Acting Manager
Nevada Site Office

11.22.06
Date

Defense Threat Reduction Agency:



James A. Tegnella
Director

14 Jan 07
Date

Department of Energy:



Michael Owen, LM-1
Office of Legacy Management

01/03/07
Date

Letter Agreement to Modify the Federal Facility Agreement and Consent Order

The National Nuclear Security Administration Nevada Site Office (NNSA/NSO); the Nevada Division of Environmental Protection (NDEP), the U.S. Department of Defense (DoD); and the U.S. Department of Energy, Office of Legacy Management (DOE/LM) have agreed to modify the May 10, 1996, version of the Federal Facility Agreement and Consent Order. In the interim, until the Agreement itself is resigned, the parties intend to comply with the revised provisions as described below. This modification reflects administrative changes to the agreement. The specific changes and paragraphs are listed below and include, but are not limited to: recording the name change of the Nevada Operations Office to the Nevada Site Office; recording the name change of the Nellis Air Force Range (NAFR) to the current name of the Nevada Test and Training Range (NTTR); reflecting the current Corrective Action Unit and Corrective Action Site numbers for Soils and the Underground Test Area (UGTA) listed in Appendix VI; update of the Resource Conservation and Recovery Act (RCRA) permit number; and update of the addresses of the parties to the Agreement.

1. Nellis Air Force Range (NAFR) will be changed to Nevada Test and Training Range (NTTR) in the following portions of the Agreement and throughout Appendices I and VI.
 - Lines 14 and 15 of the Introduction and Articles IV.26 and IV.32 of the Agreement.
2. RCRA permit number will be changed from NEV HW009 to NEV HW0021 in the following portions of the Agreement and Appendix VI.
 - Article II.1.f of the Agreement.
3. Nevada Operations Office will be changed to Nevada Site Office in the following portions of the Agreement and Appendix VI.
 - Articles VII.5, XVI.3, and XVI.4 of the Agreement.
4. In Article XII.5, first sentence, the word “will” is being replaced with the word “may” and the sentence will read as follows: “One (1) milestone, with an associated due date or deadline, beyond FY+2 may be established for the completion of UGTA.”
5. In Article XVI.1, first sentence, the reference to the Carson City Office will be removed from the sentence and the sentence will read as follows: “Documents shall be sent to NDEP in a manner designed to be received by the date due in the Las Vegas office.”
6. Article XVI.2 shall be changed to reflect that NDEP will receive two hard copies of documents and the reference to the address of the Carson City office will be removed. The paragraph will now read: “Unless otherwise specified by written notice to the agreement coordinators of DOE and DoD, any written report, document, or submittal provided to NDEP, pursuant to a milestone or deadline identified in or developed under the provisions of this Agreement, two hard copies shall be sent to:

Chief
Bureau of Federal Facilities
Division of Environmental Protection
2030 East Flamingo Road, Suite 230
Las Vegas, NV 89119-0818

7. Article XVI.4 shall be changed to update the current mailing information for DoD as follows:

Chief, Detachment 1, Nevada Operations
Defense Threat Reduction Agency
P.O. Box 208
Mercury, NV 89023

8. A new article should be added to include the address for U.S. Department of Energy, Office of Legacy Management; however, since the agreement itself is not being rewritten, in order to insert the address in the proper place in the agreement and to avoid renumbering subsequent articles, Article XVI.4 will include a sub-paragraph numbered XVI.4.a to include the address as follows:

Program Manager
U. S. Department of Energy
Office of Legacy Management
2597 B $\frac{3}{4}$ Road
Grand Junction, Colorado 81503

9. A table of contents and a list of acronyms shall be added to Appendix I.

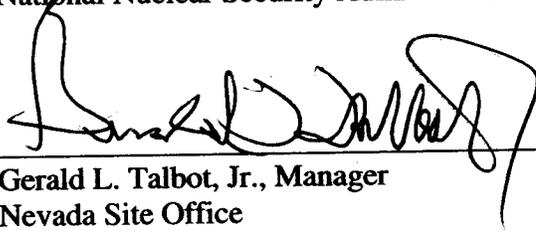
State of Nevada:



for Leo M. Brozdoff, Administrator
Department of Conservation and Natural Resources
Division of Environmental Protection

1/17/2008
Date

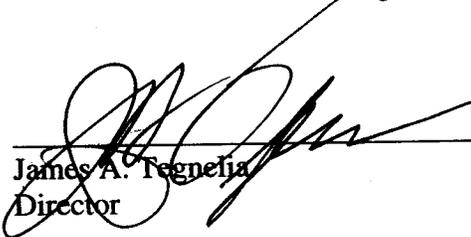
National Nuclear Security Administration:



Gerald L. Talbot, Jr., Manager
Nevada Site Office

1/17/08
Date

Defense Threat Reduction Agency:



James A. Fegnelia
Director

2/20/08
Date

Department of Energy:



Michael Owen, LM-1
Office of Legacy Management

2/11/08
Date



Federal Facility Agreement and Consent Order (FFACO) Letter Modifications



Letter Agreement to Modify the Federal Facility Agreement and Consent Order

The National Nuclear Security Administration Nevada Site Office (NNSA/NSO), the Nevada Division of Environmental Protection (NDEP), the U. S. Department of Defense (DoD), and the U. S. Department of Energy, Office of Legacy Management (DOE/LM) have agreed to modify the May 10, 1996 version of the Federal Facility Agreement and Consent Order. In the interim, until the Agreement itself is resigned, the parties intend to comply with the revised provisions as described below. This modification reflects changes to: Paragraphs VII.1, VII.6, VII.7, XII.1, XII.3 and XII.4 regarding the frequency of meetings; a change to Paragraph XVIII.2 regarding NDEP's maintenance of records; and updates to Appendix VI regarding the Underground Test Area (UGTA) strategy. The specific changes and paragraphs are listed below. The changes made to Appendix VI were made in the Appendix and Revision 3 of the Appendix is included for review along with this letter mod reflecting where changes are being made to the Agreement.

1. Paragraph VII.1 shall be changed to read as follows:

Following the effective date of this Agreement, DOE and DoD shall, on or before the 30th calendar day following the end of each calendar quarter, submit a written or electronic progress report to NDEP that describes the actions taken during the calendar quarter just ended. This information will serve as a partial basis for the discussions at the annual meeting discussed in paragraph XII.4

2. Paragraph VII.6 shall be changed to read as follows:

Annual meetings will be held in February of each year. These meetings will serve to initiate the prioritization discussions identified in Part XII, Corrective Action Investigations/Corrective Actions. Parties will attempt to resolve issues during the annual meeting. Resolution of issues will be documented, and unresolved issues will be discussed at or before the next annual meeting.

3. Paragraph VII.7 shall be changed to read as follows:

Parties may meet at times other than the annual meeting as required, for example if there are events, such as changes in available funding, that might affect milestones, especially if those milestones are in the current fiscal year.

4. Paragraph XII.1 shall be changed to read as follows:

Within sixty (60) calendar days following the signing of this Agreement by the last party to do so, the parties shall meet to review Appendices II-IV and concur on the classification of all presently identified CAUs to ensure all known CAUs are placed in the appropriate appendix, and where appropriate, due date and deadlines established for existing and proposed activities. Following this initial meeting, the annual meeting process outlined in paragraphs XII.3 and XII.4 will begin.

**Letter Agreement to Modify the
Federal Facility Agreement and Consent Order**

5. Paragraph XII.3 shall be changed to read as follows:

The parties shall review and update Appendices II through IV as required at annual meetings or through formal correspondence. DOE and DoD:

XII.3.a. Shall provide NDEP with a list of appendices changes not requiring NDEP approval made since the last annual meeting.

XII.3.b At any annual meeting or through formal correspondence, may propose changes to the milestones in Appendix III, Corrective Action Investigations/Corrective Actions; move CAUs or CASs from Appendix II, Corrective Action Sites/Units or Appendix III, Corrective Action Investigations/Corrective Actions, to Appendix IV, Closed Corrective Action Units; or request any other changes affecting CAUs or CASs in Appendix III, Corrective Action Investigations/Corrective Actions or Appendix IV, Closed Corrective Action Units.

6. Paragraph XII.4 shall be changed to read as follows:

Following the transfer of a CAU from Appendix II, Corrective Action Sites/Units, to Appendix III, Corrective Action Investigations/Corrective Actions milestones, associated due dates and deadlines may be proposed by DOE and/or DoD but shall be established by NDEP according to the following annual meeting schedule listed in paragraphs XII.4.a through XII.4.b or through formal correspondence. Except as noted in paragraph XII.5, deadlines may be established for the submittal of work plans, CADDs, CAPs, and completion of corrective actions within the FY+2 planning window. For those work plans, CADDs, CAPs, and corrective actions for which completion may fall outside the planning window (FY+2), interim deadlines may be established within the FY+2 planning window. All deadlines other than those set forth explicitly in this Agreement shall be established pursuant to paragraphs XII.4 and XII.5.

XII.4.a During the annual meeting the parties shall review and reconsider established priorities, milestones, and associated due dates and deadlines for the current fiscal year, taking into consideration the Approved Funding Program and the factors listed in section 1.3 of Appendix VI, Corrective Action Strategy. The parties shall also initiate the process to establish priorities, milestones, and associated due dates for CAUs for FY+2. At this meeting, DOE will propose CAU milestones for target and planning funding levels, as appropriate. DOE may choose to develop milestones above the target funding level, but shall identify which proposed milestones are above the target case. NDEP, under its authority, may establish deadlines for any milestones for DOE and DoD activities subsequent to the prioritization process established in Appendix VI, Corrective Action Strategy. DoD asserts it is not able to commit to these

**Letter Agreement to Modify the
Federal Facility Agreement and Consent Order**

FY+2 enforceable dates. Prioritized CAUs with their associated milestones, due dates, and/or deadlines shall be listed in Appendix III, Corrective Action Investigations/Corrective Actions. Parties reserve the right to invoke paragraph IX.1 if an issue is not resolved. Subsequent to this meeting, input on the proposed priorities will be sought from the public and the Community Advisory Board. DOE and DoD, in cooperation with NDEP, will develop a final prioritization of CAUs for CAIs and corrective actions. NDEP will establish deadlines within 30 days of receipt of the final proposed DOE and/or DoD milestones for all prioritized CAU activities it asserts must be incorporated into the FY+2 Budget Request. If the parties cannot agree on deadlines, the Part IX, Informal Dispute Resolution and Appeal Procedure, may be invoked.

XII.4.b In lieu of the second semi-annual meeting, the FY + 1 milestone chart will be distributed for review and reconsideration of established milestones and associated due dates and deadlines. The FY + 1 milestone chart will be distributed by the end of August each year. Parties reserve the right to invoke paragraph IX.1 if an issue is not resolved.

(XII.4.c has been deleted in its entirety per the Letter Mod dated January 14, 2007)

7. Paragraph XVIII.2, shall be changed to read as follows:

Such information shall be available to NDEP upon request and will form part of the basis for information to be included in the NDEP's record, which includes, but is not limited to, those documents cited in paragraph XVII.4. NDEP shall maintain the record in accordance with the requirements of NRS Chapter 239.

Appendix VI – Updates have been made to Section 1.0 – Introduction, and Section 3.0 - Underground Test Area.

**Letter Agreement to Modify the
Federal Facility Agreement and Consent Order**

State of Nevada:



Leo M. Drozdoff, Administrator
Department of Conservation and Natural Resources
Division of Environmental Protection

9/25/09
Date

National Nuclear Security Administration:



Stephen A. Mellington
Nevada Site Office

3.17.10
Date

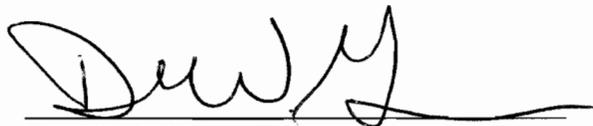
Defense Threat Reduction Agency:



Kenneth A. Myers III
Director

2/25/10
Date

Department of Energy:



David W. Geiser, Deputy Director
Office of Legacy Management, LM-1

10/30/09
Date

Letter Agreement to Modify the Federal Facility Agreement and Consent Order

The National Nuclear Security Administration Nevada Site Office (NNSA/NSO); the Nevada Division of Environmental Protection (NDEP), the U.S. Department of Defense (DoD); and the U.S. Department of Energy, Office of Legacy Management (DOE/LM) have agreed to modify the May 10, 1996, version of the Federal Facility Agreement and Consent Order. In the interim, until the Agreement itself is resigned, the parties intend to comply with the revised provisions as described below. This modification reflects administrative changes to the agreement. The specific changes and paragraphs are listed below and include, but are not limited to: recording the name change of the Nevada Operations Office to the Nevada Site Office; recording the name change of the Nellis Air Force Range (NAFR) to the current name of the Nevada Test and Training Range (NTTR); reflecting the current Corrective Action Unit and Corrective Action Site numbers for Soils and the Underground Test Area (UGTA) listed in Appendix VI; update of the Resource Conservation and Recovery Act (RCRA) permit number; and update of the addresses of the parties to the Agreement.

1. Nellis Air Force Range (NAFR) will be changed to Nevada Test and Training Range (NTTR) in the following portions of the Agreement and throughout Appendices I and VI.
 - Lines 14 and 15 of the Introduction and Articles IV.26 and IV.32 of the Agreement.
2. RCRA permit number will be changed from NEV HW009 to NEV HW0021 in the following portions of the Agreement and Appendix VI.
 - Article II.1.f of the Agreement.
3. Nevada Operations Office will be changed to Nevada Site Office in the following portions of the Agreement and Appendix VI.
 - Articles VII.5, XVI.3, and XVI.4 of the Agreement.
4. In Article XII.5, first sentence, the word “will” is being replaced with the word “may” and the sentence will read as follows: “One (1) milestone, with an associated due date or deadline, beyond FY+2 may be established for the completion of UGTA.”
5. In Article XVI.1, first sentence, the reference to the Carson City Office will be removed from the sentence and the sentence will read as follows: “Documents shall be sent to NDEP in a manner designed to be received by the date due in the Las Vegas office.”
6. Article XVI.2 shall be changed to reflect that NDEP will receive two hard copies of documents and the reference to the address of the Carson City office will be removed. The paragraph will now read: “Unless otherwise specified by written notice to the agreement coordinators of DOE and DoD, any written report, document, or submittal provided to NDEP, pursuant to a milestone or deadline identified in or developed under the provisions of this Agreement, two hard copies shall be sent to:

Chief
Bureau of Federal Facilities
Division of Environmental Protection
2030 East Flamingo Road, Suite 230
Las Vegas, NV 89119-0818

7. Article XVI.4 shall be changed to update the current mailing information for DoD as follows:

Chief, Detachment 1, Nevada Operations
Defense Threat Reduction Agency
P.O. Box 208
Mercury, NV 89023

8. A new article should be added to include the address for U.S. Department of Energy, Office of Legacy Management; however, since the agreement itself is not being rewritten, in order to insert the address in the proper place in the agreement and to avoid renumbering subsequent articles, Article XVI.4 will include a sub-paragraph numbered XVI.4.a to include the address as follows:

Program Manager
U. S. Department of Energy
Office of Legacy Management
2597 B $\frac{3}{4}$ Road
Grand Junction, Colorado 81503

9. A table of contents and a list of acronyms shall be added to Appendix I.

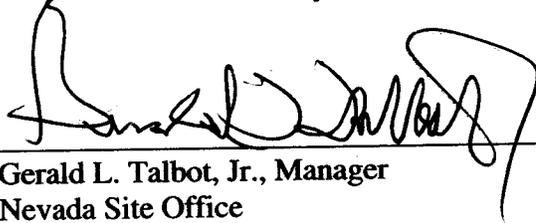
State of Nevada:



for Leo M. Brozdoff, Administrator
Department of Conservation and Natural Resources
Division of Environmental Protection

1/17/2008
Date

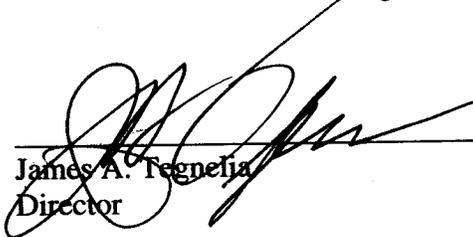
National Nuclear Security Administration:



Gerald L. Talbot, Jr., Manager
Nevada Site Office

1/17/08
Date

Defense Threat Reduction Agency:



James A. Fegnelia
Director

2/20/08
Date

Department of Energy:



Michael Owen, LM-1
Office of Legacy Management

2/11/08
Date

Letter Agreement to Modify the Federal Facility Agreement and Consent Order

In March 1999 and March 2005 the National Nuclear Security Administration Nevada Site Office (NNSA/NSO), the Nevada Division of Environmental Protection (NDEP) and the U. S. Department of Defense (DoD) agreed to changes in the May 10, 1996 version of the *Federal Facility Agreement and Consent Order* (copies of these two letter agreement modifications are included for your reference). The March 1999 modification was signed to change language in paragraph XII.4.b, from “...*setting of deadlines by NDEP by March 15.*” to read “...*that NDEP will establish deadlines within 30 days of receipt of the final proposed DOE and/or DoD milestones...*”. The March 2005 modification was intended to change the language throughout the Agreement from “...*Quarterly Meetings*” to “...*Semi-Annual Meetings*”. This modification was signed with the editing markups still visible in the modification, and inserted the previous “..*March 15*” date (which had been removed by the March 1999 modification) as well as the revised verbiage stating “...*within 30 days of receipt...*”

The NNSA/NSO has discussed the error with their Office of Chief Counsel and upon their recommendation, we are requesting that the March 1999 and March 2005 Letter Agreements to Modify the *Federal Facility Agreement and Consent Order* be rescinded and the attached Letter Agreement Modification replace the two previous Modifications.

In the interim, until the Agreement is revised, the parties intend to comply with the provisions as described below. These changes affect the timeframe for NDEP to establish deadline dates for final proposed milestones as well as the frequency and required topics of meetings. The parties have agreed to hold meetings Semi-Annually (instead of quarterly) in February and August. Additionally, the meeting requirements have been changed to accommodate the new schedule.

Paragraph VII.1 shall be changed to read as follows:

Following the effective date of this Agreement, DOE and DoD shall, on or before the 30th calendar day following the end of each calendar quarter, submit a written or electronic progress report to NDEP that describes the actions taken during the calendar quarter just ended. This information will serve as a partial basis for the discussions at the semi-annual meetings discussed in paragraph XII.4.

Paragraph VII.6 shall be changed to read as follows:

Semi-annual meetings will be held in February and August of each Fiscal Year in part to discuss any issues raised in or by the quarterly progress reports. These meetings will also serve to initiate the prioritization discussions identified in Part XII, Corrective Action Investigations/Corrective Actions. Parties will attempt to resolve issues during the semi-annual meetings or through other meetings per Paragraph VII.7. Resolution of issues will

be documented, and unresolved issues will be discussed at or before the next semi-annual meeting.

Paragraph VII.7 shall be changed to read as follows:

Parties may meet at times other than the semi-annual meetings as required, for example, if there are events, such as changes in available funding that might affect milestones, especially if those milestones are in the current fiscal year.

Paragraph XII.1 shall be changed to read as follows:

Within sixty (60) calendar days following the signing of this Agreement by the last party to do so, the parties shall meet to review Appendices II-IV and concur on the classification of all presently identified CAUs to insure all known CAUs are placed in the appropriate appendix, and where appropriate, due dates and deadlines established for existing and proposed activities. Following this initial meeting, the semi-annual meeting process outlined in paragraphs XII.3 and XII.4 will begin.

Paragraph XII.3 shall be changed to read as follows:

The parties shall review and update Appendices II through IV as required at semi-annual meetings or through formal correspondence. DOE and DTRA:

XII.3.a. Shall provide NDEP with a list of appendices changes not requiring NDEP approval made since the last semi-annual meeting;

XII.3.b. At any semi-annual meeting or through formal correspondence, may propose changes to the milestones in Appendix III, Corrective Action Investigations/Corrective Actions; move CAUs or CASs from Appendix II, Corrective Action Sites/Units or Appendix III, Corrective Action Investigations/Corrective Actions, to Appendix IV, Closed Corrective Action Units; or request any other changes affecting CAUs or CASs in Appendix III, Corrective Action Investigations/Corrective Actions or Appendix IV, Closed Corrective Action Units.

Paragraph XII.4 shall be changed to read as follows:

Following the transfer of a CAU from Appendix II, Corrective Action Sites/Units, to Appendix III, Corrective Action Investigations/Corrective Actions milestones, associated due dates and deadlines may be proposed by DOE and/or DoD but shall be established by NDEP according to the following semi-annual meeting schedule listed in paragraphs XII.4.a through XII.4.b or through formal correspondence. Except as noted in paragraph XII.5, deadlines may be established for the submittal of work plans, CADDs, CAPs, and completion of corrective actions within the FY+2 planning window. For those work plans, CADDs, CAPs, and corrective actions for which completion may fall outside the planning window (FY+2), interim deadlines may be established within the FY+2

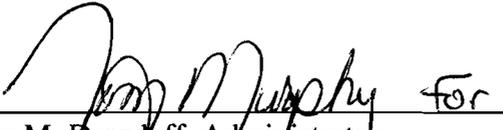
planning window. All deadlines other than those set forth explicitly in this Agreement shall be established pursuant to paragraphs XII.4 and XII.5.

XII.4.a. During the first semi-annual meeting held during the fiscal year, the parties shall review and reconsider established priorities, milestones, and associated due dates and deadlines for the current fiscal year, taking into consideration the Approved Funding Program and the factors listed in section 1.3 of Appendix VI, Corrective Action Strategy. The parties shall also initiate the process to establish priorities, milestones, and associated due dates for CAUs for FY+2. At this meeting, DOE will propose CAU milestones for target and planning funding levels, as appropriate. DOE may choose to develop milestones above the target funding level, but shall identify which proposed milestones are above the target case. NDEP, under its authority, may establish deadlines for any milestones for DOE and DoD activities subsequent to the prioritization process established in Appendix VI, Corrective Action Strategy. DoD asserts it is not able to commit to these FY+2 enforceable dates. Prioritized CAUs with their associated milestones, due dates, and/or deadlines shall be listed in Appendix III, Corrective Action Investigations/Corrective Actions. Parties reserve the right to invoke paragraph IX.1 if an issue is not resolved. Subsequent to this meeting, input on the proposed priorities will be sought from the public and the Community Advisory Board. DOE and DoD, in cooperation with NDEP, will develop a final prioritization of CAUs for CAIs and corrective actions. NDEP will establish deadlines within 30 days of receipt of the final proposed DOE and/or DoD milestones for all prioritized CAU activities it asserts must be incorporated into the FY +2 Budget Request. If the parties cannot agree on deadlines, then Part IX, Informal Dispute Resolution and Appeal Procedure, may be invoked.

XII.4.b. During the second semi-annual meeting held during the fiscal year, the parties shall review and reconsider established priorities, milestones, and associated due dates and deadlines for CAUs considering factors established in Appendix VI, Corrective Action Strategy, and the President's budget for FY+1. Parties reserve the right to invoke paragraph IX.1 if an issue is not resolved.

XII.4.c. This section is no longer applicable and will be deleted. Requirements from this section have been incorporated in Section XII.4.b.

State of Nevada:



Leo M. Drozdoff, Administrator
Department of Conservation and Natural Resources
Division of Environmental Protection

12/6/2006
Date

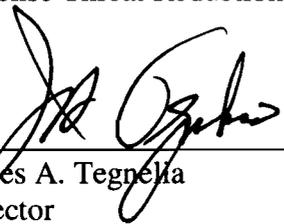
National Nuclear Security Administration:



Jay H. Norman, Acting Manager
Nevada Site Office

11.22.06
Date

Defense Threat Reduction Agency:



James A. Tegnella
Director

14 Jan 07
Date

Department of Energy:



Michael Owen, LM-1
Office of Legacy Management

01/03/07
Date

Letter Agreement to Modify the Federal Facility Agreement and Consent Order

The National Nuclear Security Administration Nevada Site Office (NNSA/NSO), the Nevada Division of Environmental Protection (NDEP) and the U. S. Department of Defense (DoD) have agreed to modify the May 10, 1996 version of the Federal Facility Agreement and Consent Order. In the interim until the Agreement itself is resigned, the parties intend to comply with the revised provisions as described below. This modification reflects the understanding and commitments between the parties regarding activities at the Central Nevada Test Area (CNTA) and at the Project Shoal Area (PSA). Although these two sites are considered 'Offsite' from the Nevada Test Site proper, the CNTA and PSA will be transferred to the Office of Legacy Management (LM) within the Department of Energy on October 1, 2006. LM is the component of DOE tasked with long-term surveillance and maintenance for CNTA and PSA.

Scope: The Nevada sites, specifically CNTA and PSA, will continue to be addressed through the FFACO in cooperation with LM. In recognition of the cooperative effort between LM and EM on the management of CNTA and PSA, specific duties and responsibilities of the parties are detailed below:

The following describes the roles of NNSA NSO; DOE/LM; and the State of Nevada (NDEP) with regard to this effort:

Nevada Division of Environmental Protection (NDEP) will:

- Continue to be a Party to the FFACO regarding the Offsites, specifically CNTA and PSA, and continue all previous obligations under the FFACO dated May 10, 1996 as amended.

National Nuclear Security Agency Nevada Site Office (NNSA NSO) will:

- Provide sensitive or classified information to appropriately cleared NDEP staff (consistent with national security requirements under the Atomic Energy Act of 1954, as amended); brief personnel about classified aspects of the project; and perform a classification review on prepared NDEP documents, when necessary.

Department of Energy, Office of Legacy Management (DOE/LM) will:

- Assume all DOE responsibility, and implement all DOE requirements outlined in Appendix VI Section 5.0 'Offsites', more specifically the Corrective Action Strategy and the Implementing Corrective Action Investigations and Corrective Actions of the FFACO.

State of Nevada:

 For

Leo M. Drozdoff, Administrator
Department of Conservation and Natural Resources
Division of Environmental Protection

6/20/2006
Date

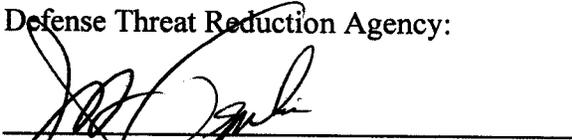
National Nuclear Security Administration:



Jay H. Norman, Acting Manager
Nevada Site Office

7/6/06
Date

Defense Threat Reduction Agency:



James A. Fegnotia
Director

5/23/06
Date

Department of Energy:



Michael Owen, LM-1
Office of Legacy Management

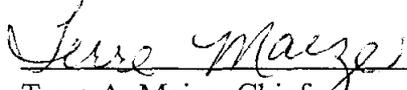
6/15/06
Date

Letter Agreement to Modify the
Federal Facility Agreement and Consent Order

The National Nuclear Security Administration Nevada Site Office (NNSA/NSO), the Nevada Division of Environmental Protection (NDEP) and the U. S. Department of Defense (DoD) have agreed that paragraph VII.4 of the May 10, 1996, version of the Federal Facility Agreement and Consent Order (FFACO) requires revision. In the interim until the Agreement itself is resigned, the parties intend to comply with a revised provision as described below. This change affects the reporting requirement to the NDEP as is related to the reporting of field activities. The reporting requirement is changed from a frequency of "bi-weekly" to "monthly." In addition all other guidance related to and citations of the reporting requirements of field activities shall be changed as previously mentioned, including standardized document outlines. Paragraph VII.4 shall be changed to read as follows:

"VII.4. DOE and DoD shall include in their quarterly reports a three-month advance schedule outlining field activities (including the field activities of their respective contractors, subcontractors, operators, and agents), proposed to be implemented under this Agreement. A more detailed schedule shall be provided to NDEP on a *monthly* basis, and shall provide the specific dates for conducting these activities for the subsequent *month*, thereby enabling NDEP to select those activities it deems appropriate to observe."

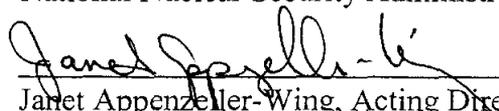
State of Nevada:



Terre A. Maize, Chief
Bureau of Federal Facilities
and FFACO Agreement Coordinator

4/5/04
Date

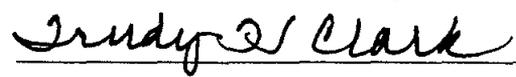
National Nuclear Security Administration:



Janet Appenzeller-Wing, Acting Director
Environmental Restoration Division
and FFACO Agreement Coordinator

3/31/04
Date

Defense Threat Reduction Agency:



Trudy H. Clark, Major General, USAF
Acting Director

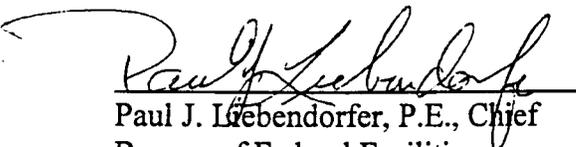
22 Mar 04
Date

**Letter Agreement to Modify the
Federal Facility Agreement and Consent Order**

The U.S. Department of Energy, Nevada Operations Office (DOE/NV), the Nevada Division of Environmental Protection (NDEP) and the Department of Defense (DoD) have agreed that paragraph XI.3 of the May 10, 1996, version of the Federal Facility Agreement and Consent Order requires revision. In the interim until the Agreement itself is resigned, the parties intend to comply with a revised provision as described below. This change will allow DOE and NDEP to make changes consistent with the current needs of the Underground Test Area (UGTA) project, specifically it will allow us to update assumptions, the project end date, and the number of Corrective Action Units (CAUs) that can be opened at any one time. All of these subsequent changes to the UGTA strategy would be made following discussions and agreements between the affected Parties. Paragraph XI.3 shall be changed to read as follows:

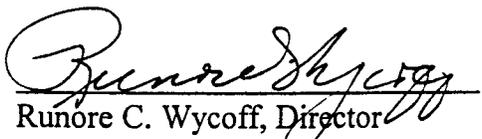
“XI.3. This Agreement shall not be modified unless such modification is in writing and signed by all affected parties. Changes to Appendices V, Public Involvement Plan, Appendix VI, Corrective Action Strategy (in order to address and incorporate new technical information per Paragraph XII.5), and the movement of CAUs between appendices as specified in Part V, Description of Appendices, and as specified in Part XII, Corrective Action Investigations/Corrective Actions, shall not be considered modifications of this agreement.”

State of Nevada:


Paul J. Liebendorfer, P.E., Chief
Bureau of Federal Facilities
and FFACO Agreement Coordinator

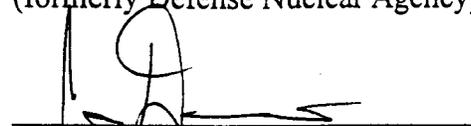
7/19/00
Date

U.S. Department of Energy:


Runore C. Wycoff, Director
Environmental Restoration Division
and FFACO Agreement Coordinator

7/12/01
Date

Defense Threat Reduction Agency:
(formerly Defense Nuclear Agency)


Dr. Jay Davis
Director

8/30/00
Date

Administration
Water Pollution Control
Air Quality
(702) 486-2850



Federal Facilities
Corrective Actions
Waste Management
Facsimile 486-2863

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION

(Las Vegas Office)
1771 E. Flamingo Road, Suite 121-A
Las Vegas, Nevada 89119-0837

May 11, 2004

ERD:040519.0010

Ms. Monica L. Sanchez, Acting Director
Environmental Restoration Division
National Nuclear Security Administration
Nevada Site Office (NNSA/NSO)
P.O. Box 98518
Las Vegas, NV 89193-8518

RE: NNSA/NSO Request to Create Corrective Action Site (CAU) 4000, No Further Action Sites

Dear Ms. Sanchez:

The Nevada Division of Environmental Protection, Bureau of Federal Facilities staff (NDEP) reviewed NNSA/NSO's written request dated March 16, 2004. NNSA/NSO requested that CAU 4000 be created as a No Further Action Site for Correction Action Sites (CASs) identified as having no remaining contamination because of natural attenuation or historical corrective actions that took place prior to the start of either a Streamlined Approach for Environmental Restoration (SAFER) Plan or a Corrective Action Investigation Plan (CAIP).

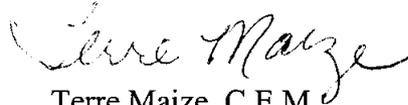
NDEP agrees with the request. The CASs requiring No Further Action prior to the beginning of either the SAFER Plan or the CAIP may be moved from Appendix II to Appendix IV of the FFACO. These CASs must not be deleted and must continue to be listed within the FFACO tracking system. Each transfer must be documented with copies distributed to the appropriate personnel.

ACTION	_____
INFO	ERD ESHD TO WMO MGR
NSO/MGR	✓
AMEM	✓
AMNS	_____
AMSO	_____
AMSSP	✓

Monica L. Sanchez, Acting Director
Page 2
May 11, 2004

Address any questions regarding this matter to either Ted Zaferatos at (702) 486-2856, Don Elle at (702) 486-2874, or me at (702) 486-2857.

Sincerely,



Terre Maize, C.E.M.
Chief
Bureau of Federal Facilities

TM/DRE/TZ

cc: Kenneth Hoar, Director, ES&HD, NNSA/NSO
Eric Shanholtz, Chief, DTRA
Patti Hall, EM, NNSA/NSO
Frank Di Sanza, WMD, NNSA/NSO
Wayne Griffin, BN/DTRA
Tiffany Lantow, DTRA/TDTON
Janet Appenzeller-Wing, ERD, NNSA/NSO
Karen Beckley, NDEP-CC

**Minutes, FFACO Meeting
Third Quarter, FY 1997
May 14, 1997, Las Vegas**

Attending:

State of Nevada (NDEP): Paul Liebendorfer, Clint Case, Karen Beckley, Dean Mireau, Jon Taylor, Clem Goewert, Harry van Drielen, Donald Garrepy

Department of Energy (DOE): Steve Mellington, Patti Hall, Ken Hoar, Sharon Hejazi, Bobbie McClure, Bob Bangerter, Monica Sanchez, Janet Appenzeller-Wing, Sabine Curtis, Clayton Barrow, Pete Sanders, Dirk Schmidhofer, Marlon Stewart, Pam Adams, Jill Williamson

Defense Special Weapons Agency (DSWA): Dave Bedsun, Wayne Griffin

These minutes are not meant to be a verbatim transcript of the meeting but are meant to reasonably represent the positions of the parties present at the meeting.

Note: ## denotes a new action item; ** denotes a new agreement.

Next Meeting: August 13, 1997, Las Vegas, 9 am.

Handouts:

- Agenda
- Summary of Agreements from November 20, 1996, meeting
- Summary of Agreements from March 19, 1997, issues resolution meeting
- Summary of Agreements from February 12, 1997, meeting
- Action Items from February 12, 1997, meeting
- Proposed DOE and DSWA modifications to appendices
- Flow diagram describing how new CASs are added to FFACO appendices

Bedsun noticed that Mireau had a tape recorder on the table in front of him and asked if the meeting was being taped. Mireau said the recorder was not on. Bedsun said all members should be informed if the meeting is being taped.

Approval of Agreements from November 20, 1996, Meeting (*Attachment I*)

Liebendorfer noted a concern with Agreement Number 3, " All agreed that NDEP staff will be responsible for documenting policy, decisions, and guidance discussed during meetings and teleconferences. NDEP will not be responsible for detailed minutes of the meeting." [version 1]

In the minutes from the November 20, 1996, meeting, the agreement actually reads as follows: "All agreed that NDEP staff will be responsible for documenting policy, decisions and guidance

discussed during meetings and teleconferences for cases in which NDEP believes it has given specific policy guidance or concurrence with decisions or proposed alternatives. If DOE believes that it has received specific direction and has not received anything from NDEP, then it is incumbent upon DOE to seek clarification. NDEP will not be responsible for detailed minutes of the meeting.” [version 2]

Liebendorfer will sign the agreements as listed in Attachment I to the agenda (version 1) if DOE understands the full implication of the meaning of the version in the minutes (version 2). Mellington understands the intent of the version in the agreement. The parties signed the agreements as listed in Attachment I of the agenda at the conclusion of this meeting.

**All agreed that Agreement 3 from the November 20, 1996, quarterly meeting should be clarified to read, “All agreed that NDEP staff will be responsible for documenting policy, decisions and guidance discussed during meetings and teleconferences for cases in which NDEP believes it has given specific policy guidance or concurrence with decisions or proposed alternatives. If DOE believes that it has received specific direction and has not received anything from NDEP, then it is incumbent upon DOE to seek clarification. NDEP will not be responsible for detailed minutes of the meeting.”

Approval of Agreements from March 19, 1997, Meeting (*Attachment II*)

Liebendorfer started a discussion of Agreement 5 from the March 19, 1997, quarterly meeting, “All agreed that the parties will review the CASs that comprise a CAU during kickoff meetings to ensure that the CAU grouping is reasonable. NDEP will not issue a policy on grouping CASs into CAUs.”

He reiterated that NDEP will not issue a policy on CAS/CAU groupings, but there is concern that once work is started on a CAU, the CAS content should not be changed unless unexpected conditions arise. He does not want to assign CAU deadlines and then have to keep changing them. Mellington identified a problem with the progression of activities. Agreement 5 states that CASs will be reviewed during kickoff meetings, but these meetings are not held until a CAU is already in Appendix III of the FFACO. Liebendorfer agreed that he is concerned with this timing dilemma. Mellington believes that it is incumbent upon DOE and DSWA to significantly screen the CASs before a CAU is promoted to Appendix III to make sure they are appropriately grouped. The CASs will then be reviewed by NDEP during the kickoff meeting.

Liebendorfer said that NDEP is preparing a summary of their concerns about how CASs are grouped into CAUs. Once a CAU is in Appendix III, he is very concerned about reorganizing the CASs into another CAU. Bedsun again raised the concern about evaluating the CASs at kickoff meetings after the CAU is in Appendix III. Liebendorfer recognizes there can be diverse CASs in a CAU, but not if they are so different that it will be difficult to perform the activities. Griffin added that sometimes CAS-related problems do not arise until the investigation has begun. Liebendorfer recognizes this, but he wants to reduce the number of CAS/CAU changes by careful review before the CAU is promoted to Appendix III.

The parties signed the agreements as listed in Attachment II of the agenda at the conclusion of this meeting.

NDEP will prepare a summary of their concerns and comments about the grouping of CASs into CAUs and send it to DOE and DSWA.

** All agreed that DOE and DSWA will carefully screen the CASs in a CAU before promoting the CAU to Appendix III, and during that screening they will consider NDEP's concerns about CAS groupings. The CASs will be reviewed again during the kickoff meeting.

Hall asked if there are comments on or changes to the draft version of the minutes from the March 19 1997, issues resolution meeting. Liebendorfer replied no, and said they can be finalized.

Approval of Agreements from February 12, 1997, Meeting (*Attachment III*)

There was no discussion of the Agreements from the February 12, 1997, quarterly meeting. The parties signed the agreements as listed in Attachment III of the agenda at the conclusion of this meeting.

Review of Action Items from February 12, 1997, Meeting (*Attachment IV*)

Hall reviewed the following ongoing action items from the February 12, 1997, meeting.

Item 5. DOE/DSWA must submit any changes to the E-tunnel discharge permit to NDEP before May 1, 1997.

This issue was discussed later in the meeting.

Item 9. Bangerter and Goewert will review the developed standardized outlines and decide where they must be adjusted to meet specific UGTA needs.

A CAIP outline has been drafted for the UGTA documents and is in review.

Item 11. NDEP has not yet formally approved proposed modifications to CAUs 120 and 450.

This issue was discussed later in the meeting.

Item 14. DOE is reviewing the NDEP comments on the Industrial Sites QAPP and will submit the completed document review to NDEP.

DOE is preparing responses to NDEP's comments on the Industrial Sites QAPP and expects them to be finalized during the first week in June. After NDEP receives the comments, DOE will schedule a meeting to discuss the issues.

Proposed appendices modifications (*Attachment V and VI*)

Hall noted that Attachments V and VI contain proposed CAS/CAU modifications. Modifications to the CAUs that are shaded have been previously proposed. Attachment V contains the detailed changes to CAU 120 that were referred to in the letter to NDEP dated April 21, 1997.

NDEP will review the CAS/CAU modifications proposed by DOE and DSWA and return approvals or responses as soon as possible.

Short Presentation on Using the PDF Reader

Schmidhofer gave a presentation on the new digital format for the FFACO, demonstrating how much easier it is to find CAS/CAU information. He explained that the FFACO will be sent out as PDF files on a CD ROM to all those who currently get controlled versions of the agreement. An updated version of the appendices will be released in the next few weeks, and the CD ROM will also contain the body of the agreement and all the appendices in PDF format.

He demonstrated the shareware software "Adobe Acrobat" that allows the digital files to be read. The Acrobat reader searches the file for key words or numbers and allows hyperlinks to cross reference or "quick connect" different portions of the agreement or the appendices. In the future, the CASs in the appendices will be linked to the CAU map showing the site location.

NDEP Issues

1. E-Tunnel/Water Permit

Liebendorfer said that NDEP postponed the release of the E-tunnel discharge permit for public comment by four-six months so that DOE could reevaluate the strategy of closing the site with the discharge permit. NDEP also agreed to delay the deadline for the closure report for six months. To date, NDEP has had no response from DOE on the permit.

Bangerter agreed that DOE requested the extension so that other closure options could be evaluated. The discharge permit proposes activities including the monitoring of well ER12-1, and DOE wanted to evaluate other options such as piping the discharge to the Area 12 sewage lagoons. The evaluation is complete, and except for the cost of monitoring well ER12-1, the life cycle cost of both approaches is very similar. Consequently, DOE is going to recommend the discharge permit approach, but not the monitoring of well ER12-1. Data from that well will not be indicative of discharge from the ponds and will be very expensive to collect. DOE will formally present this position to NDEP.

Liebendorfer replied that NDEP will propose the discharge permit as it now stands, which has been modified since the 1992 version.

NDEP will open the proposed water pollution control permit for the E-Tunnel discharge, as it now stands, for public review and comment.

DOE will respond to NDEP with comments on the proposed water pollution control permit for the E-Tunnel discharge before the end of May.

2. NDEP knowledge of FFACO-related Program Activity/Expenditure Reports by DOE contractors and input to baselining process

NDEP had several questions about the availability of digital versions of budget and cost reports and the process for NDEP involvement in the baselining process

- A. At what point will the Monthly Project Tracking System (PTS) Report, now received by NDEP in hard-copy form, be available to NDEP on-line?
- B. At what point will Project Management Information System (PMIS) Reports be available to NDEP on-line?
- C. At what point (when, specifically) in practice, in the early stages of the planning (baselining) process for a given FY, can NDEP have effective input?
- D. With whom, specifically, does NDEP interface on a regular, working-level basis during the early stages of the preparation of the Baseline each year?

Liebendorfer opened the discussion by stating that NDEP is interested in receiving and studying both the PTS and PMIS reports. McClure said that a meeting has already been scheduled for 1:30 this afternoon to discuss the availability of the PTS in digital format as well as some of the problems associated with the digital format.

Mellington began talking about the PMIS. He said that when the agreement was negotiated, the parties talked about this subject in great depth. In fact, DOE devoted an entire negotiation meeting to a presentation on the baseline/PTS. Mellington has extracted discussions from the FFACO negotiation meeting minutes on the reporting systems. He believes that NDEP agreed to review the baseline to make sure that budgets and scope are reasonable. Then it will review the PTS reports, and if cost variances are over 10 percent of the budgeted cost, then NDEP can request additional information to facilitate understanding actual costs deviated from the budgeted costs. This process allows NDEP the chance to participate in the budget process, to monitor costs throughout the project, and to obtain additional information if thresholds are exceeded.

In addition, Mellington offered two new avenues for NDEP's participation in the budget process. Each time ERD develops a baseline, an outside team validates its reasonableness, and NDEP will now be allowed to participate as an observer in the baseline validation. This will give NDEP the opportunity to work with experts who are tasked with reviewing the assumptions and methods for developing the project budgets. Another option is for NDEP to review the baseline once the DOE Project Managers receive the final draft; however, NDEP could not be part of the validation team.

Liebendorfer thought that NDEP would have access to both PTS and PMIS reports. He needs them both so he can determine, independently, how accurate the baseline budgets really

are. He needs to know how scope changes affect the budgets. Mellington replied that he researched the meeting minutes, and DOE never agreed to giving NDEP the PMIS reports. He feels comfortable that NDEP can track project costs adequately because the current-year task plans are generated from the baseline so the work scope on the reports will be current. When the cost variance of a certain activity exceeds 10 percent the budget, it will be clearly identified on the PTS report. DOE will then provide NDEP any additional information it requests. By asking for the PMIS, NDEP is assuming a management role, not a regulatory role. DOE will share with NDEP the details of how the budgets are developed, will allow NDEP to be on the validation team so they can have expert advise about how to interpret the budgets, will allow NDEP to see the PTS report to know when actual costs exceed budgets costs by 10 percent, and will provide detailed information if the threshold is exceeded.

Liebendorfer replied that NDEP is asked to make recommendations about what is a reasonable amount of work for a reasonable amount of money. NDEP can evaluate reasonable costs, but he does not know how accurately that cost represents a reasonable amount of work. For instance, in order for NDEP to determine if additional work can be performed for the same cost, NDEP needs to know the actual costs. Mellington replied that this information can be obtained from the combination of the baseline and the PTS report.

DOE and NDEP will continue to discuss the issue of the appropriate distribution of CAU budget and cost data and NDEP's involvement in DOE's budget process.

3. NDEP progress on issuing criteria for findings of substantial deficiency

Mellington asked what the status was of NDEP's definition of a substantially deficient document. Liebendorfer said he is waiting on the finalization of the document outlines.

Mellington wondered if the definition is really dependent on the outlines. Can NDEP distribute the prepared wording while the outlines are being completed? Liebendorfer agreed to distribute a draft of the letter that states NDEP's position. NDEP's legal position is that it is NDEP's right to determine if a document is substantially deficient, so it is NDEP's right to define the term. He believes the definition is not open for negotiation. Mellington asked if it is Liebendorfer's intention to discuss the definition for the first time in front of the State Environmental Commission? This is what will happen if NDEP's position remains unnegotiable. He does not believe this position meets the intent of the agreement, which was to informally resolve disputes between the parties before taking the issue to a higher level.

Hejazi said that there seems to be ambiguity in the understanding of the term "substantially deficient" because the parties are interpreting it differently. Usually, ambiguities are clarified between the parties. She believes that it is not in the best interest of any of the parties to take this issue through the formal dispute resolution process.

NDEP will send DOE and DSWA a copy of the draft version of the letter containing NDEP's definition of a substantially deficient document.

4. Status of document outlines

Case and Sanders reported on the status of the standardized outlines. There are still some outstanding issues, and these will probably have to be resolved at a higher level. Mellington asked the team to develop, within two weeks, a summary and analysis of the differences between NDEP and DOE's position.

McClure stated that DOE is in the process of preparing many reports, and she wondered if they can continue to submit documents under the current outlines. Sanders replied that, in general, the differences between DOE and NDEP are not in the report content, but rather where the information is located. Appenzeller-Wing believes that the outlines will streamline the document production process, and she suggested the team increase the priority of completing them.

The team assigned to develop standardized document outlines will identify, by May 28, the outstanding issues needing party resolution. The parties will then meet to resolve the issues.

5. CAU 120 per DOE letter dated April 21, 1997

Barrow apologized for the confusion surrounding the letter to NDEP dated April 21, 1997, concerning CAU 120. DOE simply wanted approval to move ahead with the CAU activities. The details for the CAU changes in the proposed modifications for this meeting should provide NDEP with the necessary information so the approval can be made.

Liebendorfer said that he will have to reconsider the budget for this CAU because if corrective action activities are not going to be performed at some CASs, then there should be more money available for other work. Appenzeller-Wing replied that Bechtel has already performed change control for this task and returned the budgeted cost to DOE. Liebendorfer said now that there is more money to do more work, how can he find out what additional work is going to be performed?

NDEP will review the proposed changes to CAU 120 as described in a letter to NDEP dated April 21, 1997, and in DOE's proposed modifications for May 14, 1997, quarterly meeting.

6. Documents presented as finished products with no NDEP review

Case said this issue refers to documents that are subtier to CAIPs, CADDs, etc. The subtier documents have to be satisfactory if NDEP is to judge the FFACO document as satisfactory. DOE is operating at risk if NDEP is not allowed to review or comment on subtier documents before the FFACO document arrives. It is simply a matter of efficiency to allow NDEP to review subtier documents as soon as they are complete.

Liebendorfer added that this concept is part of the definition of substantially deficient and, specifically, it relates to the UGTA program. The UGTA project is producing many interim documents which may or may not be reviewed by NDEP. For instance, the Frenchman Flat Value of Information Analysis (VOIA) was so incomplete that any CAIP based on it would

be judged substantially deficient. The situation may also arise in geologic or hydrologic studies that are the basis for later decisions. If NDEP is not given a chance to comment on the study approach or results, the FFACO document may be fatally flawed.

Bangerter replied that NDEP requested to review several UGTA documents that have not yet been developed. For instance, he provided a complete list of documents that were used in the development of the groundwater model. All but the several still being developed are available to NDEP. Goewert noted that having all the related documents does not matter so much for the CAIP, but it may matter more in the CADD. NDEP is proactively trying to alleviate problems before they start.

Mellington understands and agrees, philosophically. He asked if NDEP is having difficulty getting support documents, except for the ones that are not yet complete. Liebendorfer said yes, for instance, DOE made some changes in the Clean Slates I activities based on air quality monitoring from the Double Tracks corrective action, yet NDEP has never seen the report. He suggested that if DOE is analyzing data then perhaps NDEP should be providing input into the study.

7. CAU 386 Lead Sites

Liebendorfer asked about the status of the CAU 386 closure report revision that was promised five months ago.

Barrow replied that the report has been rewritten and is being edited. Liebendorfer finds it amazing that it is taking six months to produce the revision. Barrow said it is because the funding for that task was stopped and had to be reinitiated. Mellington agreed that it has taken too long.

DOE will distribute a revised version of the CAU 386 closure report by mid-June.

8. Specifics of land-use restrictions

Mellington confirmed that DOE received the NDEP letter approving the recording system for CAU land-use restrictions, but DOE has had trouble finding the restriction language used by the Air Force that Liebendorfer has referred to in previous meetings. Liebendorfer replied that the language should state that the future use of the site cannot alter the containment capability of the site.

NDEP will send a copy of the land-use restriction language used by the Air Force in their closures to both DOE and DSWA.

9. Present status of Soils Sites CAUs

Liebendorfer has several issues to discuss with DOE regarding the Clean Slates Sites

A. Deadlines

DOE has formally requested that the deadlines NDEP set for Clean Slates II and III Fiscal Year (FY) 1999 milestones be removed. Liebendorfer has a problem removing them because DOE still includes these milestones in the baseline and in CAB budget presentations. He sees a contradiction because on one hand DOE is asking not to be accountable for the work, and, on the other hand, DOE is telling everyone they will do the work.

Mellington replied that these particular milestones were never proposed as FFACO activities. The funding will be removed from baseline when the deadlines are removed. The process for proposing milestones with due dates and the setting of deadlines is clearly laid out in the FFACO. NDEP has no authority to set a deadline just because a milestone is written somewhere. Liebendorfer replied that NDEP reserves the right to set enforceable milestones.

Hejazi summed the arguments: (1) Liebendorfer is saying that he has set deadlines based on DOE's intended milestones; (2) Mellington is saying that the milestones were never formally proposed so no deadlines can be set. Liebendorfer added that DOE's public forum is still stating that the Clean Slates work will be performed.

Bedsun read the process for proposing milestones and setting deadlines in the FFACO. It includes language that the CAUs will be prioritized for activity. Liebendorfer argued that DOE is establishing priorities by taking the proposed work scope to the public forum and stating when it will be performed. Mellington replied that this work cannot be completed until cleanup standards are set. Liebendorfer believes that Air Force personnel have had some exposure because they do not understand the risk the contamination presents. Mellington replied that NDEP needs to discuss that issue with the Air Force, not DOE, because DOE does not control Air Force daily operations. That is the responsibility of occupational health and safety.

B. Discussions with Air Force

Liebendorfer said there seems to be a dialogue problem between DOE and the Air Force, and he will attempt to facilitate an increase in communication.

NDEP will organize a forum of the appropriate organizations to discuss the cleanup and use of Air Force-managed lands that contain sites which are the responsibility of the DOE.

C. Remediation levels/potential land-use restrictions

NDEP's concern with the remediation level issue centers on DOE's evaluation of the risk from the soils sites and whether the sites meet the Air Force mission needs. Mellington believes that DOE has no responsibility to cleanup sites to meet missions; the missions

should be altered to meet the land-use restriction. Liebendorfer said that if a helicopter landed on one of the soil sites at night, and there was 100 percent resuspension of the soil, the worker may receive an acute dosage of radionuclides. The Air Force needs to know this for their planning operations. What the Air Force perceives as unrestricted use may not be what DOE intends. For instance, unrestricted use may be for flyovers but not for land operations.

10. Process for adding CASs to Appendix II

Hall described the process for adding new CASs to the FFACO as illustrated in the flow diagram included in the agenda packet. Liebendorfer is concerned that active sites, or sites contaminated due to recent operations, will be included under the FFACO. Hall said that some active sites are listed in Appendix II because of how the original version of Appendix II was generated. DOE is in the process of reviewing this list for active sites and proposing their removal. The process described in the flow diagram should prevent any active sites from being listed in the future.

DSWA Issues

1. CAU 437 SAFER process

Griffin reminded NDEP that at the kickoff meeting for CAU 437 the parties agreed that the SAFER process was the appropriate approach for completing the corrective action, but in March, DSWA received a letter saying the approval of this approach is still under consideration. According to van Drielen, NDEP has given DSWA verbal approval to proceed with SAFER process for CAU 437, and he will formally respond, by letter, with this approval.

NDEP will formally approve DSWA's proposal to use the SAFER process for completing corrective actions at CAU 437.

DSWA will formally propose a milestone and due date for submitting the CAU 437 SAFER Plan and a revised due date for the submittal of the closure report.

2. CAU 433

Bedsun noted that Attachment VI to the agenda for this meeting contains a request by DSWA for the E-Tunnel discharge CAS, CAU 433, to be removed from the FFACO. The request is based on DSWA's belief that once the discharge is permitted, the site becomes active. Liebendorfer replied that he will not consider the E-Tunnel discharge to be an active site any more than he would consider any closed RCRA site as active. The CAU needs to be closed with the requirement that the post-closure activity requires an active discharge permit.

Meeting Adjourned at 11:30 am

**Minutes, FFACO Meeting
2nd Quarter, FY 1997
February 12, 1997, Las Vegas**

Attending:

State of Nevada (NDEP): Paul Liebendorfer, Clint Case, Karen Beckley, Dean Mireau,
Jon Taylor, Clem Goewert, Harry van Drielen, Donald Garrepy

Department of Energy (DOE): Steve Mellington, Patti Hall, Sharon Hejezi, Bobbie McClure,
Bob Bangerter, Monica Sanchez, Janet Appenzeller-Wing, Sabine Curtis, Pete Sanders,
Jon Pickus, Kevin Rohrer, Pam Adams, Barbara Deshler, Jill Williamson

Defense Special Weapons Agency (DSWA): Dave Bedsun, Wayne Griffin

These minutes are not meant to be a word-for-word description of the meeting, but are meant to reasonably represent the positions of the parties present at the meeting.

Note: ## denotes a new action item; ** denotes a new agreement.

Next Meeting: May 14, 1997, Las Vegas, 9:00 am.

Handouts:

- Agenda
- Summary of Agreements from November 20, 1996 meeting
- Action Items from November 20, 1996 meeting
- Proposed Fiscal Year (FY) 99 milestones
- Proposed modifications to appendices
- Recommended Distribution List for Copies of NDEP Transmittal Letters
- FFACO Appendix III Milestones Completed Since May 17, 1996
- Unapproved Modifications Proposed at November, 1996 FFACO Meeting
- Biweekly Field Report

Approval of Agreements from November 20, 1996 Meeting (*Attachment I*)

NDEP proposed the following change to the agreements made during the November 20, 1996 quarterly meeting:

- “2. All agreed that NDEP will perform cursory reviews of documents being submitted to meet deadlines to determine that they were received before the deadline and that they are not substantially deficient. ~~If the document meets these goals, a milestone Notice of Completion will be issued.~~ The document will then be reviewed in more detail to determine if the document is satisfactory to proceed to subsequent tasks.”

NDEP does not agree that a milestone Notice of Completion should be issued when it is determined that the document arrived before the milestone deadline and is not substantially deficient. NDEP believes it should be issued after they determine that the document is satisfactory for procession to the next task (for example, NDEP "approves" the document).

Mellington replied that when the agreement was negotiated, the parties agreed that milestones would be set for the submittal of documents. Case said that deadlines are for the submittal of the documents, and that Notices of Completion are for approval of the documents. Liebendorfer added that when NDEP determines a deadline is met, it loses its right to impose stipulated penalties. Mellington agreed and repeated that Notices of Completion should be issued after the enforceable milestone has been met (the document arrived on time, and it is not substantially deficient).

Liebendorfer outlined a new process that NDEP will be using to notify DOE of the status of documents. There will be various kinds of "form" letters, including the following:

1. The document is approved, and the deadline has been met.
2. The document is approved; the deadline has been met, but NDEP has comments.
3. The document is not approved, but the deadline has been met.
4. The deadline has been met (the document is not substantially deficient), but NDEP needs more time for review

NDEP will provide DOE with an analysis of NDEP's understanding of the milestone Notice of Completion issue. DOE will review the FFACO language in paragraphs IX.2, XII.8, and XXV.1.

The parties may possibly be able to resolve their differences through a letter of understanding which will detail the process to be used for documenting the satisfactory completion of a milestone.

Review of action items from November 20, 1996 meeting (*Attachment II*)

The following list only contains those action items from the November 20, 1996, that were discussed during the February 12, 1997, meeting. See the agenda for a complete listing of the status of the November 1996 action items.

1. DOE will add a statement to each of the 10 landfill Corrective Action Units (CAUs) listed in Appendix IV that the appropriate DOE/NV organization will conduct the long-term monitoring.

Completed. The next distribution of Appendices II-IV will include the following statement as noted in a December 12 letter from DOE and in discussions with Liebendorfer: "DOE/NV closed, registered, and will perform long-term monitoring in accordance with Nevada Solid Waste Regulations."

Liebendorfer added that the Environmental Protection Division (EPD) is assuming the responsibility for long-term monitoring at the landfills. Mellington noted that DOE has the responsibility to complete the monitoring, but it is unclear exactly which DOE organization will be performing the work. He does not want NDEP dictating which DOE organization will do the actual work. Liebendorfer said that EPD has stated that the monitoring will be their responsibility.

Mellington replied that EPD may perhaps do the work, but the responsible group is subject to change if DOE reorganizes. Liebendorfer asked who, then, is responsible and who should receive communications? EPD? Hejezi wondered if NDEP is simply concerned with identifying the DOE point of contact. Liebendorfer said it is more than that, he needs to know who is responsible for doing the work.

Hejezi suggested that the language in Appendix IV reflects that the appropriate DOE organization will take responsibility for the long-term monitoring and that points of contact will be formally transmitted to NDEP and maintained in project files.

**** All agreed that the following statement will be listed with each of the 10 landfill CAUs residing in Appendix IV: "The appropriate DOE/NV organization closed, registered, and will perform long-term monitoring in accordance with Nevada Solid Waste Regulations."**

DOE will send a letter to NDEP stating which DOE/NV organization is responsible for performing long-term monitoring at the 10 landfills now listed in Appendix IV. The letter will include the DOE points of contact.

2. DOE will respond to NDEP stating how it will satisfy NDEP's requirements (letter dated September 26, 1996) to document the 10 landfills that will be listed in Appendix IV.

Completed. DOE sent a letter to NDEP on December 12, 1996, detailing the responses to requirements made by NDEP in a letter dated September 26, 1996, for closing the landfill CAUs. DOE provided information to satisfy NDEP's concerns and included a plan to store the land withdrawal status information in several databases and in hardcopy with the CAU files.

Liebendorfer would like to review the databases where the land withdrawal status information will reside so he can better understand the process for recording and maintaining the data.

DOE will explain, in detail, the process for recording and maintaining the land withdrawal status information that will be stored in established databases and hardcopy files. This explanation will probably occur during the week of February 17, 1997.

NDEP will formally respond to DOE with the determination of their satisfaction with the proposed land withdrawal status records maintenance system.

3. DOE/DSWA will schedule a meeting to discuss CAU 433, E-tunnel discharge.
Completed. DOE/DSWA had a series of meetings in November and December and requested, in a letter to NDEP dated December 17, 1996, a six-month extension of the CAU 433 closure report submittal. NDEP approved the six-month extension in a letter dated January 6, 1997.

Harry van Drielen noted that NDEP is planning on releasing the discharge permit for the E-tunnel discharge for public comment on May 1, 1997. Any changes to the permit proposed by DOE and/or DSWA prior to May 1, 1997, will be considered and, if included, will be presented to the public for comment. After May 1, 1997, DOE and/or DSWA may submit comments to NDEP during the 30-day comment period, as may any other person.

DOE/DSWA should submit any changes to the E-tunnel discharge permit to NDEP before May 1, 1997.

10. Liebendorfer stated that his interpretation/understanding of the FFACO was not as stated by Mellington, but he will consider the issue of whether a separate CAIP is required for each CAU and formally respond.
Ongoing. NDEP responded in a letter dated December 16, 1996, that the requirement of a single CAIP for each CAU stands. DOE and DSWA disagree and are preparing a response.

Mellington said that he will suggest a mechanism for dealing with these types of issues later in the meeting. Liebendorfer does not think these types of issues are appropriate for quarterly meetings.

Budget information and FY 99 Milestones

Previously, NDEP requested a presentation summarizing DOE's budget for FYs 97, 98 and 99 and explaining how the budgets are developed. McClure presented the budget information.

McClure explained that NDEP has copies of last year's baseline in their offices. That baseline, plus the DOE Headquarters (DOE/HQ) Ten-year Plan guidance is what is being used to develop FY 99 work scope. She said that the FY 99 budget is still in a very dynamic state because the baseline is scheduled to be revised in the next few months. The budget submission schedule is as follows:

February 25, 1997	Kick-off meeting to begin the baseline revision effort.
February 28, 1997	Draft Project Baseline Summary Sheets due to DOE/HQ
April 25, 1997	Draft Project Baseline Summary Sheets due to DOE/HQ (will include Stakeholder and NDEP input)
May 30, 1997	Final Baseline due to DOE/NV
June, 1997	Final Baseline submitted to DOE/HQ and NDEP

McClure showed graphs of the budgeted distribution of funds across the projects for FY 97, 98, and 99. The Environmental Restoration Division (ERD) program is trying to have a more balanced program than in previous years with a better distribution across the Agreements, Offsites, Soils, UGTA and Industrial Sites Projects. The general priority of work is as follows:

- 1) Offsites
 - 2) Soil sites off or on the border of Nevada Test Site (NTS)
 - 3) Industrial sites starting in the southern area of NTS and working north, as identified by future land uses forecasted in alternative three of the NTS Environmental Impact Statement
- All CAUs will be investigated to determine the risk to human health and the environment, but Industrial Site CAUs in the weapons testing areas will not likely be remediated.

Liebendorfer remarked that there do not seem to be proposed FY99 milestones. He recognizes the problem DOE has with the sequencing of the budget scheduling and proposing milestones, but the FFACO specifically says that NDEP will establish deadlines by March 15 of each year. If DOE does not propose any milestones, NDEP may potentially be in the position of noncompliance. He asked if the FY99 ER activities have been presented to the stakeholders. Do they agree with the priorities?

McClure said that DOE has prepared a list of FY99 milestones, and they are included in the handout packet. DOE is proposing that deadlines for these milestones be established at the next quarterly meeting after the baseline is complete. Liebendorfer said the FFACO requirements, which specifically state that deadlines will be established by March 15, must be met. Mellington added that the DOE could formally request an extension to the March 15 requirement, and if NDEP agrees, the establishment of deadlines can be delayed.

Liebendorfer said he needs formal documentation of the criteria used to prioritize the FY99 work. Was it based on the criteria in the Corrective Action Strategy? McClure answered that the priorities are based on the Ten-Year Plan. Mellington stated that DOE/NV should plan their work independently from the Ten-Year Plan and proposed budgets. He is willing to commit to the FY 99 milestones included in the handouts and believes that NDEP can establish deadlines for these milestones.

DOE and DSWA will formally submit the FY 99 milestones to NDEP, along with the criteria used to select the milestones.

Mellington pointed out that the Soils sites milestones for FY 99 are shaded in the handouts because DOE is considering not proposing any Soils Site milestones for remediation activities. NDEP has already stated that any remediation activities must be considered interim, and DOE will not accept interim approval. Liebendorfer said he still needs to know the amount of resources that will be required to complete the soils activities because he would like the opportunity to comment on the appropriateness of expenditures. Mellington agreed to send the Soils planning information, but since NDEP will not approve it, he does not see the point in making the effort to establish milestones.

Mellington is frustrated by the progress of work since the signing of the FFACO. He thought the agreement would help the parties team together and accomplish more work in an accelerated manner, but it seems to have had the reverse effect. Liebendorfer disagreed and said that before the signing of the agreement, NDEP did not always have clear regulatory authority. He often had to ignore practices that he considered questionable. He did not think work was progressing in a satisfactory manner. Mellington believes that there is more time being spent on the interpretation of the agreement than in actually getting the remediation done. DOE is simply trying to complete the corrective actions. Both DOE and NDEP ultimately work for the taxpayers, and they both have the responsibility for making satisfactory progress. Liebendorfer suggested that maybe the parties need to reevaluate the agreement.

Proposed appendices modifications (*Attachment IV*)

Hall explained that the handout packet contains a list of newly proposed CAU modifications. There are no major issues among the proposals.

NDEP will review the proposed CAU modifications (*Attachment IV*) and formally reply with whether they agree as soon as possible.

Other issues/questions

Distribution list (*Attachment V*)

There have been some problems with the DOE Project Managers not receiving critical NDEP communication. DOE is providing a suggested distribution list for copies of transmittal letters.

Liebendorfer said that NDEP is reorganizing the Industrial Sites project Points of Contact. At this time, the NDEP contacts are as follows:

Offsites	Karen Beckley
UGTA	Clem Goewert
Part A Sites	John Taylor
Industrial Sites	Dean Mireau/Harry van Drielen

Standardized outlines

Mellington suggested that the parties empower a team consisting of DOE, NDEP, DSWA, and contractor representatives to finalize the document outlines and present them to the parties. The outline for the UGTA documents will be the hardest to fit into a standardized form. Goewert suggest that Bangerter and he review the developed outline to determine where they must be adjusted to meet UGTA needs.

**** All agreed to empower a team of appropriate personnel to finalize the standardized document outlines.**

NDEP will notify DOE by February 19, 1996, as to who will be representing NDEP at the outline development meetings.

Bangerter and Goewert will review the developed standardized outlines and decide where they must be adjusted to meet specific UGTA needs.

Notice of Completions (*Attachment VI*)

Hall noted that Attachment VI lists the documents which have been submitted to meet FFACO milestones and the dates of NDEP-issued milestone Notice of Completions (NOCs). It is very similar to the table distributed at the November 22, 1996, quarterly meeting. DOE has not received NOCs for four of the milestones.

Case said NDEP has not issued the NOCs because the state has a different opinion of when a milestone is complete then DOE does. He believes the milestone is complete when the document is approved. It was pointed out that the CAIP for CAUs 416 and 447 has been approved and that an NOC should be issued. Van Drielen said that the date for the submittal of the final CAU 332 Corrective Action Investigation Plan is incorrect. It was a draft version that was submitted on November 20, 1996.

NDEP will review the status of the Notices of Completions for those milestones listed in Attachment VI.

Approval of appendices modifications (*Attachment VII*)

Attachment VII lists the CAU modifications that were proposed at the November 20, 1996, quarterly meeting and for which DOE has not received approval or disapproval. Hall asked if a quarterly update of the appendices is too frequent. Perhaps every six months is more appropriate.

**** All agreed Appendices II-IV will be updated semi-annually, beginning when DOE receives approvals for the November 20, 1996, and February 12, 1997, proposed modifications.**

NDEP will formally respond to DOE by February 28, 1997, on whether they approve the CAU modifications that were proposed at the November 20, 1996, quarterly meeting.

Document Approval Period

Mellington noted that it is taking many months to get FFACO documents approved, and he asked what can be done to speed up the process. He recognizes that it is neither DOE's or NDEP's fault, but something must be changed. Liebendorfer said that having the standardized outlines should speed NDEP's review times.

Bi-weekly Field Report Format

A new format has been developed for the bi-weekly field report.

**** All agreed that the new format for bi-weekly field report is satisfactory and that DOE will continue to fax the latest version to NDEP.**

Status of hardware purchase and the anticipated date that data will be on the World Wide Web

Pickus reported that a new computer system has been installed in the Las Vegas NDEP office, and a similar one will be installed next week in Carson City. NDEP has requested on-line access to financial data. Pickus explained why that is not possible at this time.

DOE has a computer network that is protected with a "Firewall." The firewall keeps people from hacking into the network and obtaining confidential data. The financial system is behind the firewall. DOE is planning on taking periodic "snapshots" of technical and cost and schedule data dumping it to NDEP. NDEP can then integrate the data into their system. The types of data that can be distributed are the following:

- Site-specific information
- FFACO-required data
- Project Tracking Sheets (PTS)
- Task Plans
- Baseline Information
- Data Catalog System
- Source Data - framework for the subproject produced data
- Analytical chemistry

Pickus said that if DOE gives NDEP data about planned costs, milestones, and schedules, then NDEP should be able to evaluate where problems are. NDEP will also receive the PTS reports, which have enforceable milestones.

It may be possible for NDEP to observe some of the many audits that occur at DOE/NV each

year if NDEP wants thorough project reviews. For instance, DOE Headquarters performs many audits, as do outside organizations like the Army Corp of Engineers.

Status of Public Involvement Plan

Rohrer distributed another version of the Public Involvement Plan (PIP) and explained that comments from stakeholders, UNLV, and DSWA have been incorporated. He is not sure where the document is in the approval process. He said that the PIP is going to have to be controlled, but that he wants uncontrolled copies made available to all who need them.

Liebendorfer asked if the public comments have been compiled onto comment and response forms. NDEP has a responsibility to inform the public about the status of their comments.

DOE will provide completed document review forms with Stakeholder's comments on the Public Involvement Plan and DOE's intended response to NDEP.

NDEP issues

Liebendorfer noted that some issues are not effectively resolved in quarterly meetings, for instance project specific items should be discussed in separate meetings. Also, detailed presentations are not appropriate. The meetings should be used to discuss programmatic issues.

NDEP will provide DOE with quarterly meeting agenda items one month prior to the scheduled meeting.

DOE is reviewing the NDEP comments on the Industrial Sites QAPP and will submit the completed document review to NDEP.

DSWA issues

Bedsun noted that DSWA/NV is on track to be short of funds this year. He has been assured that the shortage will not affect scheduled work. He has no plans to alter FY97 work scope.

Negotiation meeting for outstanding issues

Mellington said that there are some outstanding FFACO issues which need to be resolved. He said the quarterly meetings are not the right forum and suggested that the original negotiation team reconvene with a moderator. Liebendorfer agreed that this is a good idea and added that it may be a different group of people depending on the issue. Mellington said the issues to be discussed are as follows:

- Substantially deficient
- Multiple CAUs per CAIP
- Soil cleanup levels
- Notice of Completions

DOE will formally request to NDEP that the FFACO negotiation team be reconvened to resolve several outstanding issues related to interpretation of the Agreement.

Meeting Adjourned at 12:00 pm

Minutes
FFACO Meeting
Third Quarter, FY 1999
May 5, 1999; Las Vegas, Nevada

Attending:

State of Nevada (NDEP): Mike McKinnon, Paul Liebendorfer, Karen Beckley, Jeff Johnson, Clem Goewert, Greg Raab, David Friedman

U.S. Department of Energy (DOE/NV): Patti Hall, Runore Wycoff, Janet Appenzeller-Wing, Monica Sanchez, Bobbie McClure, Kevin Cabble, Clayton Barrow, Sabine Curtis, Bob Bangerter, Sharon Hejazi, Janis Romo, Pete Sanders, Michael Giblin, Lisa Roos, Ann O'Hagan

Defense Threat Reduction Agency (DTRA): Dave Bedsun, Wayne Griffin

These minutes are not a verbatim transcript but are meant to reasonably represent the positions of the parties present at the meeting.

Note: ## denotes a new action item; ** denotes a new agreement.

Next Meeting: August 4, 1999, Las Vegas, 1:00 pm.

Handouts:

- Agenda
- Annotated action items from February 11, 1999, meeting (*Attachment I*)
- Notification of Appendix II changes (*Attachment II*)
- DOE/D&D Facility End Point Presentation
- Environmental Management; FY 2001 Budget Scenarios

Review of Action Items from February 11, 1999 Meeting (*Attachment I*)

Patti Hall reviewed the following ongoing action items from the meeting on February 11, 1999. All other action items from that meeting have been completed. A list of the meeting action items and the actions taken are included in the agenda packet. Items listed below retain their original number from the list in the agenda packet.

6. The NDEP will provide comments regarding issues on the CAU 98 CAIP and on the Nye County drilling program.

Ongoing: Comments on the CAIP were received in a letter dated April 2, 1999. No comments have been received on the Nye County drilling program.

NDEP will check to see if comments had been made on the Nye County drilling program, if comments have not been made, comments will be issued.

Completed CAU/CAS appendices modifications (*Attachment II*)

Attachment II of the agenda packet contains the DOE/NV's Appendix II CAS and CAU modifications. In accordance with the NDEP's policy regarding moving CASs between CAUs (March 19, 1998), these modifications do not require the NDEP approval. These changes have already been incorporated.

DOE Issues

CR used as an acronym for Closure Report

There was no objection to using the acronym CR for Closure Report.

**All agreed that CR was an acceptable acronym for Closure Report.

Sector Cleanup Work Plan

Janet Appenzeller-Wing was asked to comment on the progress of the Sector Cleanup Work Plan. She stated that they are going forward with this plan and the Housekeeping Work Plan concept will be incorporated into it. She believes that the concept that was presented to NDEP for the Sector Cleanup Work Plan is still accurate, however, it will be re-evaluated to determine if it is still how they want to proceed. After the evaluation a meeting may be necessary.

DOE will evaluate the Housekeeping and Sector Cleanup Work Plans to determine if the concept is the same and if a meeting is necessary.

CAU 404, Roller Coaster Lagoon and Trenches, CAU 426, Cactus Spring Waste Trenches
Hall asked about the status of these Closure Reports. Final approval is still pending on the documents and the CAU is still awaiting a Notice of Completion. Liebendorfer replied that the Closure Reports were lacking information and had not met the closure criteria outlined in the original documents. With the recent DOE submittal of additional information regarding these CAU closures, the issue should be resolved. NDEP letters to this effect should be forthcoming.

Public Reading Room Agreement for Carson City

Hall stated that with the new director in place, the Public Reading Room agreement should be signed and ready for implementation. When Liebendorfer inquired if this would take place prior to the next Quarterly Meeting, Hall replied that it would.

Deactivation and Decommissioning (D&D) End Points

Clayton Barrow stated that a D&D workshop was held on December 14, 1998, to recommend D&D end points. He outlined the DOE/NV D&D end points and summarized the FY 2000 and FY 2001 strategies. Liebendorfer had concerns about issues of associated CAUs such as the leachfields and piping associated with E-MAD. Barrow replied that E-MADs drains have been sealed with grout to prevent liquids from reentering these leachfields. If tenants of the facilities want to access the pipes for their own use, the pipes will have to be decontaminated prior to being used. Liebendorfer would like to see a process in place to flush these pipes and evaluate the piping. He is most interested in making sure potentially contaminated parts of systems associated with FFACO CAUs do not get lost. Barrow stated that the Sector Cleanup Plan will be an integral part of this effort to ensure that the FFACO CAUs and their associated parts are not

ignored. DOE stated all potentially contaminated components of existing sites will be addressed as part of the CAUs in the FFACO, as part of the Sector Cleanup effort, or as part of the D&D work. Barrow stated the majority of the planning for the D&D effort will take place in FY 2000 and work efforts will commence in FY 2001.

**All agreed that all aspects of potentially contaminated sites will be dealt with either in FFACO CAUs, D&D planning or the Sector Cleanup Work Plan.

##DOE will brief the CAB on the D&D process and status.

NDEP Issues

Status of addenda for the CAU 347; Areas 5, 11 Housekeeping Sites and CAU 354; Areas 25,26, 27 Housekeeping Sites Closure Reports

Appenzeller-Wing apologized for the delay and stated that the addenda to these Closure Reports will be transmitted formally.

##DOE will submit the addenda for CAU 347; Areas 5, 11 Housekeeping Sites and CAU 354; Areas 25, 26, 27 Housekeeping Sites Closure Reports within a month.

Status of information NDEP requested to finalize the CAU 404; Roller Coaster Lagoons and CAU 426; Cactus Spring Waste Trenches Closure Reports

(This item was addressed in DOE issues-see above)

Status of DOE policy regarding the use of the MARSSIM during investigations

Appenzeller-Wing has forwarded the preliminary write-up regarding the use of the MARSSIM during investigations to NDEP. Karen Beckley requested that DOE clarify terms and set definitions prior to the finalization of the policy.

##DOE will finalize the evaluation of MARSSIM prior to the next quarterly meeting.

Review/Approval of Documents in Appendix II

Liebendorfer addressed the letter that outlined NDEP concerns regarding the potential for writing and gaining approval of documents for CAUs in Appendix II. Liebendorfer asked for clarification of the system that will be used to prioritize the CAUs. Appenzeller-Wing said the big picture approach is to address TTR and the southern end of the NTS first. The ranking of the CAUs using the prioritization model should reflect this. Liebendorfer replied that he has never had access to the model and does not know the prioritization rankings. Bobbie McClure said that the model is in the baseline. Runore Wycoff also added that as strategies change the baseline is affected. Liebendorfer asked that the prioritization process be available for NDEP to look at.

##DOE will provide to NDEP the prioritized list of the CAUs for each project.

Beckley asked that the process for review and approval of documents in Appendix II be lined out so that each issue can be addressed.

##DOE will develop a process and address NDEP concerns on developing documents for CAUs

in Appendix II.

DOE to provide brief synopsis of proposed ER FY2001 budget by major category as it exists now, and deadline for submittal to headquarters

McClure outlined the budget schedule as it stands that shows the four scenarios addressed in the PBS database. She referred to a handout that compared FY1999, FY2000, and FY 2001 total funding levels and prioritized the projects. McClure stressed that the \$90 million referenced in the planning budget does not factor in for inflation. Additional funding may become available as other projects wind down. She also pointed out that if a decrement budget is approved, the completion dates of Industrial Sites projects may be pushed out as far as 2010. The expected budget for FY 2001 is \$85 million.

Status Report of UGTA CAIPs for CAU 101/102; Pahute Mesa and CAU 98; Frenchman Flat

Liebendorfer expressed NDEP's concern that the work at Frenchman Flat is proceeding without document approval. Although NDEP would like to continue to support work they want to be involved in the interim steps that lead to modification of the documents. Pahute Mesa CAIP comments should be completed by mid week. Additional discussion on the UGTA CAIPs will be conducted at a separate meeting.

##NDEP will have comments on Pahute Mesa CAIP by May 14, 1999.

DTRA Issues

Dave Bedsun had no issues to discuss at this time.

Other Issues

Liebendorfer expressed concern over the tank pulls and spill reports that need to be addressed prior to obtaining closure on these type of sites. NDEP is still grappling with these issues.

Wycoff distributed a copy of the DOE/NV EM organizational chart. Liebendorfer also requested a complete DOE/NV organizational chart. Dave Bedsun stated he would also like a copy of the DOE/NV organizational chart.

##DOE will send NDEP and DTRA the DOE/NV organization chart.

Appenzeller-Wing asked that the CAU 109 be closed next Fiscal Year because there is no money in the budget to complete the work although there is funding still available to complete the document. Liebendorfer replied that NDEP will consider this matter if it is formally presented.

The meeting was adjourned at approximately 2:10 p.m.

Nevada
Environmental
Restoration
Project

DOE/NV--579-REV-3



Sectored Clean-up Work Plan For Housekeeping Category Waste Sites

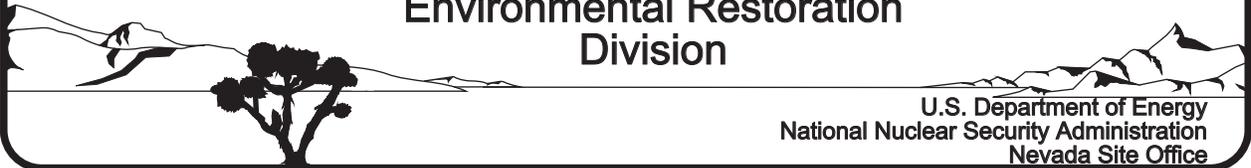
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Revision: 3

September 2003

Environmental Restoration
Division

U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office



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**SECTORED CLEAN-UP WORK PLAN
FOR HOUSEKEEPING CATEGORY WASTE SITES**

**Prepared for:
U. S. Department of Energy
National Nuclear Security Administration
Nevada Site Office
Under Contract No. DE-AC08-96NV11718**

Controlled Copy No. ____

Revision: 3

September 2003

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SECTORED CLEAN-UP WORK PLAN FOR HOUSEKEEPING CATEGORY WASTE SITES

Approved by: SIGNATURE APPROVED
Janet L. Appenzeller-Wing, Project Manager
Industrial Sites Project

Date: 9/25/2003

Approved by SIGNATURE APPROVED
Runore C. Wycoff, Division Director
Environmental Restoration Project

Date: 9/25/2003

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DISTRIBUTION LIST

ACRONYMS AND ABBREVIATIONS

ACM	Asbestos-containing Material
AEA	Atomic Energy Act
ALARA	As-Low-As-Reasonably-Acceptable
BN	Bechtel Nevada
CAS	Corrective Action Site
CAU	Corrective Action Unit
CFR	Code of Federal Regulations
COC	Contaminant(s) of Concern
CWMA	Controlled Waste Management Area
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOE/NV	U.S. Department of Energy, Nevada Operations Office
FFACO	Federal Facility Agreement and Consent Order
EPA	U.S. Environmental Protection Agency
gal	gallon(s)
JHA	Job Hazard Analysis
L	liter(s)
m ³	cubic meter(s)
mg/kg	milligram(s) per kilogram
NAC	Nevada Administrative Code
NAD	North American Datum
NDEP	Nevada Division of Environmental Protection
NEPA	National Environmental Policy Act
NNSA/NSO	U. S. Department of Energy, National Nuclear Security Administration Nevada Site Office
NRS	Nevada Revised Statute
NTS	Nevada Test Site
NV/YMP	Nevada Yucca Mountain Project
OSHA	Occupational Safety and Health Act
PAG	Preliminary Assessment Group
PCB	polychlorinated biphenyls
POC	Performance Objective Criteria

ACRONYMS AND ABBREVIATIONS (continued)

ppm	parts per million
RCRA	Resource Conservation and Recovery Act
RCT	Radiological Control Technician
REEC _o	Reynolds Electrical & Engineering Co., Inc.
REOP	Real Estate/Operations Permit
SAA	Satellite Accumulation Area
SAFER	Streamlined Approach for Environmental Restoration
SCWP	Sectored Clean-up Work Plan
SSHASP	Site-Specific Health and Safety Plan
TPH	Total Petroleum Hydrocarbons
TSCA	Toxic Substances Control Act
TTR	Tonopah Test Range
UTM	Universal Transverse Mercator
yd ³	cubic yard(s)

EXECUTIVE SUMMARY

Revision 3 of the Sectored Clean-up Work Plan for Housekeeping Category Waste Sites (SCWP) replaces Revision 2 of the SCWP (U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office [NNSA/NSO], 2003) and provides a strategy to be used for conducting housekeeping activities using either a Corrective Action Unit or a sectored clean-up approach. This work plan provides a process by which one or more existing housekeeping category Corrective Action Sites (CASs) listed in the Federal Facility Agreement and Consent Order (FFACO, 1996) and/or non-FFACO housekeeping sites are remediated as individual sites, or when appropriate, grouped into a sector for cleanup. This process increases effectiveness and efficiencies in planning, labor, materials, equipment, cost, and time. This plan is an effort by the NNSA/NSO to expedite housekeeping work in a more organized and efficient approach.

Note: As stated in Section 2.1 of this plan, a Sector is a geographic area of the Nevada Test Site (NTS), which is comprised of more than one of the numbered NTS Areas. For example, Sector A is comprised of NTS Areas 25, 26, and 27. A Zone as used on the Sectored Housekeeping Site Closure Verification Form (Appendix C) is used when listing the coordinates for a site location. The preferred coordinate system as indicated on the form in parentheses is Universal Transverse Mercator (UTM) using the North American Datum of 1927 (NAD 27). When listing a site using UTM coordinates, a reference Zone must also be listed. The entire state of Nevada falls into UTM Zone 11. The term Sector as defined in this plan has no relationship to the term Zone used when listing UTM coordinates. The terms Sector and Zone are not used interchangeably; they are distinct and refer to distinct geographical areas.

The objectives of this plan are to:

- Provide a single Work Plan to use for the cleanup and closure of FFACO and non-FFACO sites; perform similar housekeeping work activities under one approved work plan.
- Group FFACO and non-FFACO housekeeping sites, if appropriate, into sectors for closure activities.
- Provide consistent documentation on FFACO and non-FFACO housekeeping site clean-up activities.
- Increase work and planning efficiencies and cost-effectiveness; accelerate cleanups; and reduce mobilization, demobilization, and remediation costs.

The SCWP process is as follows:

1. A site is identified as a FFACO or non-FFACO housekeeping site covered by this Work Plan.
2. The wastes, debris, and/or materials located on site are evaluated/characterized by the Industrial Sites Project, Preliminary Assessment Group, or by pre-closure waste

characterization sampling activities according to the logic diagrams that are presented in this plan (Appendix B).

3. If a site is deemed a non-FFACO housekeeping site, it is grouped with other FFACO and/or non-FFACO housekeeping sites located in the same sector. The site will then be cleaned up with the sector, or it may be cleaned up with another scheduled FFACO site in close proximity at the scheduled time.
4. Clean-up activities are performed, and proper site closure documentation is completed, using the Sectored Housekeeping Site Closure Verification Form (Appendix C), which is submitted as part of a final Closure Report to the NNSA/NSO and the Nevada Division of Environmental Protection.

1.0 INTRODUCTION

The purpose of this Sector Clean-up Work Plan (SCWP) is to provide a strategy to be used by the U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office (NNSA/NSO) to expedite the cleanup and closure of housekeeping sites in a more organized and efficient manner. Work locations are at the Nevada Test Site (NTS) and the Tonopah Test Range (TTR). This plan applies to housekeeping category Corrective Action Sites (CASs) listed in the Federal Facility Agreement and Consent Order (FFACO, 1996) and non-FFACO housekeeping sites that are applicable under this plan.

Revision 3 of the SCWP replaces Revision 2 of SCWP (NNSA/NSO, 2003). The SCWP has been revised to allow FFACO and non-FFACO housekeeping sites to be closed in a consistent manner using a single work plan, and to specify the documentation for closure of housekeeping sites that must be submitted to the Nevada Division of Environmental Protection (NDEP).

Note: As stated in Section 2.1 of this plan, a Sector is a geographic area of the NTS, which is comprised of more than one of the numbered NTS Areas. For example, Sector A is comprised of NTS Areas 25, 26, and 27. A Zone as used on the Sector Clean-up Work Plan Verification Form (Appendix C) is used when listing the coordinates for a site location. The preferred coordinate system as indicated on the form in parentheses is Universal Transverse Mercator (UTM) using the North American Datum of 1927 (NAD 27). When listing a site using UTM coordinates, a reference Zone must also be listed. The entire state of Nevada falls into UTM Zone 11. The term Sector as defined in this plan has no relationship to the term Zone used when listing UTM coordinates. The terms Sector and Zone are not used interchangeably; they are distinct and refer to distinct geographical areas.

This SCWP should be used with Appendix VI of the FFACO - Corrective Action Strategy, Revision 1 (FFACO, 2000)

1.1 SECTORED CLEAN-UP WORK PLAN OBJECTIVES

The objectives of this document are to provide methods to:

- Clearly define housekeeping sites.
- Define whether a newly discovered waste site can be remediated using the SCWP process, or if it should be a new FFACO CAS to be remediated under the Streamlined Approach For Environmental Restoration (SAFER) or Complex process.
- Remediate FFACO and non-FFACO housekeeping sites if appropriate using one approved work plan.
- Consistently document FFACO and non-FFACO housekeeping site clean-up activities in a simple, similar manner.

- Increase efficiencies and cost-effectiveness; accelerate site cleanup; and reduce mobilization, demobilization, and remediation costs.
- Obtain regulatory approval of designated sector closure with no further action required.
- Avoid duplication and provide continuity and traceability of waste removal and disposal actions on a site-specific basis.

1.2 SECTORED CLEAN-UP WORK PLAN CONTENTS

General information on the housekeeping category, objectives, and definitions are found in Section 1.0 of this SCWP. Section 2.0 describes the housekeeping process for various waste types. Section 2.0 also contains discussion on how to recognize and categorize various waste types (i.e., housekeeping category wastes versus wastes that are remediated under the SAFER or Complex process). The sector clean-up approach is discussed in Section 2.2. Documentation is described in Section 3.0. The relevant plans and related documents to be considered and/or used with this Work Plan are described in Section 4.0. Section 5.0 contains the References.

1.3 HOUSEKEEPING CATEGORY SITE DESCRIPTION

As specified in the Appendix VI of the FFACO - Corrective Action Strategy, Revision 1 (FFACO, 2000), the housekeeping corrective action process is used for waste sites that do not require further investigation prior to completing corrective actions. Housekeeping sites may be closed only through clean closure, or if no Contaminants of Concern (COC) are present, by taking no further action. At these sites, historical information and field screening (e.g., radiological screening) allow the removal of source material and/or directly impacted soils, and collection of confirmatory samples (if necessary) without additional field investigation. To properly dispose of waste from these sites, waste characterization samples may be collected and submitted for analytical analysis prior to remedial field work, if necessary. Documentation of the waste removal and analytical results for any waste characterization and/or site verification samples will be provided in a closure report.

Corrective actions using the housekeeping process can be done for any waste that is classified as a housekeeping category waste as shown in the logic diagram for determining if a site qualifies as a housekeeping category site presented as Figure B-1. This includes any known waste that can be removed by hand, with a shovel, or with rubber-tired equipment; is not impacting an area greater than 23 cubic meters (m^3) (30 cubic yards [yd^3]) of soil; and will not create a large ground disturbance when removed as defined in Section 1.5. The housekeeping process can be used for sites containing low-level radioactive, hazardous, petroleum hydrocarbon, mixed waste, and/or asbestos waste.

Newly identified housekeeping sites will not be added to the FFACO. Instead, newly identified housekeeping sites not associated with visible soil staining of more than 23 m^3 (30 yd^3) will be considered non-FFACO housekeeping sites and closed as a best management practice under the

sector concept, or grouped with an existing FFACO housekeeping site for closure at a later date. Non-FFACO housekeeping site closures will be documented with the same forms as FFACO housekeeping sites.

1.4 REGULATORY DRIVERS

The FFACO (FFACO, 1996), signed by the U.S. Department of Energy (DOE), State of Nevada, and U.S. Department of Defense (DoD), is the primary regulatory driver for conducting corrective actions at the NTS, TTR, and off-site locations. Additional regulatory drivers for these sites include federal regulations (Resource Conservation and Recovery Act [RCRA], Occupational Safety and Health Act [OSHA], Toxic Substances Control Act [TSCA], Comprehensive Environmental Response Compensation and Liability Act, etc.) as well as Nevada state laws (Nevada Administrative Code [NAC]) and DOE orders. These regulatory drivers form the legal basis for the FFACO.

1.5 DEFINITIONS

The following definitions are used in this SCWP:

Asbestos-containing material (ACM) is any material that contains greater than 1 percent asbestos by weight according to Title 29 Code of Federal Regulations (CFR) 1910.1001(b) (CFR, 2001a). ACM as a waste is subject to special regulations for handling, transport, and disposal under the OSHA regulation, TSCA, and the National Emissions Standards for Hazardous Air Pollutants. Asbestos can be identified through process knowledge or by collecting a sample and analysis by microscopy. Only personnel licensed as asbestos inspectors by the State of Nevada may collect asbestos samples.

Assets for Services is a concept that identifies assets (i.e., materials both recyclable and/or salvageable) that can be exchanged for remediation or decontamination services.

Auctionable wastes are materials that can be auctioned to a vendor in return for monetary compensation or services. Auctionable wastes may also be recyclable or salvageable waste.

Controlled Waste Management Area (CWMA) is an area in which the potential exists for contamination due to the presence of unencapsulated or unconfined radioactive material. It can also be an area that is exposed to emissions or other sources of radioactive particles capable of causing activation (i.e., neutrons and protons). CWMA's also include any other posted radiological area (Reynolds Electrical & Engineering Co., Inc. [REEC], 1995).

Corrective Action Sites (CASs) are sites potentially requiring corrective action(s) and may include solid waste management units or individual disposal or release sites (FFACO, 1996). This term is used solely to identify action sites that are included or will be included in the FFACO Appendices.

Corrective Action Units (CAUs) consist of one or more CASs grouped geographically, by technical similarity, agency responsibility, funding, or other appropriate reasons for the purpose of determining corrective actions (FFACO, 1996).

Debris means solid material exceeding a 60-millimeter particle size that is intended for disposal and that is a manufactured object, plant or animal matter, or natural geologic material. However, the following materials are not debris: Any material for which a specific treatment standard is provided in Title 40 CFR Part 268, Subpart D (CFR, 2001d), namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and Intact containers of hazardous waste that are not ruptured and that retain at least 75 percent of their original volume. A mixture of debris that has not been treated to the standards provided by Title 40 Section 268.45 and other material is subject to regulation as debris if the mixture is comprised of debris, by volume, based on visual inspection (CFR Section 268.2) (CFR, 2001d) .

A container is *empty* if (1) all waste has been removed that can be removed using common practices and no more than 2.5 centimeters (1 inch) of residue remain on the bottom of the container or inner liner, or (2) no more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than, or equal to, 416.4 liters (L) (110 gallons [gal]) in size (0.3 percent by weight if greater than 416.4 L [110 gal]). A container that held a compressed gas is empty when the pressure in the container approaches atmospheric. The container or the inner liner removed from a container that held an acute hazardous waste is empty if the container or inner liner has been triple rinsed, or if the inner liner that prevented contact of the product with the container has been removed, and the rinsate is retained as a hazardous waste (Title 40 CFR Part 261, Identification and Listing of Hazardous Waste) (CFR, 2001b).

A *FFACO housekeeping site* is a Corrective Action Site that is currently identified and listed in the FFACO as a site to be remediated using the housekeeping process (FFACO, 1996).

Ground disturbances include any activity which disrupts or damages plant or animal habitats or cultural resources. Ground disturbance also consists of removal of more than 23 m³ (30 yd³) of soil containing waste where plant and/or animal habitats or cultural resources are not disturbed.

Hazardous debris is debris that contains a hazardous waste listed in Title 40 CFR Part 261 Subpart D Lists of Hazardous Wastes (CFR, 2001b) or exhibits a characteristic (ignitability, corrosivity, reactivity, or toxicity) of hazardous waste identified in Title 40 CFR Part 261 Subpart C Characteristics of Hazardous Waste (CFR, 2001b).

Hazardous waste is a solid waste that meets the criteria for a hazardous waste defined in Title 40 CFR Part 261.3 Definition of Hazardous Waste (CFR, 2001b) and Nevada Revised Statutes (NRS) 459.430 (NRS, 1999). The housekeeping process can be used for clean up of hazardous waste that clearly has not entered the environment, or spills of a known hazardous waste with a volume of less than 23 m³ (30 yd³). The type of waste will be determined by a Industrial Sites Project, Preliminary Assessment Group (PAG) or by analysis of waste characterization samples.

Housekeeping sites are waste sites that require removal of certain wastes and/or removal of limited quantities of impacted soil and qualify as a housekeeping site as determined in Figure B-1, Logic Diagram for Determining if a site qualifies as a Housekeeping Category site. Housekeeping sites include FFACO housekeeping sites and non-FFACO housekeeping sites.

Listed wastes are those wastes cited in Title 40 CFR Part 261 (CFR, 2001b) and NRS 459.430 (NRS, 1999).

Mixed waste is a waste that contains both radioactive and hazardous components regulated by the Atomic Energy Act (AEA) and RCRA. The housekeeping process can be used to clean up mixed waste that clearly has not entered the environment, or spills of a known mixed waste with a volume of less than 23 m³ (30 yd³).

Non-FFACO housekeeping site is a site not included in the FFACO (FFACO, 1996) that is categorized as a housekeeping site in accordance with this SCWP and may be remediated following this Work Plan.

Ordinary waste is any discarded, nonradioactive material that is identified as garbage, sewage, rubbish, refuse, sludge, or is excluded by Title 40 CFR Part 261. Ordinary waste includes industrial, commercial, and solid household-type wastes, and excludes hazardous, radioactive, polychlorinated biphenyls (PCBs), asbestos, or mixed wastes.

Petroleum hydrocarbon waste is a waste that consists of petroleum hydrocarbons or media containing petroleum hydrocarbons. Nevada state regulation (NAC, 2002a) defines any soil/material containing total petroleum hydrocarbon (TPH) concentrations of more than 100 milligrams per kilogram (mg/kg) as petroleum hydrocarbon waste.

Polychlorinated biphenyls are halogenated organic compounds defined in accordance with Title 40 CFR 761.3 (CFR, 2001c). Waste containing PCBs is regulated for handling, transport, storage, and disposal under TSCA and under RCRA Title 40 CFR 268.2 (CFR, 2001d). Capacitors, fluorescent light ballasts, and transformers are examples of equipment that may contain PCBs.

Radioactive waste is a solid, liquid, or gaseous material that contains radionuclides regulated under the AEA, as amended, and which is of negligible economic value considering the cost of recovery. The housekeeping process can be used to clean up radioactive waste that clearly has not entered the environment, or spills of a known radioactive waste with a volume of less than 23 m³ (30 yd³).

Recyclable and salvageable wastes are wastes that are able to be returned to a workable condition so that the material is adaptable to a new use or reuse. Hazardous waste can be recycled if it meets the RCRA definitions. Ordinary waste may be salvaged. Wood materials, excluding paper, are not permitted to leave the NTS.

Sanitary landfill is a landfill for disposal of refuse, garbage, rubbish, industrial solid waste, and ordinary waste in compacted layers covered with soil to a depth sufficient to exclude rats, flies, and other disease vectors.

Solid waste is any discarded material that is not excluded by Title 40 CFR 261.4(a) or that is not excluded by variance granted under Title 40 CFR 260.30 and 260.31 (40 CFR 261.2(a)(1)) (CFR, 2001b).

A *Sector* is a geographic area comprised of numbered NTS Areas. Sectors are further explained in Section 2.1.

2.0 HOUSEKEEPING CATEGORY STRATEGY

Housekeeping category waste characterization (if necessary), removal, waste disposition, and confirmatory sampling will be performed following this SCWP and related documents as discussed in Section 4.0. Documentation of the waste characterization sampling results, waste removal, and verification sampling results will be included in a closure report. If a FFACO housekeeping site or non-FFACO housekeeping site is more complicated than anticipated, such as finding a non-housekeeping waste type, the site will be recommended for inclusion into the FFACO and will be remediated using an approved FFACO process other than the housekeeping process.

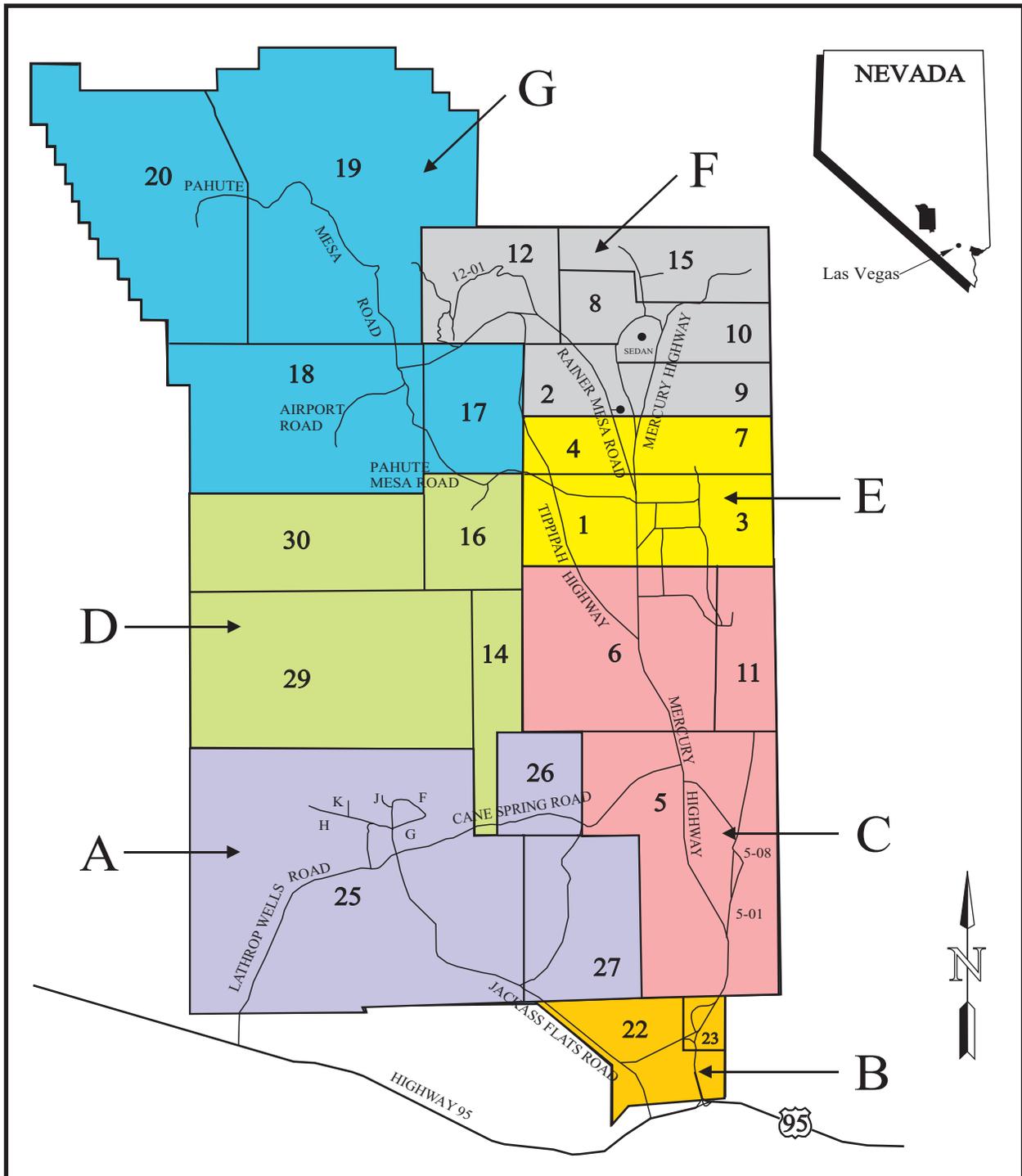
2.1 SECTORS

A sector is a group of FFACO housekeeping site(s) and/or non-FFACO housekeeping site(s) that are grouped due to their geographic proximity as shown in Figure 1. Each of these sectors is given a letter designation A through G. It is important to note that these lettered sectors do not correspond to the numbered areas used at the NTS, although groups of the numbered NTS areas make up the lettered sector. For example, NTS Areas 25, 26, and 27 combine to form the sector A. Sites at the TTR will be grouped into one sector. The sectors have been prioritized to close the TTR housekeeping sites first, followed by sectors A through G in alphabetic order. A decision to close specific sites as part of a sector or as individual sites will be made by NNSA/NSO prior to starting closure activities.

2.2 SECTORED CLEAN-UP APPROACH

The sectored clean-up approach includes the following steps:

1. A sector is identified as including FFACO housekeeping site(s) and/or possible non-FFACO housekeeping site(s) (if any are identified) covered by this SCWP.
2. A decision to close a specific housekeeping site individually or as part of a sector is made by NNSA/NSO.
3. Wastes, debris, and/or materials present at each housekeeping site (both FFACO and non-FFACO) are evaluated by the Industrial Sites Project, PAG according to the logic diagrams, which are presented in Appendix B of this Work Plan. Waste characterization samples are collected and submitted for analysis prior to conducting the remedial actions when appropriate. Non-FFACO housekeeping sites, if addressed, will be evaluated and documented by the Industrial Sites Project, PAG and reported by NNSA/NSO to NDEP.
4. If a site is found to be a non-FFACO housekeeping site, the site will be grouped with other non-FFACO housekeeping sites and/or with one or more FFACO housekeeping sites in a sector as shown in Figure 1.



25 Nevada Test Site Area
 A Sectored Area
 Sectors priority is A to G

LEGEND

Approximate Scale



FIGURE 1
SECTORED AREAS FOR THE NEVADA TEST SITE

5. FFACO housekeeping sites within a sector will be promoted from Appendix II to Appendix III of the FFACO as part of a CAU or as a sector, and a Closure Report deadline will be established.
6. If verification samples will be required for site closure, a Site-Specific Sampling Plan shall be prepared for each applicable site prior to beginning site closure activities. The Site-Specific Sampling Plan will be included as an appendix in the Closure Report and will include the following information:
 - A brief discussion of the site and COC for each housekeeping site.
 - Remediation strategy for each housekeeping site.
 - The type and number of verification samples to be collected at each housekeeping site.
 - The analyses to be made for each verification sample.
 - A detailed description of the planned verification sample locations.

Clean-up activities will be performed at all housekeeping sites within a CAU or in a sector using this SCWP. All debris will be field screened for radiological contamination prior to removal. Clean-up activities will be reported by NNSA/NSO to the NDEP in the bi-weekly and quarterly FFACO Reports.

One Sector Clean-up Housekeeping Category Site Closure Verification Form (Appendix C) will be completed for each FFACO and each non-FFACO housekeeping site closed. These forms will be included in the Closure Report for the site that is submitted by the NNSA/NSO to the NDEP.

This SCWP manages waste from FFACO and non-FFACO housekeeping sites. Waste generated during the closure of housekeeping sites falls into one of the following categories:

- Solid or ordinary waste (all nonhazardous and nonradioactive waste that can be removed without a ground disturbance) as defined in Section 1.5.
- Petroleum hydrocarbon, hazardous, radioactive, or mixed waste that clearly has not entered the environment. That is, the waste is self-contained and has not impacted (stained or dissolved into soil) the environment directly (e.g., partially full intact aerosol cans, cans/buckets of paint, intact bottles of chemicals).
- ACM, if removed by properly trained personnel.
- PCB waste contained in a non-leaking container(s).
- Spills of known petroleum hydrocarbons, hazardous, radioactive, or mixed waste with an impacted soil volume less than 23 m³ (30 yd³).

Any site that requires more than 23 m³ (30 yd³) of contaminated soil to be removed cannot be closed under the housekeeping process or this SCWP without prior NDEP approval.

2.3 GROUPING CORRECTIVE ACTION SITES

FFACO housekeeping CASs will be grouped into sectors based on their geographical location as shown in Figure 1.

If at any time, a FFACO housekeeping site is determined not to meet the requirements of a housekeeping site as defined in Appendix VI of the FFACO (FFACO, 1996), the CAS will be reclassified as either a SAFER or Complex CAS, and grouped into an appropriate CAU. Moving a CAS to a different CAU will be done by the NNSA/NSO with NDEP concurrence. The CAS will then be remediated under an approved FFACO process.

2.4 NEWLY DISCOVERED SITES

When a potentially new housekeeping site is discovered, it must be evaluated by the Industrial Sites Project, PAG to determine if the housekeeping process is the most appropriate way to close the site. Figure B-1 gives the logic to determine if a site qualifies as a housekeeping category site, and Figure B-2 illustrates the housekeeping corrective action process.

During preliminary site assessment of a potential non-FFACO housekeeping site, the following activities will be completed:

- Field screening for radioactive contamination and other hazards as required under the U.S. Department of Energy, Nevada Operations Office (DOE/NV) Environmental Restoration Division Health and Safety Plan (DOE/NV, 1998).
- Determining the type of waste/materials/debris present, including collecting and submitting for analysis waste characterization samples if required.
- Determining site coordinates using as-builts, survey, or a geographic positioning system, and placement of a site marker.
- Completing all applicable documentation necessary to determine how to categorize the site as agreed to jointly by NNSA/NSO, DoD, and NDEP.

Existing housekeeping sites may have gone through this process as part of a preliminary site assessment completed before the site was added to Appendix III of the FFACO. If comparable data cannot be found for a site, the Industrial Sites Project, PAG shall visit the site and gather the data (e.g., perform radioactive field screening, collect and submit for analysis waste characterization samples).

If an existing site meets the definition of a housekeeping site, or a non-FFACO site is determined to be a housekeeping site, then it may be evaluated by NNSA/NSO and grouped into a sector according to this plan. Newly discovered housekeeping sites will not be added to the FFACO as a new site. Rather, if the site is new and will not be cleaned up under the sectored approach, it will be cleaned up as a best management practice as part of closure of an existing housekeeping

CAU. All closure activities for the new site will be documented in the Closure Report for the existing CAU. Corrective action may be performed any time after the site is categorized as a housekeeping site by the Industrial Sites Project, PAG and approved by the NDEP.

If at any time, a non-FFACO housekeeping site is determined not to meet the requirements of a housekeeping site (i.e., unexpected complications arise during closure) it will be added as a new CAS to an existing CAU of a similar type (Complex or SAFER). Adding a site to another CAU will be done by NNSA/NSO with NDEP concurrence. The CAS will then be remediated using an approved FFACO process.

2.5 SECTOR PRIORITIZATION

If the sectored approach is funded, then clean-up activities for each sector will be prioritized based on baseline planning, the hazard, location, type of waste, concurrent activities, available funding, efficiencies, and value, following the preliminary assessment. The current priority for housekeeping site cleanup is first TTR sites, then NTS sites with sites in Sector A closed first, and proceeding alphabetically through Sector G (generally moving south to north) (Figure 1). If an immediate health and safety concern exists, the waste will be addressed immediately.

2.6 WASTE MANAGEMENT, MINIMIZATION, AND DISPOSAL

A Radiological Control Technician (RCT) will be present, as needed, based on site-specific conditions. At each applicable housekeeping site, the waste will be surveyed and cleared by the RCT who will issue a radiation clearance certification (i.e., a green tag) prior to waste removal. The survey will include field screening and/or collecting swipe samples to determine if contamination is present and removable. Screening data collected from nonradiological areas will be evaluated against the requirements of Table 2-2 of the Nevada/Yucca Mountain Project (NV/YMP) Radiological Control Manual (DOE/NV, 2000b) to determine if the material meets free release criteria. In CWMAs, the Performance Objective Criteria (POC) guidance (REECo, 1995) will be used to evaluate site-screening results. Any waste containing isotopes not addressed in, or exceeding the NTS POC screening levels, will be managed as radioactive waste following the requirements of the Nevada Test Site Waste Acceptance Criteria, Certification, and Transfer Requirements (U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office, 2002).

If site closure requires the removal of soil/material, then the following must be completed prior to the start of closure activities:

- Inspect sites located in desert tortoise areas for tortoise habitat and for other endangered species following DOE Order NV O 450.X1, Protection of Cultural Resources and Endangered Species (DOE/NV, 1999), and obtain the opinion of a biologist. Note, desert tortoise habitat inspections are not required at TTR sites.
- Determine if a Cultural Resource Survey following DOE Order NV O 450.X1, Protection

of Cultural Resources and Endangered Species (DOE/NV, 1999) is needed and complete the survey if required.

- Determine if a National Environmental Policy Act (NEPA, 1998) checklist is needed and complete the checklist if required.
- If verification samples are required for site closure, a Site-Specific Sampling Plan for collection of verification samples shall be prepared. (See Section 2.2 for information on the Site-Specific Sampling Plan content.)

During corrective action operations, waste minimization practices will be followed. Waste will be segregated by type and transported to the proper disposal/collection site based on the waste categorization and evaluation. In addition, the following will also be done:

- A Sectored Housekeeping Site Closure Verification Form (Appendix C) shall be completed for each FFACO housekeeping site and each non-FFACO housekeeping site closed and included in the Closure Report.
- Before and after photographs of each site will be taken and included in the Closure Report.
- Waste disposal documentation, as appropriate (e.g., Bills of Lading, Waste Manifests) will be completed and included in the Closure Report.
- A Closure Report (see Section 3.0) with all necessary documentation will be submitted to the NDEP.

A discussion of specific waste categories and the disposal practices for each is presented in the following sections. Possible categories for waste can be found in Appendix A. A logic diagram for waste category determination is shown in Figure B-1.

2.6.1 Asbestos-Containing Material

Friable and non-friable asbestos may be removed by properly trained personnel under this SCWP. Up to 23 m³ (30 yd³) of asbestos containing drilling mud may be remediated under this SCWP. Sites with more than 23 m³ (30 yd³) asbestos-containing drilling mud must be evaluated under the SAFER or Complex process. A radiological clearance certification (i.e., green tag) will be issued for waste ACM, as needed, based on site-specific conditions. ACM will be accounted for in a daily log or field notes and tracked to its destination with appropriate documentation, as required.

2.6.2 Auctionable, Recyclable, and/or Salvageable Waste

Waste, debris, and materials will be evaluated to determine if they are recyclable, salvageable, or auctionable, including those materials that may be reused, stockpiled, or sold. The Bechtel

Nevada (BN) Procurement and Property Management Department will identify these items prior to their final disposition. Housekeeping salvage work at the Reactor Maintenance, Assembly and Disassembly Building, Test Cell A, Test Cell C, Super Kukla, and Pluto Facilities were outlined in a letter from NNSA/NSO to NDEP (Appendix D). Future salvage activities at housekeeping sites will involve the removal of similar materials and removal activities will be conducted as outlined in the letter (Appendix D). Although the NNSA/NSO has informed the NDEP of proposed housekeeping salvage work activities at these facilities by letter (Appendix D), no formal response has been received from the NDEP. Salvage activities at the Area 25 facilities will adhere to the process outlined in the NNSA/NSO letter dated November 23, 1999 (Appendix D).

Recyclable and/or salvageable wastes that are not wood products (except paper) and not radioactively contaminated can be removed from the site provided that a large ground disturbance will not be created. Materials that have been identified as either recyclable, salvageable, or auctionable (e.g., intact lead acid batteries) will be transported one of the collection points established by the BN or biddable unit/laydown area. A mobile waste container (e.g., a drum that is moved from site to site until full) may be used to stockpile recyclable or scrap materials from multiple sites. The material will be accounted for in a daily log or field notes and a radiological clearance certification will be issued for these materials, as needed, based on site-specific conditions. These wastes will be tracked to their destination with a Bill of Lading or equivalent documentation, as required, and an inventory list will be completed for each site. An example of an inventory list is included in Appendix D.

2.6.3 Hazardous Waste

Hazardous waste that is self contained and has not entered the environment (i.e., intact aerosol cans or a bucket of paint) or impacted more than 23 m³ (30 yd³) of soil may be removed and disposed of as a housekeeping category waste. Prior to removal, the waste must be evaluated/characterized by the Industrial Sites Project, PAG. Hazardous wastes will be managed in a Satellite Accumulation Area (SAA) or 90-day accumulation area and meet RCRA requirements (Title 40 CFR 262.34) (CFR, 2001e). The waste will be disposed of at an off-site licensed Treatment, Storage, and Disposal Facility. A radiological clearance certification (i.e., green tag) will be issued for these materials prior to off-site shipment. Hazardous debris will be accounted for in a daily log or field notes and tracked to their destination with a RCRA Waste Manifest.

2.6.4 Mixed Waste

Mixed waste that has not entered the environment (i.e., is self-contained), or impacted more than 23 m³ (30 yd³) of soil may be removed and disposed of as a housekeeping category waste after the waste has been evaluated by the Industrial Sites Project, PAG. An RCT must be present when handling the waste. Other radiological and hazardous controls may include a Radiological Work Permit, Job Hazard Analysis (JHA), or other planning documents. Mixed waste will be managed in an SAA or 90-day accumulation area prior to disposal. If the hazardous components of the mixed waste are at levels less than the Land Disposal Requirements (CFR, 2001d), the waste will be disposed of at the NTS Area 5 Radioactive Waste Management Site. Mixed waste

will be handled in accordance with the Mutual Consent Agreement or future permitted facility requirements. Mixed waste will be accounted for in a daily log or field notes and tracked to its destination with appropriate documentation.

2.6.5 Radioactive Waste

Radioactive waste that has not entered the environment (i.e., is self-contained), or impacted more than 23 m³ (30 yd³) of soil may be removed and disposed of as a housekeeping category waste after the waste has been evaluated by the Industrial Sites Project, PAG. An RCT must be present when handling the waste. Other radiological controls may include a Radiological Work Permit, JHA, or other planning documents. The waste will be accounted for in a daily log or field notes and tracked to its destination (either the NTS Area 3 or Area 5 Radiological Waste Management Site) with appropriate documentation.

2.6.6 Ordinary Waste

Ordinary waste, including construction debris/waste, will be transported to an approved landfill. At the NTS, this may be either the Area 9 U-10c Class III Landfill or to the Area 23 Class II Landfill (household waste, sludge, and industrial solid wastes only). At the TTR, this is the construction debris landfill operated by the U.S. Air Force. A radiological clearance certification (i.e., green tag) will be issued for the ordinary waste, as needed, based on site-specific conditions. The material will be accounted for in a daily log or field notes and tracked to its destination with appropriate documentation, as required. There is no limit on the amount of ordinary or sanitary waste that can be removed from a site during closure.

2.6.7 Petroleum Hydrocarbon Waste

Process knowledge or site evaluation by the Industrial Sites Project, PAG will determine how petroleum hydrocarbon waste, such as stained soil, is regulated and disposed. Petroleum hydrocarbon waste that has not entered the environment (e.g. oil filters, oil cans) or has not impacted more than 23 m³ (30 yd³) of soil may be removed and disposed of as a housekeeping waste under this SCWP. Petroleum hydrocarbon waste will be disposed of in the NTS Area 6 Hydrocarbon Landfill, or if possible, recycled. A radiological clearance certification (i.e., green tag) will be issued for these wastes, as needed, based on site-specific conditions. The waste will be accounted for in a daily log or field notes and tracked to its destination with a appropriate Waste Manifest or other documentation, as required.

2.6.8 Polychlorinated Biphenyls

All unlabeled electrical equipment that typically contain PCBs will be assumed to contain regulated quantities of PCBs until sampling and analysis has demonstrated otherwise. PCBs in a non-leaking container may be considered a housekeeping category waste. Soil/concrete with PCB levels less than 50 parts per million (ppm), and which can be proven was contaminated prior to April 18, 1978, can be disposed of as toxic waste under TSCA (CFR, 2001a). Soil/concrete with PCB concentrations less than 50 ppm and volumes no more than 23 m³ (30 yd³), can be disposed of in the NTS Area 6 Hydrocarbon Landfill. Unconstrained, spilled,

burned PCBs, or soils/concrete with greater than 50 ppm PCB concentrations are not housekeeping waste, and the associated site must be evaluated as a SAFER or Complex FFACO site. Ballasts containing PCBs, if not accumulated, can be disposed of at a landfill. However, PCB ballasts which have been accumulated must be characterized and are not housekeeping waste. A radiological clearance certification (i.e., green tag) will be issued for these materials, as needed, based on site-specific conditions. PCBs will be accounted for in a daily log or field notes and tracked to their destination with an appropriate Waste Manifest.

2.6.9 Soil Stains

Soil stains of known materials or stains that have been characterized by the Industrial Sites Project, PAG during the preliminary site assessment and have not impacted more than 23 m³ (30 yd³) of soil, can be remediated under this SCWP. A radiological clearance certification (i.e., green tag) will be issued for the excavated soil, as needed, based on site-specific conditions. The excavated soil will be accounted for in a daily log or field notes and tracked to its destination with a Manifest, Bill of Lading, or other appropriate shipping documentation. Verification sampling is required to verify removal of impacted soil. Prior to beginning closure activities, a Site-Specific Sampling Plan will be prepared for each housekeeping site (Section 2.2).

2.7 SITES REQUIRING NO FURTHER ACTION

At housekeeping sites where no COC are present and where closure activities would result in adversely impacting the site (doing extensive damage to the environment and habitat during site cleanup), no further closure actions will be taken. Verification samples of the material will be collected and analyzed to demonstrate that the material is non-hazardous and non-radioactive. An example of this is a cement blow-off area, which is typically a large ground area covered with a thin cement veneer. The cement material is non-hazardous and non-radioactive. Removing it as a housekeeping waste would cause more damage to the site than leaving it in place; the site would be closed with no further action.

2.8 HEALTH AND SAFETY

Field activities for each housekeeping site will be conducted under a Site-Specific Health and Safety Plan (SSHASP) which covers routine field activities. Work will be done under approved Authorization Basis decrements contained in the NNSA/NSO Real Estate/Operations Permit (REOP) (e.g., SSHASP, Job Hazard Analysis, Pre-Task Hazard Review, and Radiological Work Permit). An As-Low-As-Reasonably-Achievable (ALARA) review will be conducted if needed.

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3.0 HOUSEKEEPING CATEGORY CORRECTIVE ACTION DOCUMENTATION

Corrective actions at housekeeping sites will be recorded in a bound project log/field book or an equivalent log each day that corrective action-related activities take place. Field notes will document time, date, weather, field conditions, personnel, equipment, arrangements, corrective actions, and deviations, and will be signed and dated at the end of each day.

The NNSA/NSO will adhere to all reporting requirements specified in NAC 445A.347 (NAC, 2002b). Specifically, within 24 hours of receiving analytical results for samples collected at a site that shows the presence of COC at levels greater than action levels, the State of Nevada will be notified. Action levels for COC shall be the U.S. Environmental Protection Agency (EPA) Region 9 Preliminary Remediation Goals for Industrial Soils (EPA, 2002), and the Nevada State action level of 100 mg/kg for total petroleum hydrocarbons in soil (NAC, 2002a). Notification to the State of Nevada will also be made within 24 hours of discovering that a historic hydrocarbon release site has impacted more than 2.3 m³ (3 yd³) of soil.

Upon completion of corrective actions at a housekeeping site, a Sectoral Housekeeping Site Closure Verification Form (Appendix C) will be completed for each housekeeping site, including both FFACO and non-FFACO housekeeping sites. This form will include before and after photographs of the site, description and removal status of the wastes, and waste disposal information. The housekeeping forms will be used along with waste disposal documentation such as Bills of Lading, Waste Manifests (both on-site and off-site), and other disposal records to document corrective actions performed at the site and track waste removed from the site.

For FFACO housekeeping CAUs a Closure Report will be prepared and submitted to the NDEP for approval. All non-FFACO housekeeping sites that are closed during a fiscal year will have all closure activities documented in a single letter report, which will be submitted to the NDEP no later than three months following the end of the fiscal year. For example, all non-FFACO housekeeping sites closures in fiscal year 2003 will be documented in a single letter report submitted to the NDEP by January 1, 2004.

Both FFACO closure reports and non-FFACO letter reports will include a description of all corrective actions, a Sectoral Housekeeping Site Closure Verification Form for each housekeeping site, all verification sample analytical results, and any field screening results will be included a Closure Report for the site. All documentation, including sampling results, will be maintained following NNSA/NSO and DoD records retention procedures.

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4.0 RELATED DOCUMENTS

Corrective actions at housekeeping sites will be conducted under existing umbrella documents for quality assurance, health and safety, work authorization basis, waste management, and verification sampling. Examples of these documents are found in Table 1. Other pertinent documents may include Work Plans, contractor-specific operating procedures, site-specific health and safety plans, generic health and safety plans, and field instructions, as applicable. A JHA will also be prepared for routine activities at these sites.

TABLE 1 - HOUSEKEEPING CATEGORY-RELATED PLANS

TOPIC	APPLICABLE PLANS	APPLICABLE LOCATION(S)
Quality Assurance	<u>Industrial Sites Quality Assurance Project Plan</u> , Rev. 3 (DOE/NV, 2002)	NTS, TTR
Health & Safety	<u>Nevada Test Site Radiation Protection Program</u> (DOE/NV, 1995)	NTS, TTR
Work Authorization	NNSA/NSO REOP for specific site activities.	NTS
	Work Packages to control site specific clean-up activities.	NTS, TTR
Waste Management	<u>Waste Characterization Sampling and Analysis Plan for Tonopah Test Range: Corrective Action Units 400, 407, 426, 430, and the Wind Radar Antenna Pedestal</u> (International Technology Corp., 1996)	TTR
	<u>Nevada Test Site Performance Objective for Certification of Nonradioactive Hazardous Waste</u> (REECo, 1995)	NTS
	<u>NTS Area 6 Hydrocarbon Class III Industrial Solid Waste Disposal Site, Rev. 3, Operating Permit # SW13 097 02</u> (DOE/NV, 2000a).	NTS
	<u>NTS Area 9 U10C Class III Industrial Solid Waste Disposal Site, Rev. 4 Operating Permit # SW13 097 03</u> (DOE/NV, 2001).	
<u>NTS Area 23 Class II Municipal and Industrial Solid Waste Disposal Site, Rev. 1 Operating Permit # SW13 097 04</u> (DOE/NV, 1997).		
Verification Sampling	Site-Specific Sampling and Analysis Plans (developed as needed included in site Closure Report)	NTS, TTR
	BN Organization Instruction OI-2152.108 <u>Soil Sampling</u> (BN, 2000)	

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5.0 REFERENCES

Bechtel Nevada. 2000. Organization Procedure OI-2152.108, "Soil Sampling".

BN, see Bechtel Nevada.

CFR, see Code of Federal Regulations.

Code of Federal Regulations. 2001a. Title 29 CFR Part 1910. Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. July 1, 2001. Washington, D.C.: U.S. Government Printing.

Code of Federal Regulations. 2001b. Title 40 CFR Part 261. Identification and Listing of Hazardous Waste. July 1, 2001. Washington, D.C.: U.S. Government Printing.

Code of Federal Regulations. 2001c. Title 40 CFR Part 761. Occupational Safety and Health Standards. July 1, 2001. Washington, D.C.: U.S. Government Printing.

Code of Federal Regulations. 2001d. Title 40 CFR Part 268. Land Disposal Restrictions. July 1, 2001. Washington, D.C.: U.S. Government Printing.

Code of Federal Regulations. 2001e. Title 40 CFR Part 262. Standards Applicable to Generators of Hazardous Wastes. July 1, 2001. Washington, D.C.: U.S. Government Printing.

DOE/NV, see U. S. Department of Energy, Nevada Operations Office.

EPA, see U.S. Environmental Protection Agency.

FFACO, see Federal Facility Agreement and Consent Order.

Federal Facility Agreement and Consent Order. 1996 (as amended). Agreed to by the State of Nevada, the U.S. Department of Energy, and the U.S. Department of Defense.

Federal Facility Agreement and Consent Order Appendix VI Corrective Action Strategy, Rev. 1. December 7, 2000. Agreed to by the State of Nevada, the U.S. Department of Energy, and the U.S. Department of Defense

IT, see International Technology Corporation.

International Technology Corporation. 1996. Waste Characterization Sampling and Analysis Plan for Tonopah Test Range: Corrective Action Units 400, 407, 426, 430, and the Wind Radar Antenna Pedestal, ITL/NV10972-168. Las Vegas, NV.

NAC, see Nevada Administrative Code.

5.0 REFERENCES (continued)

National Environmental Policy Act Environmental Statutes. 1998. Rockville, MD: Government Institutes, Inc.

NEPA, see National Environmental Policy Act.

Nevada Administrative Code. 2002a. NAC 445A.2272, "Contamination of soil: Establishment of Action Levels," as adopted by the Nevada Environmental Commission, Carson City, NV.

Nevada Administrative Code. 2002b. NAC 445A.347, "Notice required," as adopted by the Nevada Environmental Commission, Carson City, NV.

Nevada Revised Statutes. 1999. NRS 459.430, "Hazardous Waste Defined". Carson City, NV.

NNSA/NSO, see U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office.

NRS, see Nevada Revised Statutes.

REECo, see Reynolds Electrical & Engineering Co., Inc.

Reynolds Electrical & Engineering Co., Inc. 1995. Nevada Test Site Performance Objective for Certification of Nonradioactive Hazardous Waste, December 18. Las Vegas, NV.

U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office. 2002. Nevada Test Site Waste Acceptance Criteria, Certification, and Transfer Requirements, NSO-325-Rev. 4, Las Vegas, NV.

U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office. 2003. Sector Clean-up Work Plan For Housekeeping Category Waste Sites, Revision 2. DOE/NV--579-REV-2. Las Vegas, NV.

U.S. Department of Energy, Nevada Operations Office. 1995. Nevada Test Site Radiation Protection Program. DOE/NV/11432-203, UC-702, Rev. 3. December 1995.

U.S. Department of Energy, Nevada Operations Office. 1997. NTS Area 23 Class II Municipal and Industrial Solid Waste Disposal Site, Operating Permit # SW13 097 04, Rev. 1. October 1997. Las Vegas, NV.

U.S. Department of Energy, Nevada Operations Office. 1998. Environmental Restoration Division Health and Safety Plan, Rev. 3, Las Vegas, NV.

U.S. Department of Energy, Nevada Operations Office. 1999. Protection of Cultural Resources and Endangered Species, DOE Order NV O 450.X1, Las Vegas, NV.

5.0 REFERENCES (continued)

- U.S. Department of Energy, Nevada Operations Office. 2000a. NTS Area 6 Hydrocarbon Class III Industrial Solid Waste Disposal Site, Operating Permit # SW13 097 02, Rev. 3. June. Las Vegas, NV.
- U.S. Department of Energy, Nevada Operations Office. 2000b. NV/CMP Radiological Control Manual, Rev. 4, DOE/NV/11718--079, Las Vegas, NV.
- U.S. Department of Energy, Nevada Operations Office. 2001. NTS Area 9 U10C Class III Industrial Solid Waste Disposal Site, Operating Permit # SW13 097 03, Rev. 4. June. Las Vegas, NV.
- U.S. Department of Energy, Nevada Operations Office. 2002. Industrial Sites Quality Assurance Project Plan, Rev. 3. Las Vegas, NV.
- U.S. Environmental Protection Agency. 2002. Region IX Preliminary Remediation Goals (PRG). October. San Francisco, CA.

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APPENDIX A

WASTE CATEGORIZATION LIST

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TABLE A1 - WASTE CATEGORIZATION LIST

WASTE TYPE	POSSIBLE WASTE CATEGORY
Abandoned chemicals	Housekeeping if containerized (not in soil)
Aerosol cans	Housekeeping if empty or if not empty but contents are identifiable by process knowledge
Air filters	Ordinary/Sanitary waste
Aluminum cans	Salvageable
Arsenic	Hazardous
Asbestos (non-friable)	Ordinary waste
Bare wood, wooden structures	Ordinary waste
Batteries - lead acid (intact)	Recyclable
Batteries - lead acid (crushed)	Hazardous
Batteries, other - intact	Recyclable, hazardous if alkaline, mercury, or nickel-cadmium
Black rubber casing	Ordinary waste
Bottles	Ordinary waste
Buckets or Cans (empty)	Ordinary waste
Buckets or Cans (not empty)	Hazardous or salvageable; can be housekeeping if contents are known/determined by waste characterization sampling.
Cable and wire	Salvageable if in good condition; otherwise ordinary
Cadmium	Hazardous
Capacitors	May contain polychlorinated biphenyls (PCBs)
Chromium	Hazardous
Circuit and electrical boxes	Salvageable or recyclable (if in good condition)
Concrete blocks, cinder blocks	Salvageable if not broken; ordinary waste
Construction debris (untreated lumber, rear, or concrete)	Industrial solid waste
Drill pipe	Salvageable if in good condition

WASTE TYPE	POSSIBLE WASTE CATEGORY
Drilling mud	Ordinary or Hydrocarbon waste. Pre-1975 contained asbestos, barium, chromium, making mud potentially hazardous waste depending on characterization results.
Drums or barrels (empty)	Ordinary waste
Drums or barrels (not empty)	Hazardous or salvageable
Epoxy tar sites	Ordinary waste
Eye hook tie downs	Salvageable
Fencing	Ordinary waste
Fluorescent light bulbs, intact	RCRA Universal waste
Food containers, food wrappers	Ordinary waste
Gas cylinders (compressed) - empty	Salvageable
Gas cylinders (compressed) - not empty	Hazardous or salvageable
Gas cylinders (uncompressed)	Can be reused if in good condition
Gasoline cans	Salvageable
Glass	Ordinary Waste, recyclable
Heavy equipment	Salvageable
Hoists, pulleys	Salvageable
Hoses	Salvageable if new and/or in good shape
Industrial solid waste	Salvageable or ordinary waste
Joint compound	May be hazardous
Lead	Recyclable, hazardous, or mixed
Linoleum	Asbestos potential
Lumber, dimensioned	Salvageable
Mastic	May contain asbestos
Metal (scrap)	Ordinary Waste, recyclable
Metals (steel, iron, aluminum, copper)	Scrap or ordinary waste, recyclable
Nuts, bolts, nails	Salvageable or ordinary, recyclable

WASTE TYPE	POSSIBLE WASTE CATEGORY
Office trash	Ordinary waste
Paint cans	Probably not hazardous if latex
Painted or treated wooden boards	Potentially hazardous (waste is volume averaged)
Pesticide cans	Hazardous even if empty
Petroleum spill sites (<30 yd ³)	Hydrocarbon waste
Photographic equipment	Salvageable or recyclable
Photographic chemicals	May be hazardous
Pipes and unions	Salvageable
Piping or connectors with insulating wrap	Asbestos potential
Piping with sealant on the threads	Sealant is often lead based
Plastic, molded	Ordinary if not new or reusable
Radioactive Waste, Low Level	Possibly non-impacting radioactive waste
Rear	Salvageable
Recyclable Materials	Cabling, steel, drill pipe, empty gasoline cans, empty gas cylinders, nuts and bolts
Sand bags	Salvageable or ordinary waste
Signs (in good condition)	Salvageable (if metal or plastic) or ordinary waste
Silver	Photographic related; not housekeeping
Spill sites of known materials (<30 yd ³)	Hazardous or ordinary housekeeping
Soil that contains lead shot	Hazardous waste. Lead shot is hazardous waste.
Sparkletts bottles	Returned for deposit or ordinary waste
Spray insulation	Ordinary waste, salvageable
Stained soil	Housekeeping, if less than 30 yd ³
Sulfa-set	Ordinary waste
Tar	Ordinary waste
Tin cans	Ordinary waste, recyclable

WASTE TYPE	POSSIBLE WASTE CATEGORY
Tires	Salvageable or recyclable
Transformers/PCBs	PCB waste
Transite pipe	Non-metal, non-plastic pipe, ordinary waste
Trash cans, metal	Salvageable if in good condition
Treated or painted pallets or posts	Hazardous or ordinary waste
Unexploded ordnance	Not housekeeping
Tiles and shingles - roofing, flooring, and ceiling	Asbestos potential
Wallboard	Paint and asbestos potential
White plastic sheeting	May be salvageable if new or non-weathered; otherwise ordinary waste
Wood - bare	Ordinary waste
Wood - cable spools, pallets	Salvageable
Wood - dimensioned lumber	Salvageable
Wood - painted or treated	May be hazardous or ordinary waste
Wood railroad ties (untreated)	Ordinary waste
Wood railroad ties (treated; creosote)	Hazardous waste

APPENDIX B

**SECTORED CLEAN-UP APPROACH LOGIC
DIAGRAMS**

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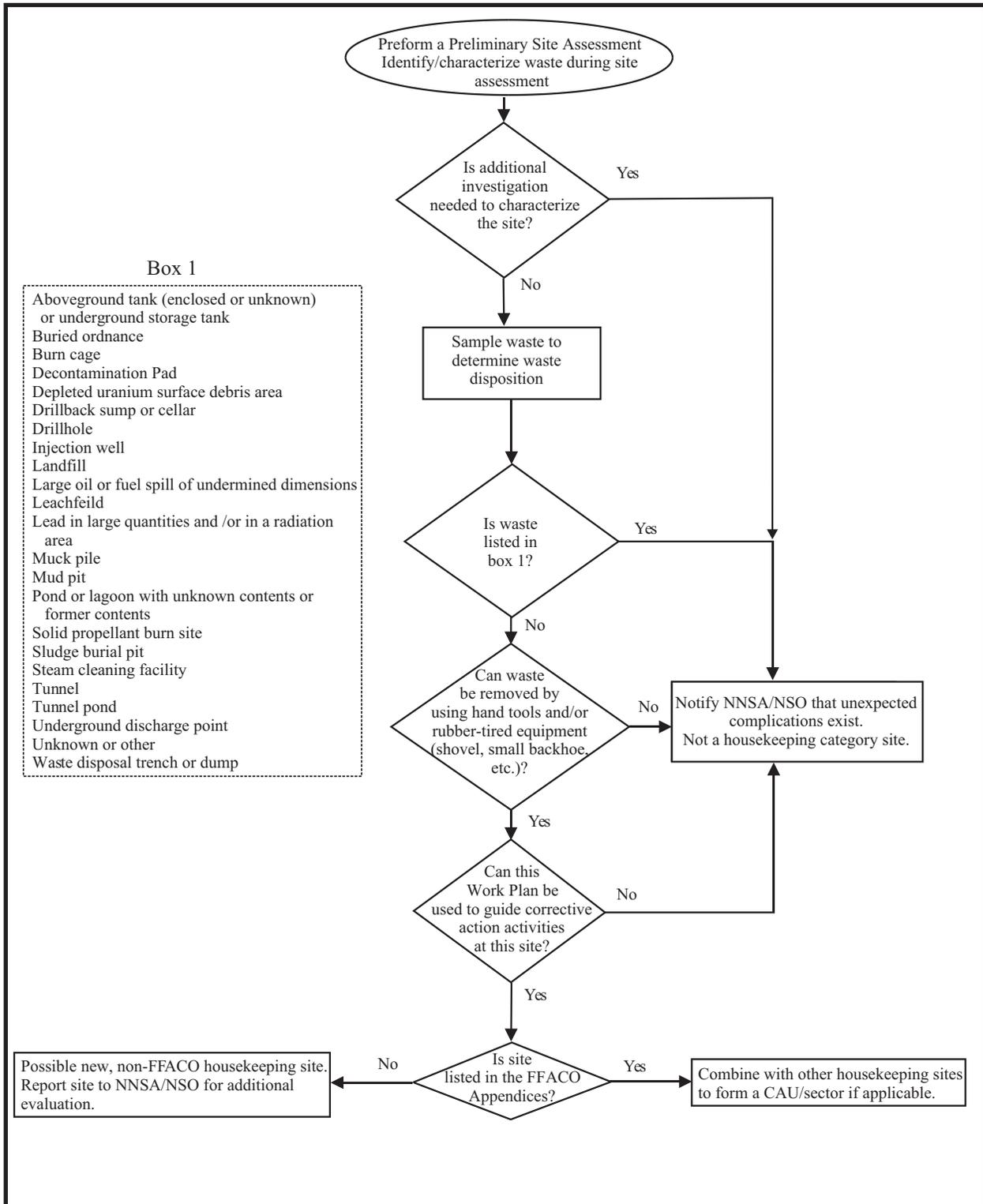


FIGURE B-1
LOGIC DIAGRAM FOR DETERMINING IF A SITE
QUALIFIES AS A HOUSEKEEPING CATEGORY SITE

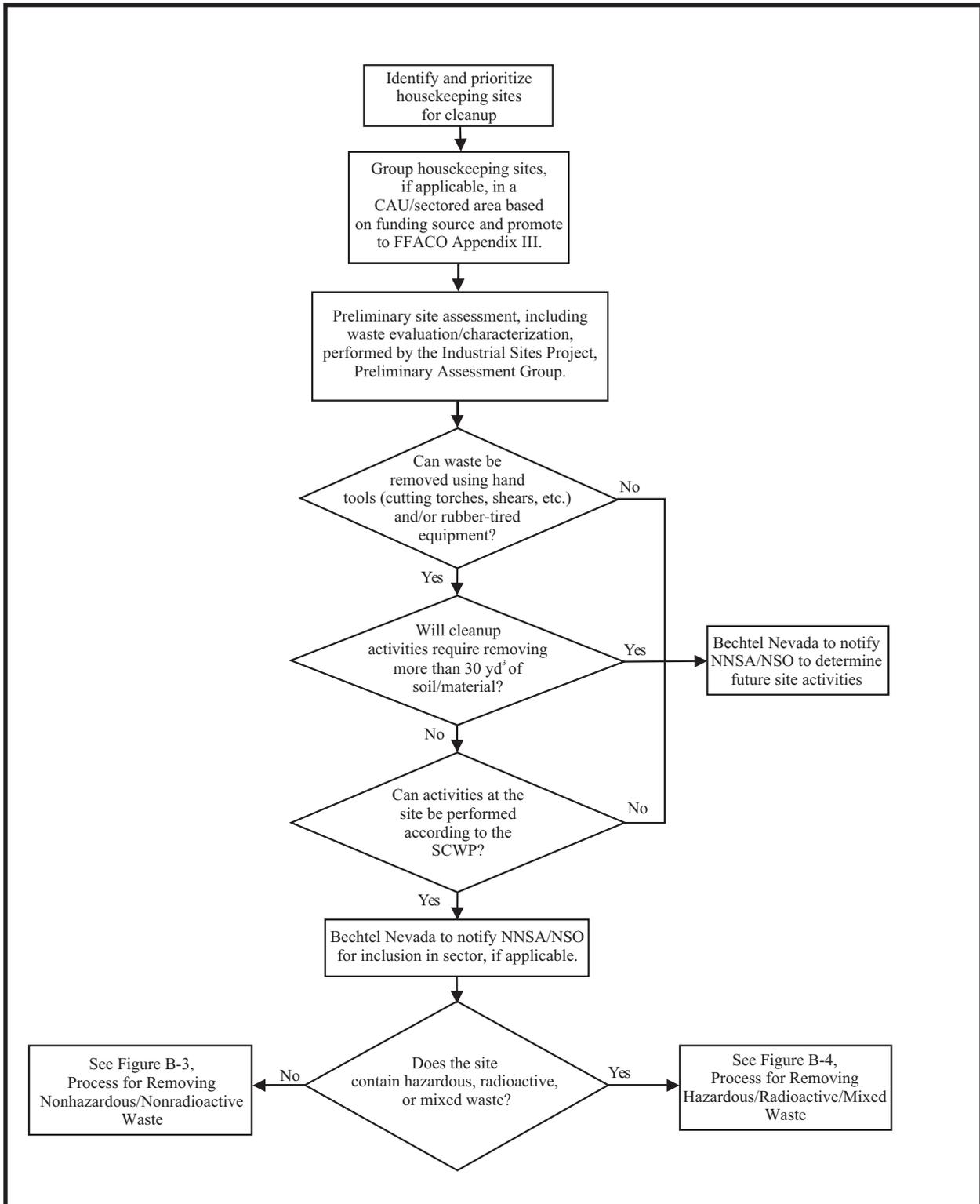
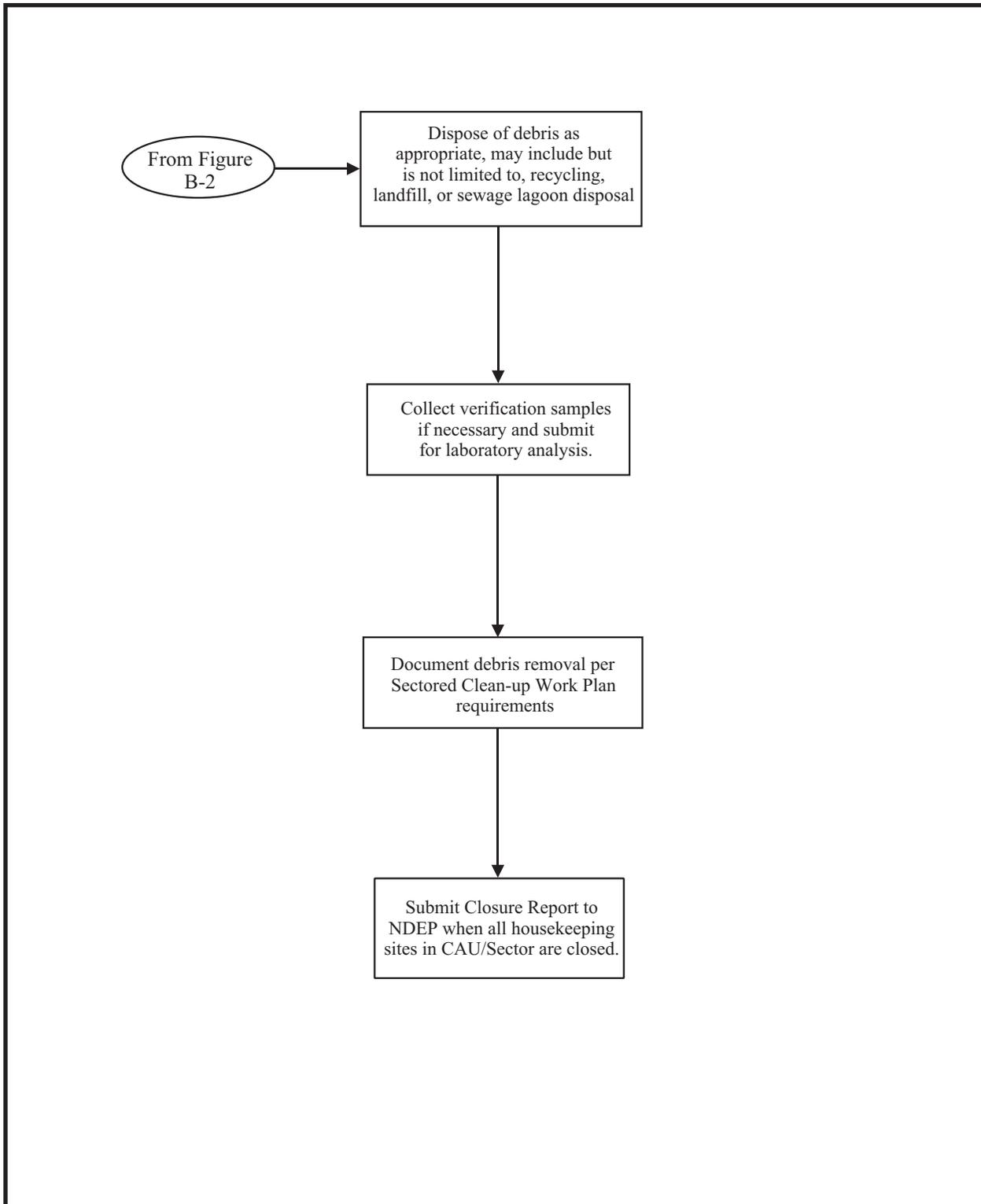
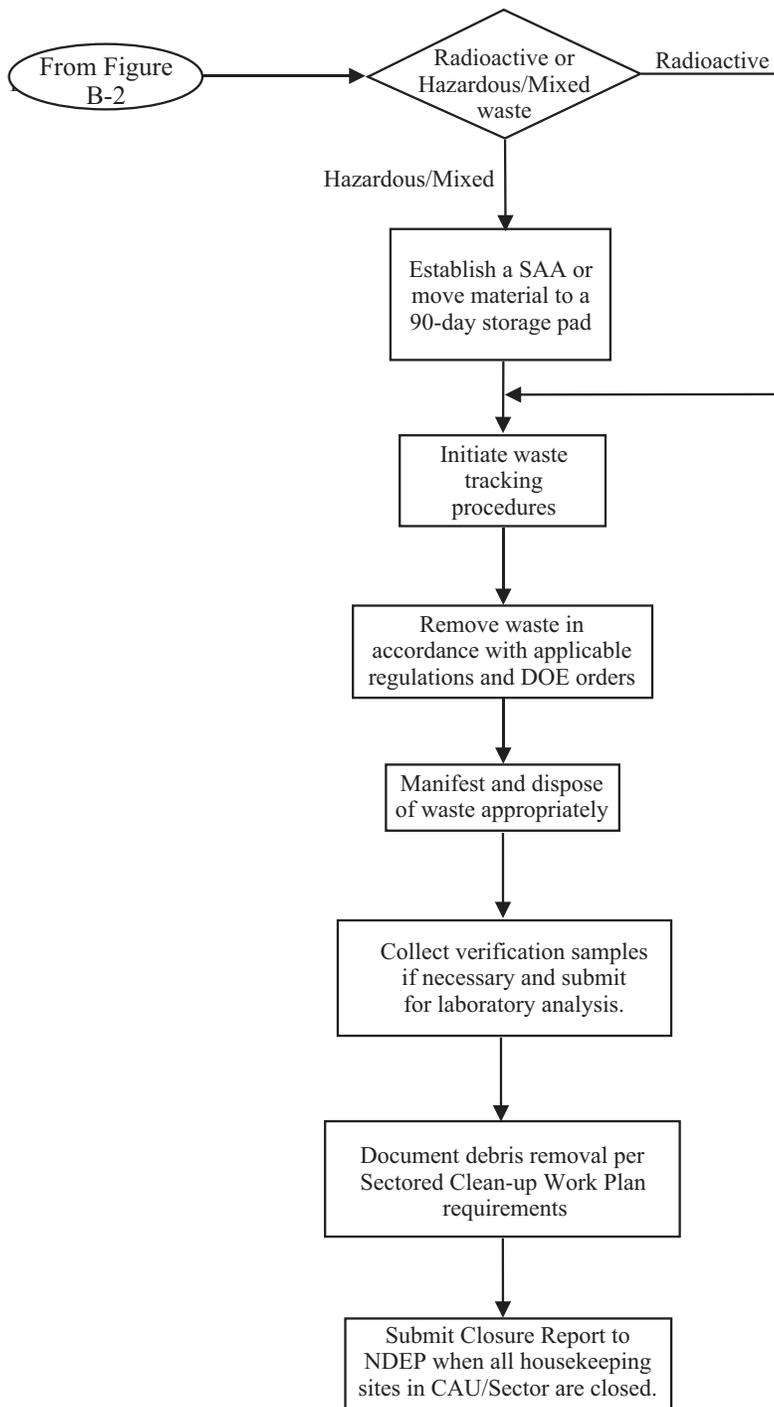


FIGURE B-2
GENERAL PROCEDURE FOR THE SECTORED
CLEAN-UP WORK PLAN (SCWP)



**FIGURE B-3
PROCESS FOR REMOVING
NONHAZARDOUS/NONRADIOACTIVE WASTE**



**FIGURE B-4
PROCESS FOR REMOVING
HAZARDOUS/RADIOACTIVE/MIXED WASTE**

APPENDIX C

**EXAMPLE OF A
SECTORED HOUSEKEEPING SITE CLOSURE
VERIFICATION FORM**

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SECTORED HOUSEKEEPING SITE CLOSURE VERIFICATION FORM

Closure Verification Date:

CAS Number: (if applicable)

CAU Number: (if applicable)

Sector Designation:

Housekeeping Site General Location:

Elevation: (meters)

Northing: (UTM, Zone 11, meters)

Easting: (UTM, Zone 11, meters)

Latitude: (degrees)

Longitude: (degrees)

Coordinate/Elevation Data Obtained from: (North American Datum, 1927)

Site Access Route:

Waste Item(s) Originally at Site	Apparent Waste Type*

* Ordinary, Scrap Metal, Asbestos, PCB, Salvageable, Hazardous, Radioactive, Mixed, Unknown, Other

Housekeeping Site Before Closure (taken date)	Housekeeping Site After Closure (taken date)

Current Site Description/Observations:

___ **No Further Action Required at Housekeeping Site**

_____ **Corrective Action Coordinator/Designee** **(Signature)** **Date**

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APPENDIX D

CORRESPONDENCE REGARDING THE SECTORED CLEAN-UP WORK PLAN FOR HOUSEKEEPING WASTE SITES AND AREA 25 SALVAGE SITES

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Department of Energy

Nevada Operations Office

P. O. Box 98518

Las Vegas, NV 89193-8518

NOV 23 1999

Paul J. Liebendorfer, P.E., Chief
Department of Conservation and Natural Resources
Division of Environmental Protection
333 W. Nye Lane, Room 138
Carson City, NV 89706-0851

BECHTEL NEVADA (BN) PROPOSED WORK ACTIVITIES AT REACTOR MAINTENANCE & DISASSEMBLY BUILDING (RMAD), TEST CELL A, TEST CELL C, SUPER KUKLA, AND PLUTO FACILITIES

BN is planning to do equipment and materials salvage at the above facilities all of which are Corrective Action Units (CAUs) in the Federal Facility Agreement and Consent Order (FFACO). An example of the types of equipment and materials to be salvaged include: various bridge cranes and load handling equipment; heating systems; cooling systems; electrical distribution systems including wiring and conduit; compressed air supply systems including piping; nitrogen supply systems including piping; lighting systems including fixtures; potable water distribution systems including piping; interior doors and windows including desks, chairs, filing cabinets, and storage lockers; plumbing fixtures such as sinks, toilets, showers, and drinking fountains; and railroad tracks.

While conducting these salvage operations cleanup, work will also be done on the interior and exterior of the facilities. Trash and debris from inside the facilities and within the facility compounds will be removed. In addition, vegetation will be removed from areas around the outside of the facilities. Temporary lighting will be installed in the facilities during the salvage operations as electrical power to the facilities has been disconnected. To access salvageable equipment, drop ceilings will be removed. Construction debris is expected to be generated as part of the salvage operations.

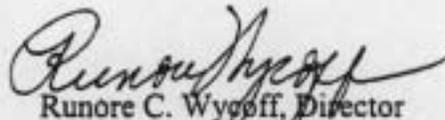
Part of the salvage operation will include removing hazardous conditions from each site. Hanta virus decontamination will be performed using trained workers throughout the facilities to minimize risk to workers. Asbestos Containing Materials (ACM) has been identified in the roofing insulating material over the former MX missile high bay, part of building 3110C, at RMAD. This material is not part of the building structure and will be removed by a qualified subcontractor. Asbestos material is also expected to be found in limited quantities in piping insulation elbows on some piping systems. This material will be removed by state certified asbestos workers in accordance with BN Company Directive CD-044.012, Asbestos Management. Nonfriable asbestos containing materials such as floor tiles, floor tile mastic, cementitious asbestos-containing materials that have become damaged will be considered friable and handled as friable ACM. Fluorescent lamps will also be removed. These and other hazardous materials such as lead bricks will be collected, and properly disposed or recycled.

All salvaged materials and equipment will be inventoried. Inventory records will be maintained and made available to the Nevada Division of Environmental Protection (NDEP) upon request.

Waste generated as part of the salvage operations will be managed in accordance with BN Company Directive CD-0442.010, Waste Management and Permitting. All wastes generated will be inventoried prior to proper disposal. Waste inventories and disposal records will also be maintained and made available to NDEP upon request.

Work at these facilities will be performed by a dedicated field crew. Debris and trash removal will occur the week of November 22, 1999, at Test Cell C. Salvage work will occur the week of November 29, 1999, at RMAD and will continue throughout the rest of the fiscal year. Removal of asbestos containing roof insulation from the RMAD Building 3110C roof will start after subcontract bid evaluation and award. The FFACO Bi-Weekly Schedule will provide details of the work schedule.

If you have any questions regarding this issue, please contact Clayton W. Barrow, of my staff, at (702) 295-7960.



Runore C. Wycoff, Director
Environmental Restoration Division

ERD:CWB

cc:

M. D. McKinnon, NDEP, Las Vegas, NV

J. J. Johnson, NDEP, Carson City, NV

D. A. Bedsun, DTRA, Mercury, NV

L. F. Roos, IT, Las Vegas, NV

K. A. Hoar, ESHD, DOE/NV, Las Vegas, NV

P. L. Hall, EM, DOE/NV, Las Vegas, NV ←

J. L. Appenzeller-Wing, ERD, DOE/NV,
Las Vegas, NV

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Department of Energy

Nevada Operations Office
P. O. Box 98518
Las Vegas, NV 89193-8518

RECEIVED
DEC 17 1999
IT/LV

DEC 15 1999

Paul J. Liebendorfer, P.E., Chief
Department of Conservation and Natural Resources
Division of Environmental Protection
333 W. Nye Lane, Room 138
Carson City, NV 89706-0851

DRAFT SECTORED CLEAN-UP WORK PLAN FOR HOUSEKEEPING CATEGORY WASTE SITES, DECEMBER 1999

Enclosed are two copies of the subject work plan for your review and comment. Draft documents are predecisional and are not releasable to the public.

If you have any questions, please contact Clayton W. Barrow, of my staff, at (702) 295-7960.

Janet Appelle-Wy
for Runore C. Wycoff, Director
Environmental Restoration Division

ERD:CWB

Enclosure:
As stated

cc w/encl:
M. D. McKinnon, NDEP, Las Vegas, NV

cc w/o encl:
J. J. Johnson, NDEP, Carson City, NV
D. A. Bedsun, DTRA, Mercury, NV
L. F. Roos, IT, Las Vegas, NV
K. A. Hoar, ESHD, DOE/NV, Las Vegas, NV
P. L. Hall, EM, DOE/NV, Las Vegas, NV

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PETER G. MORROS
Director

STATE OF NEVADA
KENNY C. GUTIN
Governor

ALLEN BIAGGI
Administrator



(702) 486-2850

FAX (702) 486-2863

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION

(Las Vegas Office)

555 E. Washington, Suite 4300

Las Vegas, Nevada 89101-1049

January 12, 2000

ERD.000120.0004

Ms. Runore C. Wycoff
Director, Environmental Restoration Division
U.S. Department of Energy
Nevada Operations Office
P.O. Box 98518
Las Vegas, NV 89193-8518

RE: Comments on Draft Sector Clean-Up Work Plan for Housekeeping
Category Waste Sites, December 1999

Dear Ms. Wycoff,

The Draft Sector Clean-Up Work Plan for Housekeeping Category Waste Sites, December 1999, has been reviewed by Nevada Division of Environmental Protection, Bureau of Federal Facilities staff (NDEP). The following comments need to be addressed in the submittal of the Final Work Plan:

Comment 1: Page ix, 1st paragraph, 1st sentence: The acronym "SCWP" should follow "The Sector Clean-up Work Plan".

Comment 2: Page ix, 1st sentence after bullets: replace "followed" with "follows".

Comment 3: Page 1, 1st paragraph, 2d line: Insert "remediation of" between "expedite" and "housekeeping".

Comment 4: Page 7, Paragraph 2.1.5, 2d line: Replace "my" with "may".

Comment 5: Page 8, 5th bullet: The correct conversion from liters to gallons is 3.785.

ACTION	_____
INFO	_____
MGR	_____
AMBFS	_____
AMTS	_____
AMNS	_____
AMEM	_____
AMPIA	_____

ERD ESHD AMEM WMD

Ms. Runore Wycoff
Draft Housekeeping Work Plan
January 12, 2000
Page 2

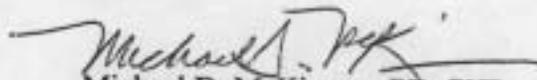
Comment 6: Page 12, Mixed Waste: This section should indicate that mixed wastes will be managed in accordance with the Mutual Consent Agreement (MCA) or future permitted facility requirements.

Comment 7: Page 13, Polychlorinated Biphenyls: See Comment #5.

Comment 8: Page B-2, Figure B-2: The first decision point does not have the "yes" and "no" directions indicated.

Please address these comments in the submittal of the Final Work Plan. If you have any questions, please contact me at 486-2874.

Sincerely,


Michael D. McKinnon, PE, CHP
Bureau of Federal Facilities
Las Vegas Office

PJL/KKB/MDM:mdm

cc:

Kenneth Hoar, DOE/ES&HD
P.L. Hall, DOE/ERD
Dave Bedsun, DTRA
P. Liebendorfer, NDEP-CC
K. Beckley, NDEP-CC
J.J. Johnson, NDEP-CC
Janet Appenzeller-Wing, DOE/ERD
Clayton Barrow, DOE/ERD
Frank DiSanza, DOE/WMD
Mike McKinnon, NDEP-LV



Department of Energy

Nevada Field Office
P.O. Box 98518
Las Vegas, NV 89193-8518

FEB 24 2000

Paul J. Liebendorfer, P.E., Chief
Department of Conservation and Natural Resources
Division of Environmental Protection
333 W. Nye Lane, Room 138
Carson City, NV 89706-0851

**SUBMITTAL OF THE FINAL SECTORED CLEAN-UP WORK PLAN FOR HOUSEKEEPING
CATEGORY WASTE SITES, FEBRUARY 2000**

Enclosed for your approval are two controlled copies of subject final plan. Please contact
Janet L. Appenzeller-Wing at (702) 295-0461 if you have any questions regarding this document.

Runore C. Wycoff, Director
Environmental Restoration Division

ERD:CWB

Enclosure:
As stated

cc w/encl. (controlled):
M. D. McKinnon, NDEP, Las Vegas, NV
S. D. Lawrence, EM Records Center,
DOE/NV, Las Vegas, NV

cc w/encl. (uncontrolled):
D. K. Cowser, BN, Las Vegas, NV
A. M. Heidema, BN, Las Vegas, NV
W. F. Johnson, BN, Las Vegas, NV
S. J. Nacht, BN, Mercury, NV
S. M. Parsons-DePry, BN, Mercury, NV
Correspondence Control, BN, Las Vegas, NV
R. B. Jackson, IT, Las Vegas, NV
✓ L. F. Roos, IT, Las Vegas, NV
J. L. Appenzeller-Wing, ERD, DOE/NV,
Las Vegas, NV
C. W. Barrow, ERD, DOE/NV, Las Vegas, NV

FEB 24 2000

Paul J. Liebendorfer

-2-

cc w/o encl:

J. J. Johnson, NDEP, Carson City, NV

D. A. Bedsun, DTRA, Las Vegas, NV

K. A. Hoar, ESHD, DOE/NV, Las Vegas, NV

P. L. Hall, EM, DOE/NV, Las Vegas, NV

15-000224

PETER G. MORROS
Director

STATE OF NEVADA
KENNY C. GUINN
Governor

ALLEN BIAGGI
Administrator



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DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION

(Las Vegas Office)

555 E. Washington, Suite 4300

Las Vegas, Nevada 89101-1049

March 8, 2000

ERD.000315.0004

Ms. Runore C. Wycoff
Director, Environmental Restoration Division
U.S. Department of Energy
Nevada Operations Office
P.O. Box 98518
Las Vegas, NV 89193-8518

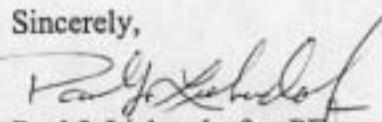
RE: Comments on Final Sectored Clean-Up Work Plan for Housekeeping
Category Waste Sites, December 1999

Dear Ms. Wycoff,

The Final Sectored Clean-Up Work Plan for Housekeeping Category Waste Sites, February 2000, has been reviewed by Nevada Division of Environmental Protection, Bureau of Federal Facilities staff (NDEP). NDEP comments on the draft document (Ltr: McKinnon to Wycoff, January 12, 2000) were also reviewed. All NDEP concerns have been adequately addressed in the final document. This plan is hereby approved as submitted and all future housekeeping category clean-up actions should be conducted in accordance with this plan.

If you have any questions, please contact me at (775)687-4670, extension 3039, or Mike McKinnon at 486-2874.

Sincerely,


Paul J. Liebendorfer, PE
Chief
Bureau of Federal Facilities

ACTION	<u>ERD ESHD AMEM WMD</u>
INFO	_____
MGR	<input checked="" type="checkbox"/>
AMBFS	_____
AMTS	<input checked="" type="checkbox"/>
AMNS	_____
AMEM	<input checked="" type="checkbox"/>
AMPIA	_____

Ms. Runore Wycoff
Final Housekeeping Work Plan
March 8, 2000
Page 2

PJL/KKB/MDM:mdm

cc:

Kenneth Hoar, DOE/ES&HD
P.L. Hall, DOE/ERD
Dave Bedsun, DTRA
P. Liebendorfer, NDEP-CC
K. Beckley, NDEP-CC
J.J. Johnson, NDEP-CC
Janet Appenzeller-Wing, DOE/ERD
Clayton Barrow, DOE/ERD
Frank DiSanza, DOE/WMD
Mike McKinnon, NDEP-LV

03/15/00 00:51:00

ALLEN BIAQGI, Administrator

STATE OF NEVADA
KENNY C. GUNN
Governor

R. MICHAEL TURNIPSEED, Director

(775) 687-4670

TDD 687-4678

Administration
Facsimile 687-3856

Water Pollution Control
Facsimile 687-4834

Mining Regulation and
Reclamation
Facsimile 684-5259



Waste Management
Corrective Actions
Federal Facilities

Air Quality
Water Quality Planning
Facsimile 687-6366

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION

333 W. Nye Lane, Room 138
Carson City, Nevada 89706

January 28, 2003

Ms. Rumore C. Wycoff
Director, Environmental Restoration Division
National Nuclear Security Administration
Nevada Operations Office
P.O. Box 98518
Las Vegas, NV 89193-8518

RE: Review of the Final Sectored Clean-Up Work Plan for Housekeeping
Category Waste Sites, Revision 1, December 2002

Dear Ms. Wycoff,

The Nevada Division of Environmental Protection, Bureau of Federal Facilities staff (NDEP) has reviewed the final Sectored Clean-Up Work Plan for Housekeeping Category Waste Sites, Revision 1, December 2002. NDEP comments on the draft document were also reviewed. The following comments were generated from our review of Revision 1.

In section 2.6.2 on page 12, reference was made to a letter that provides a process. The approval letter from NDEP should be part of the documentation. It is still unclear how the flow diagrams are integrated with each other. For example:

- There is no link between Figure B-1 and Figure B-2.
- It appears that based on the end boxes of Figure B-2, the top circles of B-3 and B-4 should reference B-2, not B-1.
- The reference to Appendix B-2 on page 2 and to Figure B-2 on pages 4 and 12 should be changed to Figure B-1.

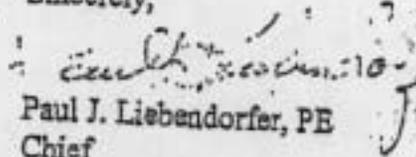
These issues must be resolved before NDEP can complete the document review.

ACTION	<u>ERD</u>
INFO	<u>ESND AMEM WMD</u>
NSO/MGR	<u>W</u>
SC	
OFFM	
AMTS	<u>✓</u>
AMNS	
AMEM	<u>✓</u>

Ms. Runore C. Wycoff
January 28, 2003
Page 2

If you have any questions, please contact Ted Zaferatos at (702) 486-2856, Don Elle at (702) 486-2874 or Karen Beckley at (775) 687-9390.

Sincerely,



Paul J. Liebendorfer, PE
Chief
Bureau of Federal Facilities

PJL/KKB/DRE/KFW/TZ/cb

cc:

Ken Hoar, Director, NNSA/ES&HD
Eric Shanholtz, Chief, DTRA
Patti Hall, NNSA/ERD
Frank Di Sanza, NNSA/WMD
Wayne Griffin, BN/DTRA
Tiffany Lantow, DTRA/TDTON
Janet Appenzeller-Wing, DOE/ERD

APPENDIX E

NEVADA ENVIRONMENTAL RESTORATION PROJECT DOCUMENT REVIEW SHEET

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NEVADA ENVIRONMENTAL RESTORATION PROJECT DOCUMENT REVIEW SHEET

1. Document Title/Number: <u>Sectored Clean-up Work Plan for Housekeeping Category Waste Sites / DOE/NV-579-REV 2</u>		2. Document Date: <u>April 2003</u>		
3. Revision Number: <u>2</u>		4. Originator/Organization: <u>Bechtel Nevada</u>		
5. Responsible NNSA/NV ERP Project Mgr.: <u>Janet Appenzeller-Wing</u>		6. Date Comments Due: <u>June 5, 2003</u>		
7. Review Criteria: <u>Full</u>		9. Reviewer's Signature: _____		
8. Reviewer/Organization/Phone No.: <u>Ted Zaferatos / NDEP / (702) 486-2856</u>				
10. Comment Number/ Location	11. Type ^a	12. Comment	13. Comment Response	14. Accept
1. Page ix, item 3	M	There is a discussion of grouping non-FFACO housekeeping sites with other FFACO (or non-FFACO housekeeping sites located in the same geographical area to form a sector. How are “new” sectors being formed?	The intent was not to form a new sector, rather the intent was to add the site to the sector it is already located in. The bullet has been rewritten as follows: “If a new site is deemed a non-FFACO housekeeping site, it is grouped with other FFACO and/or non-FFACO housekeeping sites located in the same sector. The site will then be cleaned up with the sector approach or it may be cleaned up with another scheduled FFACO site in close proximity (within 150 ft) at the scheduled time.”	Yes
2. General Comment	M	Historically the term Sectored and Zone were used interchangeably. How are zone and sector cleanups being defined for this document?	The term Sector is defined in Section 2.1 as a combination of NTS Areas. The only use of the word “Zone” in the document is found in appendix C on the example Sectored Housekeeping Site Closure Verification Form. On this form the preferred coordinate system for the site location is Universal Transverse Mercator (UTM) coordinates. UTM coordinates must be referenced to a Zone. UTM Zone 11 includes all of Nevada. The terms Sector and Zone refer to distinct geographical areas and are not interchangeable. The following text has been added as the second paragraph on page ix, and the third paragraph on page 1. “Note: As stated in Section 2.1 of this plan, a Sector is a geographic area of the NTS which is comprised of more than one of the numbered NTS Areas. For example Sector A is comprised of NTS Areas 25, 26, and 27. A Zone as used on the Sectored Housekeeping Site Closure	Yes

^aComment Types: M = Mandatory, S = Suggested.

10. Comment Number/ Location	11. Type ^a	12. Comment	13. Comment Response	14. Accept
			Verification Form (Appendix C) is used when listing the coordinates for a site location. The preferred coordinate system as indicated on the form in parentheses is Universal Transverse Mercator (UTM) using the North American Datum of 1927 (NDA 27). When listing a site using UTM coordinates, a reference Zone must also be listed. The entire state of Nevada falls into UTM Zone 11. The term Sector as defined in this plan, has no relationship to the term Zone used when listing UTM coordinates. The terms Sector and Zone are not used interchangeably; they are distinct and refer to distinct geographical areas.”	
3. General Comment	M	It is unclear how NNSA/NSO is evaluating FFACO areas that contain housekeeping sites not listed in the FFACO that need to be remediated. A defined process of how FFACO housekeeping sites and the surrounding sector will be evaluated needs to be developed.	The FFACO list of potential remediation sites was generated from several field efforts designed to identify all such sites. These investigations are considered comprehensive and are an adequate determination of potential environmental problems at the NTS. The SCWP provides two mechanisms to deal with housekeeping sites, one the sector approach, the other clean up in conjunction with other FFACO sites. It is not anticipated that sites in addition to those already identified in the FFACO will be identified. The SCWP was developed with the notion that such sites could exist. If such sites are identified during the characterization and remediation of other FFACO sites then the SCWP outlines two approaches for remediation. However, at this time, no new program will be developed and funded to look for new previously unidentified sites at the NTS. Currently new sites identified (if any) will be cleaned up as a best management practice as part of the closure of an existing FFACO site. All closure activities at the new site will be documented in the Closure Report for the existing FFACO site. The sector approach will be invoked only if the number of sites found in addition to the FFACO make such a strategy efficient. At present the sector approach is not in the baseline.	Yes

^aComment Types: M = Mandatory, S = Suggested.

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AWFC RM/RML
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Tonopah, NV 89049

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**Agreements
FFACO Meeting
Third Quarter, FY 1998
May 13, 1998, Las Vegas**

1. All agreed that the CAP, CR, SAFER, and CADD/CR Document Outlines faxed to the DOE/NV and the DSWA on May 11, 1998, do not require further comment by the NDEP unless either the DOE/NV or the DSWA have additional changes.
2. All agreed that the title of the decision document which is used when contamination is below regulatory limits will be "Corrective Action Decision Document/Closure Report."
3. All agreed that for CAUs where no contamination was found and a CADD/CR document will be submitted, the following process applies. The CADD/CR must be submitted by the established CADD deadline, and no closure report milestone will be proposed unless additional activities are required.

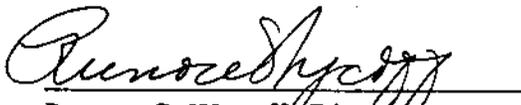
State of Nevada:



Paul Liebendorfer, P.E., Chief
Bureau of Federal Facilities

8/19/98
Date

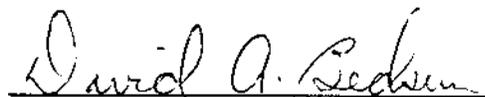
Department of Energy:



Runore C. Wycoff, Director
Environmental Restoration Division

8/19/98
Date

Defense Special Weapons Agency:



David A. Bedsun, Chief
Technical Compliance Division

8/19/98
Date

**Standardized Federal Facility Agreement and Consent Order
(FFACO) Outline
Corrective Action Decision Document/Closure Report
(CADD/CR)
Revision 2
June 13, 2012**

Table of Contents

List of Figures

List of Tables

List of Acronyms/Abbreviations

Executive Summary

1.0 Introduction

Identify the Corrective Action SiteCAS number(s), their location(s), and Corrective Action Unit (CAU) number. Provide a concise statement relating the corrective action being proposed to the provisions of the FFACO.

1.1 Purpose

Provide a concise updated description of the CAU, reference previous documentation and state the purpose of this document, namely to justify why no corrective action is necessary; how and why use restrictions will be applied; and the technical rationale for implemented closure activities.

1.2 Scope

Discuss the scope and substance of activities used to identify, evaluate, and recommend why no corrective action is necessary; how and why any required use restrictions will be applied; and basis for implemented closure activities.

1.3 CADD/CR Contents

Summarize the contents of the CADD/CR. Reference applicable programmatic plans and other documents as appropriate to support the CADD/CR. Include the Data Quality Objectives (DQOs) and summarize the results of the assessment in Section 2.2.2.

2.0 Corrective Action Investigation Summary

Concisely discuss the subject matter described by the following subject headings. Provide only enough information on the site conditions and/or completed closure activities to facilitate an understanding that no further corrective action is required. Refer the reader to an appendix for detailed discussion of the results including any changes/modifications to the approved Corrective Action Investigation Plan (CAIP).

2.1 Investigation Activities

Provide a concise description of the investigation activities conducted at the site. Refer to and discuss the validity of the conceptual model developed in the CAIP.

2.2 Results

- 2.2.1** Provide summary analytical data, plume concentration isopleth maps or graphics that summarize the investigation results and affirm that based on these results the CAU has been adequately characterized.
- 2.2.2** An assessment as to whether or not the results from the CAIP meet the DQOs must be included. The conceptual site model must be reconciled with the actual findings.

2.3 Justification for No Further Action

Justify why no further corrective action is to be performed at this site (e.g., investigation activities determine that contaminants are below Preliminary Action Levels [PALs] stated in the approved CAIP and/or industrial Preliminary Remediation Goals, or are determined not to present a risk to human health or the environment based on a site-specific risk assessment. If appropriate, provide a summary of any closure and verification activities that were performed). Provide details on use restrictions (figures with coordinates, Use Restriction Forms, etc.) Based on the current U.S. Department of Energy *Nevada Test Site (NTS) Resource Management Plan (RMP)* for those sites on the Nevada National Security Site (NNSS) (formerly known as the Nevada Test Site).

3.0 Recommendation

State that no further corrective action is required. Request the Nevada Division of Environmental Protection (NDEP) issue a Notice of Completion for this CAU and the CAU be moved from Appendix III to Appendix IV of the FFACO.

4.0 References

Provide references for the sources of information used during the preparation of the CADD/CR.

Appendices

Corrective Action Investigation Results

Discuss the investigation and present the results. Minimize restating site history, etc.; refer to CAIP, as appropriate. Concisely discuss the field program, focusing on changes or deviations from the planned operation. Present and discuss the results, quality assurance parameters and data validation results, as appropriate. Present data in tables, lab data reports, boring logs, site cross-sections with plume data, or other graphic representations of the results, as appropriate.

DQOs as developed in the CAIP

Data Assessment

Assess how well the results from the CAIP meet the DQOs using the primary data quality indicators (DQIs) of precision, accuracy, representativeness, comparability, and completeness. Other DQIs used to support the discussion of the analytical data can be sensitivity, recovery, memory effects, limit(s) of quantitation, repeatability, and reproducibility. The assessment must include a reconciliation of the data with the

conceptual site model and the model revised as appropriate.

Risk Assessment (if applicable)

Risk Assessment findings and supporting documentation.

Closure Activity Summary (if applicable)

Provide concise details on the completed closure activities and include the required verification activities and supporting documentation. Multiple variations of Closure Activities and required supporting documentation can be applicable under the CADD/CR. Examples of the type of Closure Activities that would be appropriate include, but are not limited to:

- Limited contaminated soil excavation (hot spot removal) supported by post excavation verification sampling and analysis documentation and documentation (manifest) of proper disposal of the material.
- Removal of underground storage tank contents and/or underground tanks for closure where characterization has determined that concentrations in surrounding soil is less than the PAL supported by documentation (manifest) of the proper disposal of the material.
- Use restriction is the only corrective action based on the characterization results. This activity will be supported by details on the use restrictions: figures with coordinates, Use Restriction Forms, etc., based on the current RMP.
- Closure of septic tanks associated with leachfields determined through the characterization that concentrations are below the PAL and/or released without restriction based on a risk assessment (A through K analysis).
- Closure of hydrocarbon impacted soils in place and released without restrictions based on a risk assessment (A through K analysis).
Closure activities similar to Housekeeping type cleanups at CAUs where characterization has determined that concentrations in surrounding soil is less than the PAL supported by documentation (manifest) of the proper disposal of the material.
- Removal of underground piping and/or pipeline contents for closure where characterization has determined that concentrations in surrounding soil is less than the PAL supported by documentation (manifest) of the proper disposal of the material.

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

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DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION

333 W. Nye Lane, Room 138
Carson City, Nevada 89706-0851

August 31, 1998

Ms. Runore Wycoff, Director
Environmental Restoration Division
Department of Energy
Nevada Operations Office
P.O. Box 98518
Las Vegas, NV 89193-8518

RE: INCLUSION OF MULTIPLE CORRECTIVE ACTION UNITS (CAUs) IN A SINGLE
CORRECTIVE ACTION INVESTIGATION PLAN (CAIP)

Dear Ms. Wycoff:

Addressing multiple CAUs in a single CAIP, has been a topic of discussion between the Department of Energy (DOE) and the Nevada Division of Environmental Protection (NDEP) for two years now. During the August 19th, 1998 Federal Facilities Agreement and Consent Order (FFACO) quarterly meeting, this issue was again raised. Each time this issue has come up, NDEP has indicated that although this alternative is not explicitly excluded by the FFACO, it was never intended, by NDEP, to be a viable option. NDEP has stated that, except for unique circumstances, we would not be receptive to approving projects proposed through such an option. NDEP has previously concurred that those CAIPs where this process had been initiated, could continue for DOE's convenience. These previous concurrences have apparently been perceived by DOE as precedent setting and therefore, DOE continues to make similar proposals.

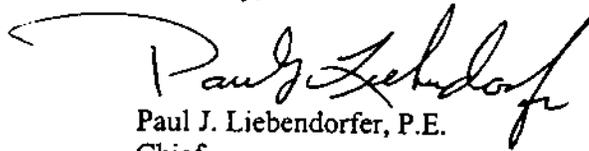
CAUs were established to enable the grouping of impacted areas, (CASs), into manageable sized projects, as determined by DOE, considering among other things both budget and time to complete the work. When grouping CASs, DOE should have enough information about the CASs to appropriately group sites into a single CAU. This should be done prior to prioritizing and proposing movement of a CAU from Appendix II to Appendix III for development of CAIP and subsequent work. To facilitate this process, NDEP has agreed that DOE can unilaterally transfer and group CASs into CAUs in Appendix II to address their program needs. DOE need only provide notification to NDEP of such movements prior to prioritization of these for transfer to Appendix III. This eliminated NDEP from constraining or controlling DOE actions in the grouping or regrouping of sites in Appendix II to form projects of a manageable size. Once CASs are grouped into a CAU, all subsequent work associated with a CAU should proceed independent of work on other CAUs.

ACTION	_____
INFO	_____ <i>ERD ESHD</i>
MGR	_____ <input checked="" type="checkbox"/>
AMBFS	_____
AMTS	_____ <input checked="" type="checkbox"/>
AMNS	_____ <input checked="" type="checkbox"/>
AMEM	_____ <input checked="" type="checkbox"/>

Runore Wycoff, Director
August 31, 1998
Page 2

Based on the above facts, in the future NDEP will not approve a CAIP which contains multiple CAUs except for clearly unique conditions. I hope NDEP's position is clearly stated in this letter.

Sincerely,



Paul J. Liebendorfer, P.E.
Chief
Bureau of Federal Facilities

PJL/js

cc: K. Beckley, NDEP-CC
J. Johnson, NDEP-CC
Supervisor, NDEP-LV
K. Hoar, DOE/ES&HD
P. Hall, DOE/ERD
J. Appenzeller-Wing, DOE/ERD
D. Bedsun, DSWA

Final
INFORMATION EXCHANGE
for Issues since the November 7, 2001 Quarterly Meeting

NNSA/NV Industrial Sites Quality Assurance Project Plan (QAPP)

The Nevada Division of Environmental Protection (NDEP) approved Revision 3 of the Industrial Sites Project Quality Assurance Project Plan on 3/25/02. The QAPP ensures that Industrial Sites Project field activities are conducted in accordance with an approved Quality Assurance program.

FFACO Update

The current version of the FFACO Appendices is available on the ERP web site at <http://cdr/root-erp/>

FFACO Document Distribution Process

The Carson City office of NDEP currently needs only one copy of either DTRA or NNSA/NV Industrial Sites Project documents (FFACO) and post-closure inspection reports. Two copies of UGTA and NNSA/NV Soils Project documents (FFACO) will still be required at the Carson City Office. The FFACO document distribution process is currently being revised and will include the aforementioned change to distribution.

FFACO Corrective Action Unit (CAU) Demotion Process

NDEP approved the justification forms to be used when requesting the demotion of a Corrective Action Site (CAS) from Appendix III to Appendix II. See Environmental Restoration Project (ERP) web site for FFACO Correspondence dated 2/21/02 and 4/4/02.

From the February 6, 2002 FFACO Quarterly Meeting:

NDEP has requested they receive Data Quality Objective (DQO) meeting-related materials at least one week in advance of the meeting date. NDEP has expressed concern that review of the DQO materials is limited when materials are not received until the night before the meeting. NNSA/NV stated they would accommodate this request.

NDEP clarified their policy related to the addition of CASs in Appendix II CAUs. NDEP indicated NNSA/NV is not required to provide backup documentation or acquire NDEP preapproval for the addition. Following the creation of any CAS into an Appendix II CAU, NNSA/NV may notify NDEP regarding during the next FFACO Quarterly Meeting. To clarify: This process only applies to Appendix II CAUs. CAS additions to Appendix III CAUs still require NDEP approval prior to their addition to the FFACO.

Corrections to FFACO documents:

Corrections to distributed FFACO documents are to be accomplished in the following ways

- Addendums - used when extensive corrections/additions to a section or multiple sections of a FFACO document are necessary
- Record of Technical Change (ROTC) - used when correcting limited technical information
- Errata Sheet - used when correcting limited, non-technical information, such as typographical errors (*See attached Errata Sheet and transmittal letter examples*)

NOTE: Addendums, ROTCs and Errata Sheets are to be distributed in the same manner as the original document. This includes a transmittal letter addressed to the Nevada Division of Environmental Protection (NDEP) containing the exact distribution as the original document.

[Date of Transmittal]

[Addressee]

SUBMITTAL OF ERRATA SHEET FOR THE FINAL *CORRECTIVE ACTION DECISION DOCUMENT (CADD) FOR CORRECTIVE ACTION UNIT 356: MUD PITS AND DISPOSAL SITES, NEVADA TEST SITE, NEVADA*, REVISION 0, DECEMBER 1999

Enclosed please find an errata sheet for the subject document. Page 1 of the document incorrectly states that the Nevada Division of Environmental Protection (NDEP) approved Revision 0 of the Corrective Action Unit (CAU) 356 Corrective Action Investigation Plan (CAIP) on January 12, 2000. The correct date NDEP approved the CAU 356 CAIP is March 1, 2000.

Please direct comments and questions to Kevin J. Cabble, of my staff, at (702) 295-5000.

ERD:KJC

Runore C. Wycoff, Director
Environmental Restoration Division

Enclosure:
As stated

cc w/encl. (controlled):

cc w/encl. (uncontrolled):

cc w/o encl:

ERRATA SHEET

The fifth sentence of the first paragraph on Page 1 of the Corrective Action Decision Document for Corrective Action Unit 356: Mud Pits and Disposal Sites, Nevada Test Site, Nevada erroneously states that Revision 0 of the CAIP was issued in December of 1999 and was approved by NDEP on January 12, 2000. The sentence should state that Revision 0 of the CAIP was issued in December of 1999 and was approved by NDEP on March 1, 2000.

Per NNSA/NV (transmittal letter date) Letter entitled: SUBMITTAL OF ERRATA SHEET FOR THE FINAL CORRECTIVE ACTION DECISION DOCUMENT FOR CORRECTIVE ACTION UNIT 356: MUD PITS AND DISPOSAL SITES, NEVADA TEST SITE, NEVADA, REVISION 0, DECEMBER 1999



Department of Energy

Nevada Operations Office
P.O. Box 98518
Las Vegas, NV 89193-8518

APR 13 2000

Paul J. Liebendorfer, P.E., Chief
Department of Conservation and Natural Resources
Division of Environmental Protection
333 W. Nye Lane, Room 138
Carson City, NV 89706-0851

PROCESS FOR RECORD OF TECHNICAL CHANGE (ROTC)

This letter is a result of the February 10, 2000, Federal Facility and Consent Order meeting to standardize the ROTC process. The following paragraph describes the process we will implement, pending any concerns or comments by the Nevada Division of Environmental Protection (NDEP).

If there is a change to the scope of the investigation or remediation that was approved in the Corrective Action Investigation Plan, Corrective Action Decision Documents, Closure Plan, or Closure Report, the contractor must contact the federal Task Manager immediately. The Task Manager will provide written notification of the ROTC by fax to NDEP. NDEP will provide written concurrence with the ROTC by fax to the DOE Nevada Operations Office (DOE/NV). Once written concurrence is received from NDEP, DOE/NV will give the contractor approval to continue work. Lastly, DOE/NV will issue a controlled copy of the ROTC.

If you have any questions or comments, please contact Sabine T. Curtis, of my staff, at (702) 295-0542.

ERD:STC

A handwritten signature in black ink, appearing to read "Runore C. Wycoff".

Runore C. Wycoff, Director
Environmental Restoration Division

Paul J. Liebendorfer

-2-

APR 13 2000

cc:

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M. D. McKinnon, NDEP, Las Vegas, NV
D. A. Bedsun, DTRA, Mercury, NV
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D. R. Wilson, IT, Las Vegas, NV
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J. L. Appenzeller-Wing, ERD, DOE/NV, Las Vegas, NV

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Agreements
FFACO Meeting
Second Quarter, FY 1998
February 11, 1998

1. All agreed that if additional data is needed to complete a CAU decision document, then the plan to gather the additional data will be written as an addendum to the existing CAIP. If a complete revision to the technical approach is required, a new CAIP will be written.

2. All agreed that, under the FFACO, NDEP is not concerned with new sites having no hazardous waste components and consisting only of litter, construction debris, and sanitary waste. These sites will be addressed under the DOE/NV's zonal cleanup program.

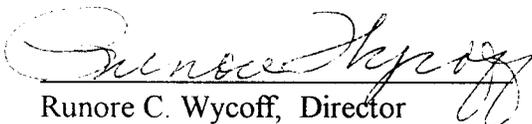
State of Nevada:



Paul Liebendorfer, P.E., Chief
Bureau of Federal Facilities

5/13/98
Date

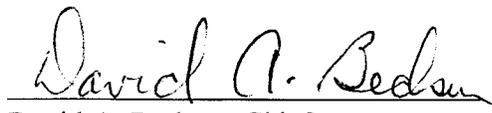
Department of Energy:



Runore C. Wycoff, Director
Environmental Restoration Division

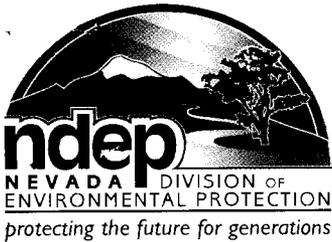
5/13/98
Date

Defense Special Weapons Agency:



David A. Bedsun, Chief
Technical Compliance Division

5/14/98
Date



STATE OF NEVADA
Department of Conservation & Natural Resources
DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor
Leo M. Drozdoff, P.E., Director
Colleen Cripps, Ph.D., Adminis

ERD.130327.0003

March 22, 2013

Robert F. Boehlecke, Manager
Environmental Management Operations
National Nuclear Security Administration
Nevada Field Office
P.O. Box 98518
Las Vegas, NV 89193-8518

RE: REQUEST TO TRANSFER USE RESTRICTION (UR) INFORMATION FROM THE FACILITY INFORMATION MANAGEMENT SYSTEM (FIMS) TO THE MANAGEMENT AND OPERATING (M&O) CONTRACTOR GEOGRAPHIC INFORMATION SYSTEM (GIS)

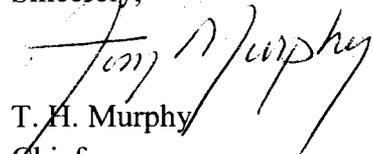
Dear Mr. Boehlecke,

The Nevada Division of Environmental Protection, Bureau of Federal Facilities staff (NDEP) has reviewed your letter dated February 13, 2013 requesting NDEP concurrence on transferring UR information for all sites closed under the Federal Facility Agreement and Consent Order (FFACO) from the FIMS into the M&O GIS which is maintained by the M&O contractor.

NDEP hereby concurs with this requested transfer.

If you have any questions regarding this matter, contact me at (702) 486-2850 ext. 231 or Jeff MacDougall at ext. 233.

Sincerely,


T. H. Murphy
Chief
Bureau of Federal Facilities

THM/JJM/CA/JW/TZ/SP:jjm



Robert F. Boehlecke

Page 2

March 22, 2013

cc: Kevin Flanagan, HQ DTRA/GC, Ft. Belvoir, VA
N-I Central Files, MS NSF 156
NSTec STI Point of Contact, MS NLV051
Jeffrey Thomas, DRTA/CXT, Kirtland AFB, NM
FFACO Group, EMOS, NNSA/NFO, Las Vegas, NV
T. A. Lantow, EMO, NNSA/NFO, Las Vegas, NV
W. R. Wilborn, EMO, NNSA/NFO, Las Vegas, NV

3

PETER G. MORROS, Director

L.H. DODGION, Administrator

(702) 687-4670

TDD 687-4678

Administration
Mining Regulation and Reclamation
Water Pollution Control

Facsimile 687-5856

STATE OF NEVADA

BOB MILLER

Governor



Waste Management
Corrective Actions
Federal Facilities

Air Quality
Water Quality Planning
Facsimile 687-6396

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION

333 W. Nye Lane, Room 138
Carson City, Nevada 89706-0851

March 3, 1998

Mr. Michael O. Giblin, Acting Director
Environmental Restoration Division
U.S. Department of Energy
Nevada Operations Office
P.O. Box 98518
Las Vegas, Nevada 89193-8518

RE: RECORDING LAND USE RESTRICTIONS ON AIR FORCE LANDS

Dear Mr. Giblin:

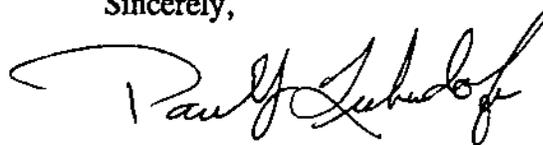
We have reviewed the above referenced flow diagram which proposes the process for recording land use restrictions for DOE sites which will be closed in place on Air Force facilities. There is only one change in the proposed sequence that needs to occur. NDEP will not issue the CAU notice of completion until the land use restrictions forms are completed and included in the closure report. The sequence of these two actions needs to be reversed. With the implementation of this one change, the proposed process is approved.

ACTION	_____
INFO	_____ <i>ERD ESHD AMGM</i>
MGR	_____ ✓
AMBFS	_____
AMTS	_____ ✓
AMNS	_____
EM	_____ ✓

Michael O. Giblin
US Department of Energy
March 3, 1998
Page 2

If you have any questions regarding this matter I may be contacted at (702) 687-4670 Ex. 3039.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Liebendorfer". The signature is fluid and cursive, with a large initial "P" and a long, sweeping underline.

Paul Liebendorfer, P.E.
Chief
Bureau of Federal Facilities

PL/js

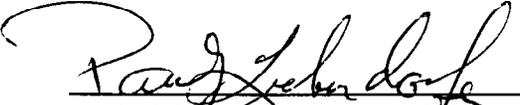
cc: Dave Bedsun, DSWA
Patti Hall, DOE/ERD
Ken Hoar, DOE/EPD
Monica Sanchez, DOE/ERD
Pete Sanders, DOE/ERD
Steve Mellington, DOE/EM&TD
Donald Garrepy, NDEP/LV
Janet Appenzeller-Wing, DOE/ERD
Clint Case, NDEP/CC
Karen Beckley

**Agreements, FFACO Meeting
Third Quarter, FY 1997
May 14, 1997, Las Vegas**

1. All agreed that Agreement 3 from the November 20, 1996, quarterly meeting should be clarified to read, "All agreed that NDEP staff will be responsible for documenting policy, decisions and guidance discussed during meetings and teleconferences for cases in which NDEP believes it has given specific policy guidance or concurrence with decisions or proposed alternatives. If DOE believes that it has received specific direction and has not received anything from NDEP, then it is incumbent upon DOE to seek clarification. NDEP will not be responsible for detailed minutes of the meeting."

2. All agreed that DOE and DSWA will carefully screen the CASs in a CAU before promoting the CAU to Appendix III, and during that screening they will consider NDEP's concerns about CAS groupings. The CASs will be reviewed again during the kickoff meeting.

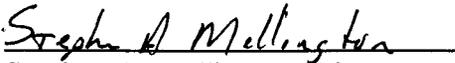
State of Nevada



Paul Liebendorfer, P.E., Chief
Bureau of Federal Facilities

8/13/97
Date

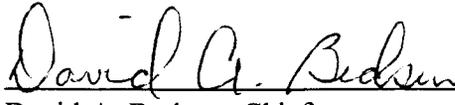
Department of Energy:



Stephen A. Mellington, Director
Environmental Restoration Division

8/13/97
Date

Defense Special Weapons Agency:

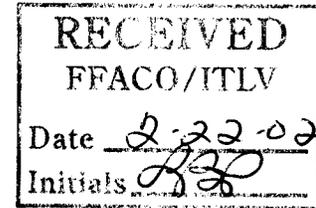


David A. Bedsun, Chief
Technical Compliance Division

8/13/97
Date



Department of Energy
National Nuclear Security Administration
Nevada Operations Office
P.O. Box 98518
Las Vegas, NV 89193-8518



FEB 21 2002

Paul J. Liebendorfer, P.E., Chief
Department of Conservation and Natural Resources
Division of Environmental Protection
333 W. Nye Lane, Room 138
Carson City, NV 89706-0851

**MODIFICATION REQUESTS DEMOTING CORRECTIVE ACTION SITES (CASs) FROM
APPENDIX III TO APPENDIX II OF THE FEDERAL FACILITY AGREEMENT AND
CONSENT ORDER (FFACO)**

Based on our recent discussion with you after the February 6, 2002, FFACO meeting, please find enclosed a revised version of the justification forms for demoting CASs from Appendix III to Appendix II of the FFACO. Both checklists have been reviewed and concurred on by staff from the Defense Threat Reduction Agency (see enclosed e-mail).

If you have any questions or comments regarding this issue, please contact Janet L. Appenzeller-Wing, of my staff, at (702) 295-0461.


Runore C. Wycoff, Director
Environmental Restoration Division

ERD:050.JAW

Enclosures:
As stated

Paul J. Liebendorfer

-2-

RECEIVED

FEB 22 2002

IT/LV

cc w/encls:

M. A. DeBurle, NDEP, Carson City, NV

D. Elle, Ph.D., NDEP, Las Vegas, NV

Eric Shanholtz, DTRA, Las Vegas, NV

LTC P. M. Loomis, DTRA, M/S 645,

Mercury, NV

DTRA Environmental, M/S 645, Mercury, NV

BN Technical Information Officer,

M/S NLV048, Las Vegas, NV

W. F. Johnson, BN, Mercury, NV

G. M. Romano, IT, Las Vegas, NV

W. C. Suiter, ESHD, NNSA/NV, Las Vegas, NV

P. L. Hall, AMEM, NNSA/NV, Las Vegas, NV

R. C. Wycoff, ERD, NNSA/NV, Las Vegas, NV

J. L. Appenzeller-Wing, ERD, NNSA/NV,

Las Vegas, NV

Attachment to FFACO Modification Request

Justification for CAS Demotion from Appendix III to Appendix II

CAU Number: _____

CAS Number: _____

1. RATIONALE FOR DEMOTION

New information identified after the promotion of this CAS require significant changes to cost and schedule based on the following determinations:

- Technology is not currently available to characterize the site
- Conceptual model has changed significantly
- Contaminants defined for the CAS have changed significantly
- Site cannot be concurrently characterized with other CASs in the CAU
- Technical attributes of the site differ from the original CAS description
- Volume of contaminated media to be characterized is considerably larger than original estimates
- Site is not an Industrial Site and ownership must be transferred to the UGTA or Soils Project

2. BACKGROUND INFORMATION

3. TECHNICAL JUSTIFICATION

4. FUNDING IMPACTS, OPPORTUNITIES

5. RECOMMENDATIONS

Outline for Justification Form

Justification for CAS Demotion from Appendix III to Appendix II

CAU Number(s): _____ CAS Number(s): _____

1. RATIONALE FOR DEMOTION

New information identified after the promotion of this CAS require significant changes to cost and schedule based on the following determinations:

- Technology is not currently available to characterize the site
- Conceptual Model has changed significantly
- Contaminants defined for the CAS have changed significantly
- Site cannot be concurrently characterized with other CASs in the CAU
- Technical attributes of the site differ from the original CAS description
- Volume of contaminated media to be characterized is considerably larger than original estimates
- Site is not an Industrial Site and ownership must be transferred to the UGTA or Soils Project

2. BACKGROUND INFORMATION

Provide background information and specifically discuss the new information that justifies the rationale presented in question 1.

3. TECHNICAL JUSTIFICATION

Provide concise statements that justify the rationale which should be directly tied to the background information provided in question 2.

4. FUNDING IMPACTS, OPPORTUNITIES

This section should include data on the relationship between the technical justification and the final funding output that resulted in the necessity to transfer the CAS from Appendix III to II.

- a. When applicable, detail the original estimate and the new estimate for this CAS
- b. Amount of funds in current FY which will become available by demoting this site
- c. How funds will be reallocated and the benefit to project completion

5. RECOMMENDATIONS

Provide relevant FFACO recommendations and CAS disposition information. Also include the life cycle baseline and schedule implications for the transfer.

**Minutes, FFACO Meeting
Second Quarter, FY 1998
February 11, 1998; Las Vegas, Nevada**

Attending:

State of Nevada (NDEP): Paul Liebendorfer, Karen Beckley, Clinton Case, Jon Taylor,
Clem Goewert, Donald Garrepy, Harry van Drielen, Michael McKinnon

U.S. Department of Energy (DOE/NV): Patti Hall, Michael Giblin, Ken Hoar, Bobbie McClure,
Bob Bangerter, Janet Appenzeller-Wing, Monica Sanchez, Sabine Curtis, Peter Sanders,
Clayton Barrow, Marlon Stewart, Pam Adams, Lisa Heydman, Terry Brooker

Defense Special Weapons Agency (DSWA): Dave Bedsun, Wayne Griffin

These minutes are not a verbatim transcript of the meeting but are meant to reasonably represent the positions of the parties present at the meeting.

Note: ## denotes a new action item; ** denotes a new agreement.

Next Meeting: May 13, 1998, Las Vegas, 9 am.

Handouts:

- Agenda
- Summary of agreements from November 12, 1997, meeting
- Summary of agreements from January 11, 1998, meeting
- Annotated action items from November 12, 1997, meeting
- DOE/NV and DSWA proposed appendices modifications
- Proposed Fiscal Year 1999 and 2000 milestones

Patti Hall (DOE/NV) opened the meeting by introducing Terry Brooker (DOE/IT) and explained that a new process for recording action items is being tested during the meeting. After some of the FFACO meetings, there has been confusion as to what exactly is required to complete the action items. To help reduce the misunderstandings, as the action items arise, Brooker will write the actions on an easel pad and ensure that all the parties agree to the language and expectations. The items will be quickly reviewed at the end of the meeting.

Paul Liebendorfer (NDEP) introduced Michael McKinnon, a new staff engineer in the NDEP, Las Vegas office. He will be replacing Donald Garrepy, who has moved into the position of supervisor. McKinnon is a certified health physicist and a registered engineer.

Approval of Agreements from November 12, 1997, Meeting (*Attachment I*)

There was no discussion of the agreements from the November 12, 1997, quarterly meeting. The parties signed the agreements, as listed in Attachment I of the agenda, at the conclusion of the meeting.

Approval of Agreements from January 12, 1998, Meeting (*Attachment II*)

There was no discussion of the agreements from the January 12, 1998, quarterly meeting. The parties signed the agreements, as listed in Attachment II of the agenda, at the conclusion of the meeting. The minutes from the January 12, 1998, are still being reviewed by the NDEP.

Review of Action Items from November 12, 1997, Meeting (*Attachment III*)

Patti Hall reviewed the following ongoing action items from the November 12, 1997, meeting. All other action items from the November 12, 1997, meeting have been completed. Items are numbered here in accordance with the original action list.

4. The DOE/NV and the NDEP will finalize a standardized outline for UGTA Corrective Action Investigation Plans.

Ongoing: The DOE/NV and the NDEP have been actively developing an agreed-upon UGTA CAIP outline. The NDEP sent the most recent version to the DOE/NV on February 2, 1998.

The DOE/NV and the NDEP will finalize a standardized outline for UGTA Corrective Action Investigation Plans (ongoing from November 12, 1997).

7. The NDEP will provide comments on the CAP, CR, SAFER and CADD/CR Document Outlines by November 27, 1997 (ongoing from August 13, 1997).

Ongoing: The NDEP recently distributed a new version of the CAP, CR, SAFER and CADD/CR Document Outlines to the DOE/NV and the DSWA. They are being reviewed.

The DOE/NV and the DSWA will respond to the NDEP's most recent version of the CAP, CR, SAFER and CADD/CR Document Outlines by March 13, 1998.

8. The DOE/NV will evaluate the sites listed in the NDEP letter dated September 25, 1997, and add the appropriate ones to the FFACO.

Ongoing: The DOE/NV has evaluated the list of sites and is meeting with the NDEP on February 12, 1998 to discuss the matter.

10. The NDEP will distribute to the DOE/NV and the DSWA a summary of its concerns and comments about the grouping of CASs into CAUs (ongoing from May 14, 1997, meeting).

Ongoing: No comments have been received from the NDEP as of February 9, 1998.

*Liebendorfer said that the NDEP is developing policy about how CAUs are managed and grouped. He feels there is too much movement of Corrective Action Sites (CASs) among the Corrective Action Units (CAUs), and that this movement makes the FFACO process even more complex. If the CAU is already in Appendix III, then good cause must exist before the NDEP will allow any changes. See discussion under the **DSWA Proposed Modifications** section of these minutes for more information on this issue.*

The NDEP will provide guidance for grouping CASs into CAUs and for deciding when CAU modifications can take place (ongoing from May 14, 1997, meeting).

11. The DOE/NV will brief Liebendorfer and other appropriate NDEP staff on Jerry Johnson's (DOE/NV) management philosophy and its impact on the PMIS system.

Ongoing: Clinton Case (NDEP) was briefed on the higher level reporting system in November 1997. A briefing with Liebendorfer has not yet been scheduled.

Liebendorfer said the information contained in this briefing will be important because costs must be tracked to milestones, and the NDEP needs to understand the costs associated with the completion of CAU activities.

The DOE/NV will brief Paul Liebendorfer and other appropriate NDEP staff on Jerry Johnson's (DOE/NV) management philosophy and its impact on the PMIS system (ongoing from November 12, 1998).

12. The DOE/NV will propose that CAU 110, U-3axbl Crater be removed from the FFACO because it is the responsibility of the DOE/NV's Waste Management Division to close the unit.

Ongoing: the proposed CAU/CAS modification table for the February 11, 1998 quarterly meeting states that the DOE/NV will, in a separate letter, propose the removal from the FFACO of the CAUs that are the responsibility of the Waste Management Division.

Specifically, these are CAUs:

110, Area 3 WMD U-3axbl Crater

111, Area 5 WMD Retired Mixed Waste Pits

207, Area 5 WMD Greater Confinement Disposal (GCD) Boreholes

The DOE/NV will propose that CAU 110, U-3axbl Crater; CAU 111, Area 5 WMD Retired Mixed Waste Pits; and CAU 207, Area 5 WMD Greater Confinement Disposal (GCD) Boreholes be removed from the FFACO because it is the responsibility of DOE/NV's Waste Management Division to close the units (ongoing from November 12, 1997).

Proposed Appendices Modifications (*Attachments IV and V*)

Hall noted that Attachments IV and V of the agenda packet contain the DOE/NV's and the DSWA's proposed CAS and CAU modifications. The attachments also contain proposed new Fiscal Year (FY) 1999 and 2000 milestones and due dates. The following CAU specific issues were discussed.

CAU 143 - Area 25 Contaminated Waste Dumps

At the May 1997 quarterly meeting, the DOE/NV proposed that CAS 25-08-01 be deleted from the FFACO because it duplicated another site in CAU 143. The proposed modification table incorrectly stated that CAS 25-08-01 was in CAU 197. This CAS has always been in CAU 143.

The NDEP approved the deletion of CAS 25-08-01 in a June 13, 1997, letter. At the November 1997 quarterly meeting, the DOE/NV asked that CAU 143, with its three CASs, be promoted to Appendix III and that milestone deadlines be established. In a December 1, 1997, letter the NDEP said the CAU could not be promoted until the issue of whether the CAU contained three or four CASs was resolved. Hall gave Liebendorfer a packet of DOE/NDEP correspondence and other information related to the deletion of CAS 25-08-01 and asked the NDEP to resolve the issue.

The NDEP will resolve the issue of whether CAS 25-08-01 was appropriately deleted from CAU 143 in the June 1997 modification determinations by February 20, 1998.

CAU 450 - Historical Underground Storage Tank (UST) Release Sites

Janet Appenzeller-Wing said the DOE/NV submitted a closure report for CAU 450 to the NDEP on September 24, 1997. The NDEP disapproved the report, with comments, in a letter dated October 17, 1997. The DOE/NV responded to the comments in a letter dated November 7, 1997, and provided Volume II of the report. NDEP has not responded to the latest DOE/NV letter or made another determination on the Closure Report. Liebendorfer said that Dean Mireau (NDEP, Las Vegas) was reviewing the Closure Report, but he resigned before completing the review. Harry van Drielen has scanned the report, but he has not studied it in detail and will not get a chance to finish the review before he resigns on February 19, 1998.

The NDEP will review the CAU 450 Closure Report, and all its supporting documentation, and comment on or approve the report prior to the May 13, 1998, quarterly FFACO meeting.

CAU 452, 454, 456, 464s - Historic UST Releases

Appenzeller-Wing said the DOE/NV submitted a SAFER Plan for CAUs 452, 454, 456, and 464 on September 11, 1997. The NDEP questioned the appropriateness of the SAFER process and the DOE/NV justified its use in a letter dated October 28, 1997. The NDEP approved the SAFER process for these CAUs and established Closure Report deadlines in a letter dated December 1, 1997. The NDEP approval of the SAFER Plans has not yet been received. Liebendorfer responded the NDEP was initially concerned with the plan because it contained too much ambiguity, which is why it was not approved.

Clayton Barrow (DOE/NV) added that the field work for CAU 456 has been completed and a closure report is sitting on his desk. The DOE/NV began the field work after receiving written approval from Mireau. Barrow asked if it would be okay to submit the closure report for CAU 456 to the NDEP before the SAFER Plans were approved. Liebendorfer responded that he would actually appreciate a copy of the closure report because it may illustrate any inadequacies in the SAFER Plan.

The NDEP will supply comments, concerns, or an approval of the SAFER Plan for CAUs 452, 454, 456, 464 by February 27, 1998 or, by that date, provide a timeframe of

when the review will be complete.

The DOE/NV will transmit the CAU 456 Closure Report to the NDEP as soon as possible.

CAU 447 - Project Shoal Area Subsurface

Peter Sanders (DOE/NV) said the DOE/NV met with the Desert Research Institute during the first week in February to discuss the hydrologic model for CAU 447, Project Shoal Area (PSA), Subsurface. It was recognized that unacceptable uncertainty exists in the definition of the contaminant boundary. The DOE/NV must collect additional data to help define the contaminant boundary, and consequently the CADD deadline will need to be extended. Liebendorfer responded that when the NDEP approved the PSA CAIP, the corrective action approach used at all the subsurface test sites was not well understood, so the NDEP never really approved the CAIP. Sanders replied that he has discussed this issue with the NDEP before, and he is developing a proposal for the next phase of investigative activities.

Liebendorfer noted it is not just the CADD date that needs to be readdressed, but also the issue of an approved CAIP. Sanders noted the DOE/NV has a CAIP that was used to collect the initial data. Liebendorfer agreed, but he said it was never approved. The CAIP covered both the surface and the subsurface activities at PSA. The NDEP concurred that the approach for the surface sites was acceptable and that the initial approach for the subsurface sites was satisfactory. The additional investigation activities should be described in a new CAIP. Liebendorfer needs to have a date for when the new CAIP will be provided, and at that time he will reconsider the CADD deadline.

Clem Goewert (NDEP) asked if the strategy for collecting the additional data should be covered in a new CAIP or in an addendum to the existing plan. Robert Bangerter (DOE/NV) said if the existing approach is not changed, and only additional data is required, then the new activities should be covered under an addendum. Liebendorfer replied that because the NDEP never really approved the subsurface portion of the CAIP, a new CAIP should be written to cover the additional activities. The CAIP should include the timeframe for gathering the additional information.

Liebendorfer noted if a CAIP states no additional data is required to perform groundwater modeling, than that decision has to be well justified. Sanders agreed with this concept. He said in the initial PSA CAIP it was recognized that additional data was required, and this data has been collected. Now it is understood that more information is needed to complete the modeling effort. Liebendorfer noted the fact that the DOE/NV needs more information should be reasonable grounds for approving a CADD extension.

It was asked if another Data Quality Objectives (DQO) meeting is required because additional data will be collected. Monica Sanchez (DOE/NV) believes that another meeting is not necessary because the data types will be the same as were collected before. Neither the objectives or the

parameters have changed. The DOE/NV just needs more information to determine the compliance boundary location and conditions.

The DOE/NV will send the NDEP a letter by February 27, 1998, identifying when the new CAU 447, Project Shoal Area Subsurface CAIP will be available. The letter will also state that an extension of the CADD deadline is required due to additional investigation activities.

**** All agreed that if additional data is needed to complete a CAU decision document, then the plan to gather the additional data will be written as an addendum to the existing CAIP. If a complete revision to the technical approach is required, a new CAIP will be written.**

CAU 102 - Western Pahute Mesa

Bangerter said that at the January 12, 1998, issues meeting, the DOE/NV committed to submitting the UGTA integrated approach document to the NDEP by the end of January. This task has been completed and the DOE/NV would like to schedule a meeting to discuss the document and the extension of the CAU 102 CAIP deadline. Liebendorfer noted the NDEP committed to responding to the document within two weeks of its receipt. At this time they have not had a chance to thoroughly review it or to internally discuss the issues.

The NDEP will provide the DOE/NV with a response to the Integrated Approach Document by February 27, 1998.

DSWA Proposed Modifications

Hall asked Dave Bedsun (DSWA) if there were any DSWA-proposed modifications he wished to discuss. Bedsun said he understands why Liebendorfer is frustrated with all the CAS movements within CAUs, but he asked the NDEP to be patient while the problems are resolved. It is not always possible to have detailed knowledge of a site before a CAU is promoted to Appendix III, especially with the Housekeeping Sites. Most of problems are associated with Housekeeping Sites, which really should not have been in the FFACO. The problems cannot be determined until the site is actually visited. Liebendorfer responded he does not have a problem with moving CASs among Appendix II CAUs, but once a CAU is in Appendix III, its CAS content should be relatively stable. Appenzeller-Wing added that until recently, the DOE/NV did not begin looking at the CASs until the CAU was already in Appendix III. Obviously, this approach is not working well and the DOE/NV is now field checking the CASs before a CAU is proposed for promotion to Appendix III. There may be some CAUs that were promoted before this policy began and they may require CAS modifications, but this should eliminate most of the problems. Garrepy agreed that most of these problems should go away with field checking, and he suggested the NDEP be invited on the field visits.

Liebendorfer noted everyone spends an inordinate amount of time tracking these CAS manipulations. Bedsun responded the modifications are not done frivolously. They are proposed

when a CAU cannot be closed because of specific site conditions. He added that many site variables cannot be anticipated until the investigation has begun. Liebendorfer said he has no problem moving CASs based on investigation results.

Barrow again noted most of the CAS changes are occurring in Housekeeping CAUs. Because the goal is to visit the site only once, and perform any necessary cleanup and documentation all at one time, there is no initial visit to determine if the CAS belongs in the CAU. The DOE/NV is reevaluating the housekeeping process to see if an improvement can be made in the overall approach. The DOE/NV would like commitments from both the NDEP and the DSWA to reevaluate the Housekeeping Work Plan. Liebendorfer agreed if a CAS is miscategorized as a housekeeping site then certainly this is justification for moving it to another CAU. Bedsun is concerned that a blanket statement from the NDEP saying that CASs should not be moved may be inappropriate. There may be many good reasons for reorganizing CAUs, and it should not be prohibited.

Liebendorfer added that the NDEP is developing a protocol for handling CASs requiring no further action. If the CAS is in Appendix II, then it can be deleted from the FFACO by listing it in CAU 5000 (maintained as a place holder). If the CAS is in Appendix III, then it should stay with the CAU and the closure report (or some other document) must contain the justification for why the CAS requires no further action.

Update on status of 2006 Plan and FY 2000 Budget

Bobbie McClure (DOE/NV) summarized the status of the DOE/NV's 2006 Plan. A national plan should be released by DOE Headquarters (DOE/HQ) in March 1998, which will probably be based on an unescalated budget. The DOE/NV submitted a revised version of the local plan in February, but once the national plan has been released, then the site-specific plan may have to be revised again. The site-specific plan should be available to the public in late March. The DOE/NV is assuming that the Project Baseline Summaries (PBSs), or something very similar, will be the budget submittal tool, but a final determination has not yet been made. At this point, DOE/NV Environmental Management is planning on submitting a budget request at the \$90 million scenario, but is realistically expecting no more than \$74 million. The request for the additional \$20 million is being made based on the State Clearing House's formal request that the DOE/NV ask for additional UGTA money annually. The DOE/NV is not expecting to be granted the additional funds because very rarely does an office receive more funding than it received the previous year. McClure noted that DOE Secretary Frederico Pena is actively involved in the funding profile decisions. McClure is not expecting to receive guidance for the budget requests until mid to late March.

Liebendorfer said the State of Nevada reached an agreement with Al Alm and Thomas Grumbly (DOE/HQ) that deadlines could be set based on the high budget scenario. The FFACO states the DOE/NV will request the funds required to be in compliance with the agreement. In the FY 1999 budget, DOE/HQ told DOE/NV that Congress would not be asked for the additional funds, which makes DOE/NV noncompliant with the agreement. Liebendorfer said that this process does not

give Congress the chance to grant the funding. The agreement with Alm and Grumbly was that every site would calculate how much funding it required to be compliant and then ask for that much. Liebendorfer is not amenable to changing deadlines because of funding shortfalls when the money was never requested.

Michael Giblin (DOE/NV) responded that, in fact, during the FY99 budget process, the DOE/HQ asked the Office of Management and Budget (OMB) for the additional \$20 million and identified that DOE/NV would be noncompliant if it was not received. It was the OMB that did not ask Congress for the additional funding. Liebendorfer responded the state's position is that the DOE is part of the administration and so is OMB. DOE/NV deadlines will not be extended because the OMB did not ask Congress for additional funding.

Liebendorfer said the next issue to be addressed is the timeline for establishing FY+2 deadlines in the FFACO. Giblin noted that the DOE/NV came to the quarterly meeting with proposed milestones based on a \$59 million budget scenario, but the CAU priorities will not be discussed with the Community Advisory Board (CAB) until March 20, 1998. This will be after the NDEP's March 15, 1998 deadline to establish FY+2 deadlines. Liebendorfer said the DOE/NV needs to make a formal request to modify the schedule as outlined in the FFACO. Hall asked if changing the language would affect the DSWA budget cycles. Bedsun replied it would not.

Liebendorfer added the milestone process in the Waste Management Division's Federal Facility Compliance Act - Compliance Order (FFCAct) also needs to be examined because it may need changing. He noted with the FFCAct, new milestones are proposed with the annual update of the Site Treatment Plan, but the FY+2 proposal process is not that different from the FFACO.

The DOE/NV will develop a new process for establishing the DOE/NV FY+2 deadlines that is synchronized with the current budget process. To be effective, the new process will require an official modification to paragraph XII.4.b of the FFACO. The letter containing the modification will be sent to Lou Dodgion (NDEP) from Jerry Johnson (DOE/NV), and requires DSWA concurrence.

Proposed Fiscal Year (FY) 99 and 2000 DOE/NV milestones and due dates

Hall said the agenda packet contains summary tables of the proposed DOE/NV FY99 and FY 2000 milestones and due dates. This information is also listed in the proposed modification tables, Attachment IV. Bedsun had no comments on the DSWA proposed milestones.

Giblin noted the milestones contained in the summary list will be used as a starting point in the discussions with the CAB on March 20, 1998. Liebendorfer said unless he hears otherwise, the NDEP will establish deadlines for these milestones by March 15, the deadline specified in the FFACO. He suggested the DOE/NV request a one-time extension to the March 15 deadline. This would allow more time to develop the new schedule for setting FY+2 milestones.

The DOE/NV will request, as soon as possible, a one-time extension of the deadline

listed in paragraph XII.4.b of the FFACO which requires the NDEP to establish deadlines for FY+2 milestones by March 15, 1998.

Giblin said the NDEP has noted, in informal conversations, that NDEP staff changes may affect the 30-day time period for supplying document comments. Giblin noted the FFACO allows milestones to have due dates, which are enforceable through RCRA penalties, or deadlines, which are enforceable through stipulated penalties. A precedent was set by the NDEP when the first set of milestones was submitted to establish deadlines for every milestone. Legally, this is not required. Giblin suggested it may be worthwhile to step back and consider a new direction at this time. If deadlines are not set for some of the milestones in the corrective action cycle, it would ease the NDEP work load considerably. Setting two deadlines per CAU would still ensure the work proceeds on schedule. Having fewer deadlines would also reduce the pressure on the DOE/NV because of the large number of deadlines associated with this agreement. Liebendorfer said if the DOE/NV proceeds with work without NDEP approval then the work is done at risk. Giblin expects the NDEP to approve all documents even if there was no associated deadline, but drafts would not have to be submitted, nor would the documents need such scrutiny. Giblin asked the NDEP to consider a this streamlined approach.

McClure noted that extending the review cycle dramatically affects the DOE/NV's work schedules. The schedules are progressive and depend on a 45 day review period. The delays have a domino affect on the DOE/NV's ability to meet outyear commitments. Liebendorfer said there have been some delays in the reviews but they were always due to the seriousness of the comments.

DOE/NV Issues/Clarifications

Status of CAP, Closure Report, SAFER and CADD/Closure Report Document Outlines

This issue was discussed earlier as one of the ongoing action items.

Clarification of Points of Contact

Hall asked that because of all the staff changes, everyone make an effort to ensure the correct distribution is used for all correspondence.

Hall asked if the NDEP will be officially changing corrective action coordinators. Liebendorfer responded that Karen Beckley (NDEP) is still responsible for all Industrial Sites and Soils Sites on Tonopah Test Range, the Nellis Air Force Range Complex and the Nevada Offsites. Case and Goewert are responsible for the subsurface sites at the Offsites. The NDEP will issue a notification letter if responsibilities change.

Demonstration of digital version of FFACO

Hall said a new version of the FFACO Appendices I-V has been released in both digital and paper formats. She suggested staff in Carson City have the digital version installed on the NDEP LAN so it is available to both the Carson City and the Las Vegas offices. A similar installation was

conducted with the first digital version of the FFACO. Some users are experiencing problems searching the Portable Document Format files because of using old versions of Adobe Acrobat. Adobe 3.01 must be installed to use the search capabilities. This version of Adobe Acrobat is available on the distributed CD ROM. Call Marlon Stewart, DOE/NV at (702) 295-0525 with questions.

Stewart gave a short presentation on the new features of the digital FFACO, including linked CAS maps and a better format for viewing on computer screens.

NDEP Issues/Clarifications

Informational UGTA Update

This was discussed earlier with the CAU-specific issues.

Process for incorporation of newly-discovered (by NDEP) CASs into Appendix II in light of the DOE letter dated 12/10/97 discussing approaches to historic contamination in light of Donald Garrepy's letter identifying new CASs

Liebendorfer noted Garrepy has identified sites which may need to be added to the FFACO. He said the Environmental Restoration Division (ERD) will have to decide which sites they will manage and which will be delegated to other organizations. Recently, Harry van Drielen (NDEP) authored a letter saying all spills occurring before the signing of the FFACO in May 1996 are historic in nature and thus belong in the FFACO. The DOE/NV said it takes responsibility for determining whether a site is historic or whether it is associated with an operational activity. Liebendorfer said the problem with this approach is that operational releases need to be reported immediately to Emergency Management or the NDEP has to issue a Notice of Violation. The corrective action must also be performed immediately. If ERD does not take ownership of a site, then some other process must be developed for performing the corrective actions. It is not acceptable to NDEP for DOE/NV to say the site will be cleaned up later due to lack of funding.

Barrow said a process for handling the potential new sites will be discussed in the meeting scheduled for February 12, 1998, between the DOE/NV and the NDEP. The goal of the new process is to minimize paper work and to make the evaluation of the potential sites as efficient as possible. Liebendorfer said litter control and sanitary waste cleanup is not an issue with NDEP. That type of waste is removed under the zonal cleanup program.

**** All agreed that, under the the FFACO, NDEP is not concerned with new sites having no hazardous waste components and consisting only of litter, construction debris, and sanitary waste. These sites will be addressed under the DOE/NV's zonal cleanup program.**

DQO Process Update

Liebendorfer said van Drielen, in cooperation with DOE/NV personnel, is developing a new process for addressing Data Quality Objectives.

The NDEP will distribute a letter outlining a new DQO process by February 13, 1998.

Legal/Regulatory discussion of Compliance Orders, etc.

This issue was not discussed at this meeting.

The way in which ER-defined mixed waste analysis/protocols relate to/are communicated to Waste Management prior to the generation of Mixed Waste and its clean-up

Liebendorfer said in the DOE/NV Waste Management Division (WMD) meeting held 2 weeks ago there was discussion about the types of waste generated by ERD corrective action activities. Liebendorfer believes the types of generated waste should be discussed in the CAU Corrective Action Decision Documents and may need to be considered in the prioritization model. It appeared to Liebendorfer there was not adequate communication between ERD and WMD when ERD mixed waste was stored on the TRU Pad. WMD was given only a limited amount of knowledge regarding the waste so further characterization is needed before disposition. Appenzeller-Wing noted the DOE/NV has directed their contractors to coordinate their efforts so that when a characterization plan is developed, there is sufficient analysis planned to not only characterize the site, but to also characterize the waste for disposal. She believes the WMD is absolutely in the knowledge loop on any ERD waste activities, but she will investigate the situation.

Prioritization of Outyear activities

This issue was discussed earlier in the meeting.

DSWA Issues/Clarifications

Bedsun asked if the NDEP can provide a list of state-certified laboratories for performing radiological analysis. As far as the DSWA knows, the only radiologically certified lab was recently closed. Liebendorfer agreed there is currently no certified labs, so it is incumbent on the DSWA (and the DOE/NV) to provide and justify a reasonable alternative. Ken Hoar (DOE/NV) said for tritium analyses, the DOE/NV found a laboratory with a good track record and contracted with them. Bedsun noted that the DSWA has had problems in the past with using laboratories that have a good history and then realized analytical results were not satisfactory, after the fact. He said inconsistencies in laboratory results almost forces sending split samples to different laboratories, which greatly increases cleanup costs. Jon Taylor (NDEP) noted the Environmental Protection Agency maintains a list of certified laboratories. Liebendorfer said the NDEP needs a proposal from the DSWA justifying the use of any selected analytical laboratory.

Bedsun added the DSWA never received determinations on the proposed CAS/CAU made during the November 1997 quarterly meeting. Some activities cannot occur until these determinations are made.

The NDEP will provide the DSWA with a response to the CAS/CAU modifications that were proposed at the November 1997 quarterly FFACO meeting prior to the May 13,

1998, quarterly meeting.

Other Issues

There were no other issues raised for discussion.

Meeting Adjourned at 12:00 pm

(775) 687-4670

TDD 687-4675

Administration
Facsimile 687-5856

Water Pollution Control
Facsimile 687-4884

Mining Regulation and
Reclamation
Facsimile 687-5259



Waste Management
Corrective Actions
Federal Facilities

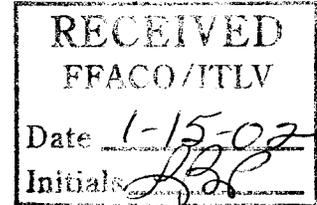
Air Quality
Water Quality Planning

Facsimile 687-6396

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION

333 W. Nye Lane, Room 138
Carson City, Nevada 89706

January 3, 2002



Ms. Runore C. Wycoff
Director, Environmental Restoration Division
National Nuclear Security Administration
Nevada Operations Office
P. O. Box 98518
Las Vegas, NV 89193-8518

Re: Proposed Modifications to Create New Corrective Action Sites (CASs)
Corrective Action Unit (CAU) 516, Sumps, Underground Discharge Points, Decon Areas
Federal Facility Agreement and Consent Order

Dear Ms. Wycoff:

The Nevada Division of Environmental Protection (NDEP) is in receipt of five proposed modifications to create new CASs in CAU 516. As per previous agreement, the National Nuclear Security Administration Nevada Operations Office (NNSA/NV) may create additional CASs in Appendix II of the FFACO as new sites are discovered. The NNSA/NV does not need NDEP concurrence to create these CASs. Additionally, since CAU 516 is currently in Appendix II of the FFACO, the NNSA/NV does not need NDEP concurrence to move the newly created CASs into CAU 516. These modifications/movements need only be reported to the NDEP at the quarterly FFACO meetings. Additionally, the NDEP concurs with changing the description of CAU 516 from "Sumps, Underground Discharge Points, and Decontamination Areas" to "Septic Systems and Discharge Points."

ACTION	_____
INFO	_____ <i>ELD ESHD WND AMEM</i>
MGR	_____
AMBFS	_____
AMTS	_____
AMNS	_____
AMEM	_____
AMPIA	_____

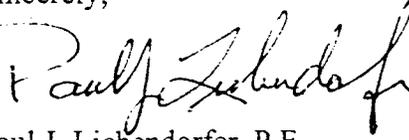
Ms. Wycoff, Director

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January 3, 2002

Questions or comments may be directed to Matthew A. DeBurle, of my staff, at (775) 687-4670, extension 3031.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul J. Liebendorfer". The signature is written in a cursive style with a large initial "P".

Paul J. Liebendorfer, P.E.

Chief

Bureau of Federal Facilities

PJL/KKB/MAD/cb

cc: Supervisor, NDEP/LV
K. Hoar, DOE/ESHD
E. Shanholtz, Chief, DTRA
P. Hall, NNSA/ERD
F. Di Sanza, NNSA/WMD
J. Appenzeller-Wing, NNSA/ERD
W. Griffin, BN/DTRA