LMS/CNT/S03736

Fluid Management Plan
Central Nevada Test Area
Corrective Action Unit 443

January 2009

U.S. DEPARTMENT OF ENERGY | Office of Legacy Management

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Contents

Figures

Appendix

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Acronyms and Abbreviations

CAU	Corrective Action Unit
CNTA	Central Nevada Test Area
DOE	U.S. Department of Energy
FFACO	Federal Facility Agreement and Consent Order
FMP	Fluid Management Plan
LM	DOE Office of Legacy Management
NDEP	Nevada Division of Environmental Protection
pCi/L	picocuries per liter
PPE	personal protective equipment

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Definitions

Containment—A structure made of earthen materials or fabricated from metal or other suitable material that is designed to contain fluids generated from site activities. Typical containment structures identified in this plan are infiltration basins, infiltration areas, and tanks.

Discharge—The release of fluids for final disposal. Fluids discharged for disposal must meet applicable fluid management criteria. Discharge also describes the physical process whereby fluids are released from the "flow line or discharge line" during drilling operations. Drilling discharges are typically routed to appropriate containment structures (e.g., infiltration basin) prior to final disposal.

Disposal—The act of discharging fluids with no intention of further management. On-site disposal options include discharge to an infiltration basin/area or the ground surface.

Ground Surface—The natural, relatively undisturbed condition of an area of soil or bedrock. Dry washes, intermittent stream beds, or other natural depressions identified by the Nevada Division of Environmental Protection as waters of the state are not included in this definition.

Infiltration Basin—An engineered, constructed, earthen structure designed for the storage and infiltration of well fluids meeting applicable fluid management criteria.

Infiltration Area—An area of the ground surface with defined boundaries that has been designated for the purpose of discharge and infiltration of well fluids meeting applicable fluid management criteria.

Transfer—The physical transfer of well-derived fluids from one appropriate fluid containment structure to another containment structure. Fluids may be conveyed using mechanical means or gravity through appropriate piping or hoses.

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1.0 Introduction

The U.S. Department of Energy (DOE), National Nuclear Security Administration Nevada Site Office initiated the Offsites Project to characterize the risk posed to human health and the environment as a result of underground nuclear testing at sites in Alaska, Colorado, Mississippi, Nevada, and New Mexico. Responsibility for environmental restoration of the sites that constitute the Offsites Project was transferred from the DOE Office of Environmental Management to the DOE Office of Legacy Management (LM) on October 1, 2006. The scope of this Fluid Management Plan (FMP) is to support subsurface investigations at the Central Nevada Test Area (CNTA) Corrective Action Unit (CAU) 443, in accordance with the Federal Facility Agreement and Consent Order (FFACO) (1996). The subsurface CAU 443 is associated with the underground nuclear testing conducted at UC-1 and is located approximately 30 miles north of Warm Springs in Nye County, Nevada (Figure 1–1).

1.1 Scope

The FMP provides guidance for the management of fluids and associated materials generated during subsurface investigation activities and provides the standards that govern their final disposition. Although the Nevada Division of Environmental Protection (NDEP), Bureau of Federal Facilities is not a signatory to this FMP, it is involved in the negotiation of the contents of this plan and approves the conditions contained within it.

The major elements of this FMP include (1) establishment of a well-site operations strategy, (2) site design/layout, (3) monitoring of contamination indicators (monitoring program), (4) fluid management decision criteria and fluid disposition, and (5) other waste management activities and reporting requirements.

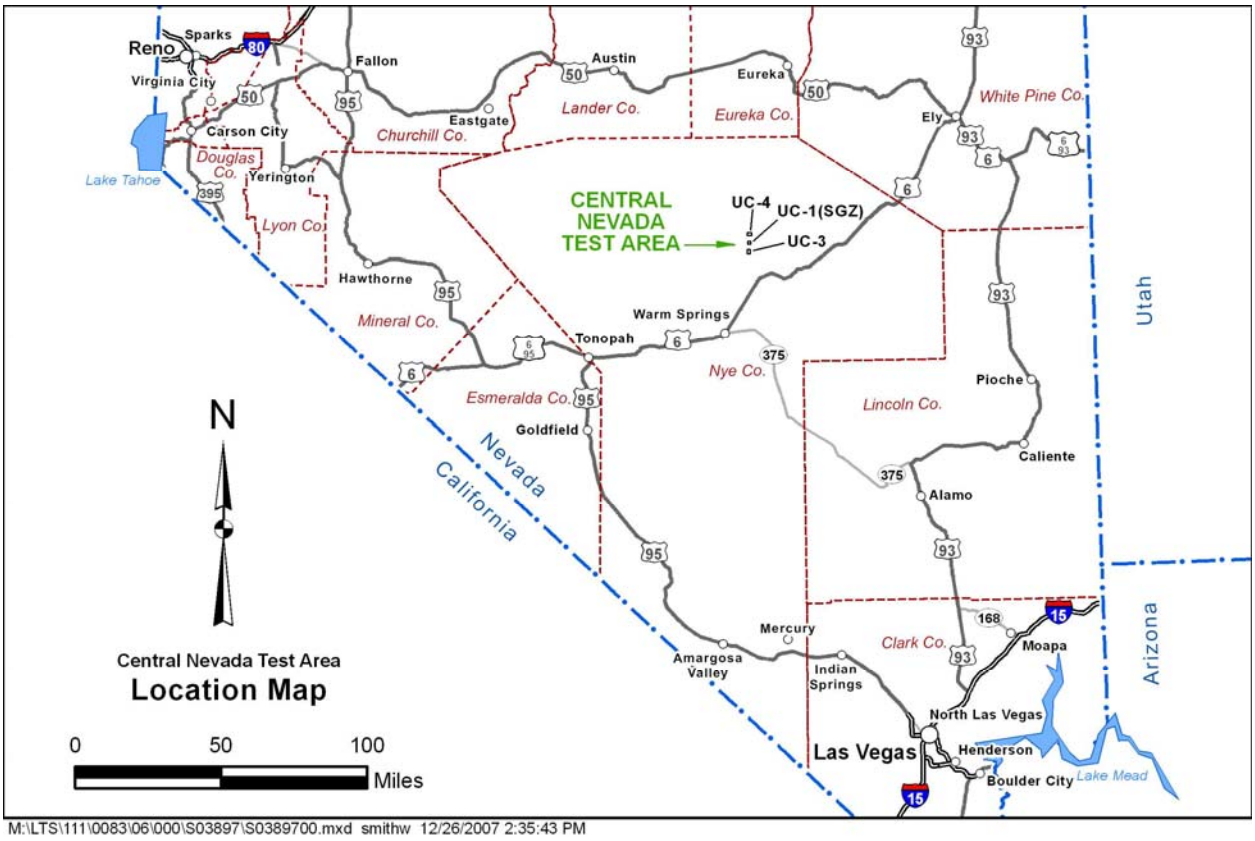

Figure 1–1. CNTA Location Map

2.0 Investigation Activities

This FMP serves as the governing document for all fluid-producing activities conducted in support of CNTA Offsites Project investigations. For the purpose of this FMP, investigation activities are considered either (1) drilling activities that advance the borehole or (2) other well-site activities.

2.1 Drilling Activities

Drilling activities that advance the borehole involve only those that cut or disturb new subsurface formations. Presumably, groundwater and rock cuttings generated as part of these operations are from geologic materials that have not been specifically characterized with regard to their chemical and radiological nature. Occasionally, well recompletion may involve cutting into new subsurface formations. Rock cuttings generated during the drilling activities will be managed in the same manner as the drilling fluids, and their disposal will be based on field screening results obtained from the analysis of drilling fluids. Any change in the strategy for managing drilling fluids would similarly affect the management of associated solid materials.

2.2 Other Well-Site Activities

Other well-site activities include activities that encounter subsurface formations that were previously drilled through or contacted in some way. Examples of other well-site activities that typically occur without advancement of the borehole include cleaning and conditioning the borehole, well completion operations such as casing and stemming of annular materials, well development, aquifer testing, and periodic sampling events. Well completion designs and associated well construction activities will vary depending on well-specific objectives. The activities may include setting casing; installing well/piezometer tubing to specified depths; and isolating productive zones with gravel, cement, packers, and sliding sleeves. Other well-site activities may be conducted within a discrete time period (e.g., a one-day well sampling event) or over a span of time (e.g., a series of well-purging and aquifer-testing activities that may span months). Many of the wells drilled or recompleted may support long-term monitoring and may be sampled periodically. Typically, well sampling involves purging the well for a period of time, during which fluids are produced. The volume of fluids produced will vary from well to well and may range from several gallons to thousands of gallons, depending on the activity being performed.

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3.0 Well-Site Operation Strategy

3.1 General Fluid Management Planning Approach

Figure 3–1 outlines the basic process to be followed in preparing for any fluid-producing activity at the CNTA. The first step in the process is to establish the well locations. The well-site operation strategy is then determined. The well-site operation strategy is site-specific and will vary on the basis of available historical knowledge of the site and on the scientific and technical objectives of the investigation. The strategy is designed with fluid production and the potential for encountering contamination in mind. The well-site operation strategy dictates the type of containment required for the operation and the initial monitoring requirements.

Two basic well-site operation strategies (far-field and near-field) are considered as part of the evaluation for determining the well-site operation strategy (Figure 3–1). The far-field designation refers to a relatively safe distance from the detonation site and has less potential to encounter radioactive contamination. The near-field designation refers to closeness to the detonation site and the increased potential for encountering radioactive contamination in the well. A comprehensive assessment of historical information (or "process knowledge") that may be relevant to the site operation strategy is typically conducted to determine the appropriate strategy. Information to be used in support of this decision may include, but is not limited to, the following:

- Proximity of the proposed wells to the location of the underground nuclear detonation.
- Hydrogeologic setting of the proposed wells and surrounding areas.
- Potential for chemical or radiological contamination in the groundwater due to the underground test.
- Historical information provided through site documents or interviews.
- Analytical and site monitoring data associated with the well or surrounding area wells.
- Groundwater flow and transport modeling results.
- Other applicable process/historical knowledge.

Once the initial well-site operation strategy is determined and the nature of initial fluid containment (e.g., lined sumps, infiltration basins/areas) to be located at the site is identified, LM will notify NDEP by letter, as indicated in Figure 3–1. Notification will include the well-site operation strategy and supporting rationale as well as specific information about the configuration of the fluid containment to be located at the sites. This written notification will be submitted for approval to NDEP at the address noted in Section 6.0.

The initial operation strategy for a particular well site will be applied to all subsequent well-site activities, such as aquifer tests or routine sampling, unless site process knowledge or other site factors change. For example, if a well was drilled under a far-field strategy, and site conditions continue to support this determination, subsequent investigation activities will continue under a far-field strategy unless an alternate strategy can be justified. If LM plans to operate a particular investigation activity using a different strategy than initially determined for the well site, LM shall notify NDEP. Such notification may be provided via telephone, fax, or e-mail and will be followed by a formal letter describing any approved operational changes.

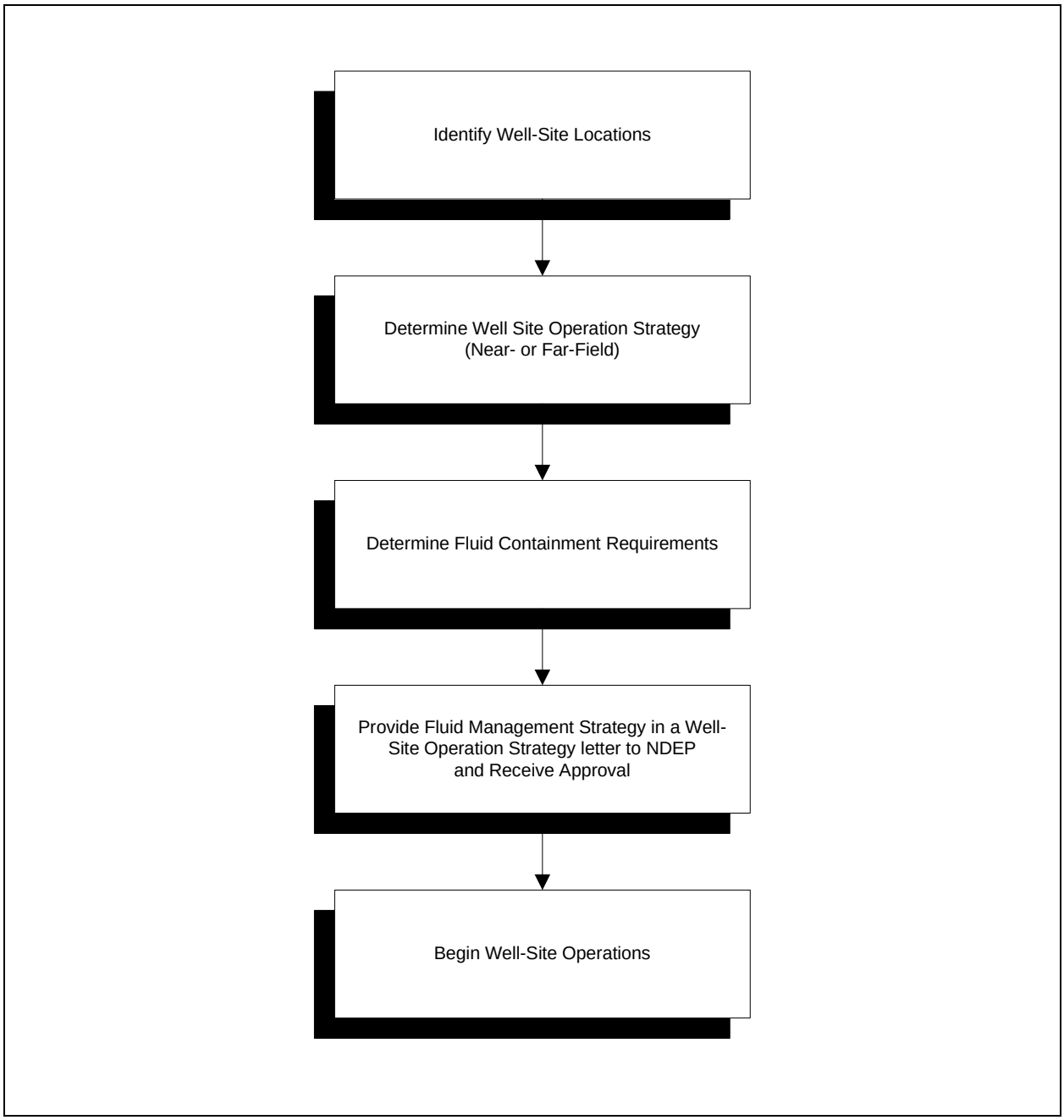

Figure 3–1. Fluid Management Planning Process

3.2 Site-Specific Fluid Management Strategy for CNTA

The objective of drilling activities at CNTA for the foreseeable future is to augment the long-term monitoring network with wells designed to provide early detection of contaminant migration. Figure 3–2 shows existing monitoring wells at the CNTA along with other selected site features.

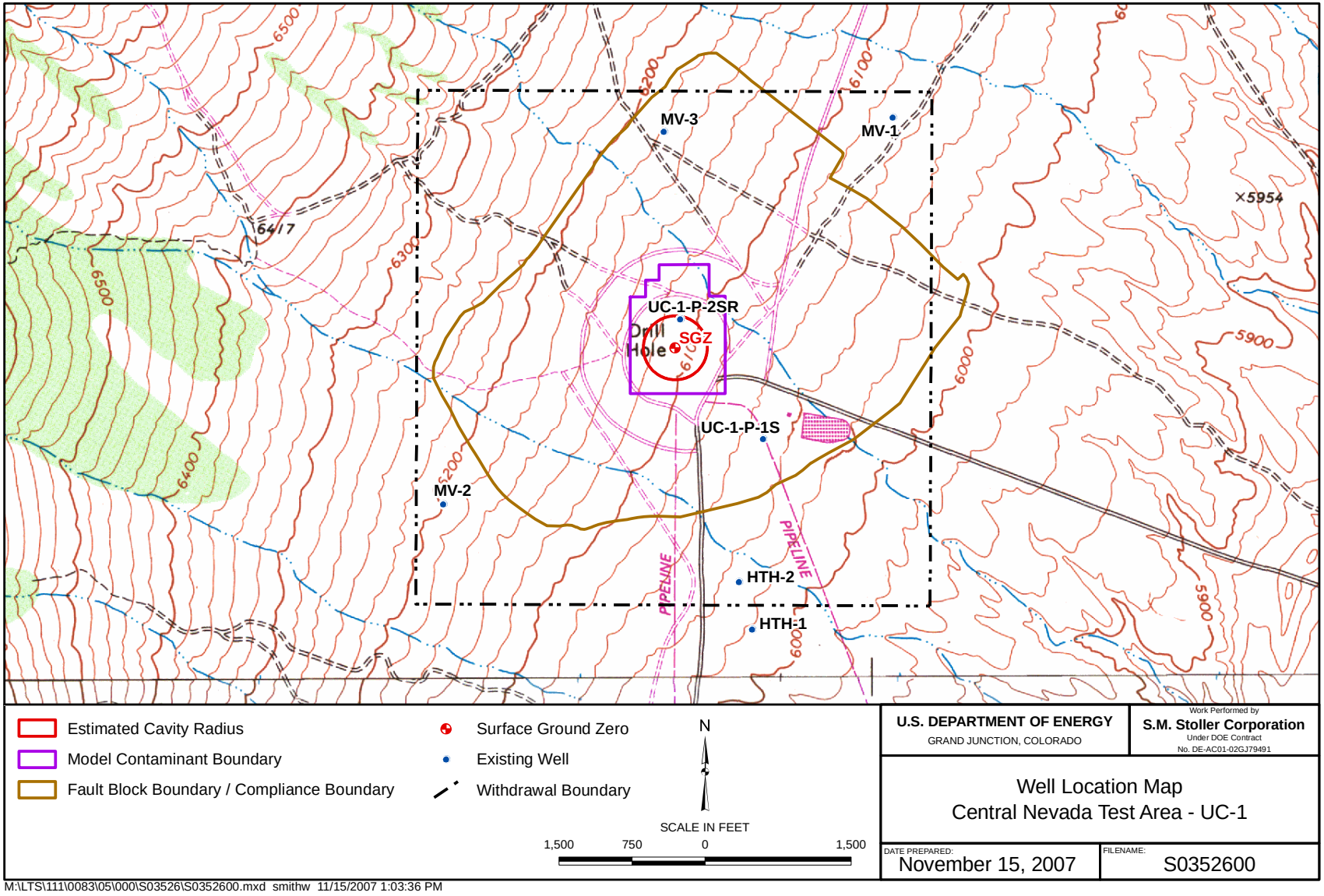

Figure 3–2. Location Map of Monitoring Wells and Boundaries at the CNTA

Appendix A contains correspondence between NDEP and LM regarding a draft of this FMP that was submitted to NDEP for their review in March 2008. NDEP's main comment on the draft plan was that discharge of pollutants that could be carried into waters of the state is prohibited without a permit. LM responded that all future drilling at CNTA is expected to take place under a far-field strategy and that it is highly unlikely that contaminants will be encountered. LM therefore proposed to remove the discussion of the near-field scenario from the revised FMP and to add justification for the use of a far-field strategy. NDEP agreed with this approach. This section provides information to support the use of a far-field strategy for future drilling activities at the CNTA.

As shown in Figure 3–1, the first consideration in selecting a well site operation strategy is the locations of the proposed wells (specifically, their proximity to the detonation zone). New wells to be completed at the CNTA will be located at a significant distance from the detonation zone and outside the modeled contaminant boundary. Though the groundwater model for the site could not be validated, the contaminant boundary derived from the model is based on assumptions that likely overestimate the degree of potential contaminant movement. In addition, new wells at the site will be completed in the alluvium, above the level of the detonation. The wells will be installed in the vicinity of existing alluvial well UC1-P-1S. Results of samples analyzed for test-related radionuclides from that well have remained below detection limits.

Therefore, based on well location, a far-field drilling strategy is anticipated to be appropriate for augmenting the existing monitoring network and is assumed to be the default strategy. In addition to location, a number of other factors justify use of the far-field strategy. These include the following:

- Monitoring of water levels indicates that ground water in the vicinity of the detonation cavity and chimney area are continuing to recover from the detonation (i.e., water movement is downward toward the cavity/chimney area).
- Tritium levels in all wells completed in the alluvium and densely welded tuff have been below detection (detection limit has ranged between 313 and 328 picocuries per liter [pCi/L]).
- Observations regarding temperature and contaminant distribution indicate that permeabilities of the densely welded tuff/volcanic section are extremely low and that groundwater and contaminant movement are extremely slow.
- Data from UC1-P-2SR indicate that test-related contaminants decrease significantly with distance above the test cavity.

Based on the above, fluids generated through drilling and other well-site activities will be contained in accordance with the far-field strategy as specified in this FMP and as negotiated with the NDEP. Section 4.0 details far-field fluid management requirements.

4.0 Far-Field Fluid Management Strategy

As discussed in Section 3.2, all drilling activities conducted under this FMP are expected to be carried out under a far-field strategy. No long-term monitoring wells constructed to date outside the near field area have had concentrations of tritium even remotely approaching the notification threshold of 10,000 pCi/L. In the far-field scenario, tritium is used as the contaminant indicator and is monitored in accordance with the following sections.

4.1 Well-Drilling Activities

Section 2.1 describes well drilling activities covered by this FMP.

4.1.1 Fluid Containment

The type of fluid containment required will be based on available process knowledge and probable quantity of water generation and will be identified in the Well-Site Operation Strategy letter to be approved by NDEP (see Section 3.1). During past drilling events, a portable mud tank was used to temporarily contain fluids prior to discharge into an infiltration basin. An infiltration basin is a constructed unlined basin or pit within which fluids and rock cuttings may be placed. Field screening for tritium will be conducted at the portable mud tank to verify the absence of tritium contamination before the fluids are discharged to the infiltration basin. A similar system is planned for future drilling activities at CNTA, though specific details will be provided in the Well-Site Operation Strategy letter.

In a typical far-field scenario, two infiltration basins may be constructed to ensure adequate capacity. An equalizing pipe may be constructed between the basins to allow for the transfer of fluids from one basin to the other.
Figure 4–1 provides an example of a typical far-field fluid containment configuration.

4.1.2 Monitoring Program

The monitoring program supports the daily management of fluids produced during an investigation activity. This program is based on the use of tritium as a contamination indicator to make decisions regarding fluid containment and the progression of investigation operations. Tritium was chosen as the indicator for radioactive contamination because it is a radioactive isotope of hydrogen that is readily transported in groundwater and provides the earliest detection of groundwater contamination resulting from underground testing.

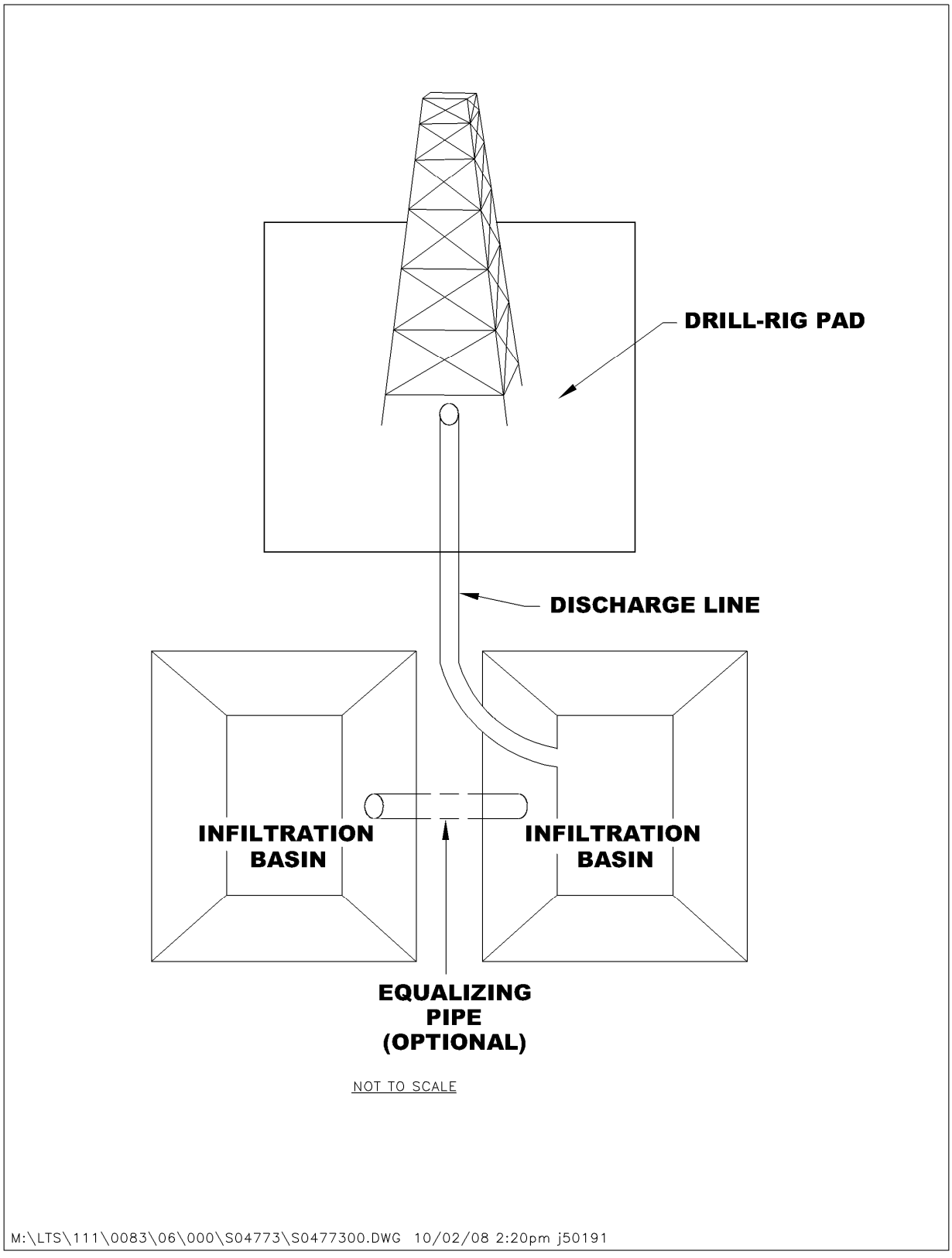

Figure 4–1. Far-Field Site Layout

Figure 4–2 outlines the decision points in the monitoring program for far-field well sites. LM and NDEP shall be notified immediately if monitored tritium levels meet or exceed the established notification level of 10,000 pCi/L. Notification of subsequent monitoring results to LM and NDEP shall follow established protocol.

4.1.2.1 Tritium Monitoring

Tritium samples shall be collected during the advancement of the borehole from the fluid discharge line at approximately 30-foot intervals or every 2 hours, whichever occurs first. Note that samples will not be collected at a frequency greater than 1 per hour based on time required to perform the field monitoring. Monitoring samples will be analyzed daily at a minimum. The notification level for tritium is 10,000 pCi/L (see Section 4.1.2.2); the action level is 20,000 pCi/L (Section 4.3). Reduction in the frequency or elimination of tritium monitoring shall be based on process knowledge and approval from LM and NDEP. Tritium monitoring for other well-site activities is discussed in Section 4.2.2.

4.1.2.2 Monitoring Notification

On the basis of information from previous wells drilled at the CNTA, chemical or radiological contamination under a far-field strategy is not expected. LM and NDEP will be notified via telephone, fax, or e-mail if tritium monitoring levels reach or exceed 10,000 pCi/L. This is a courtesy notification only and will not result in the suspension of operations but may necessitate a reevaluation of planned monitoring well completion.

LM and NDEP shall be notified immediately if monitoring of tritium meets or exceeds the established action level of 20,000 pCi/L, and drilling operations will cease. If this action level is exceeded, a reevaluation of the drilling program and fluid management protocols will be necessary as specified in Section 4.3.

4.2 Other Well-Site Activities

Section 2.2 describes well-site activities other than drilling that are covered by this FMP.

4.2.1 Fluid Containment

Fluid containment options for other well-site activities operating under the far-field strategy will be guided by field screening results during drilling. Assuming tritium levels remained below the action level of 20,000 pCi/L, fluids generated during other well-site activities will not require containment and will be discharged directly to an unlined infiltration basin/area.

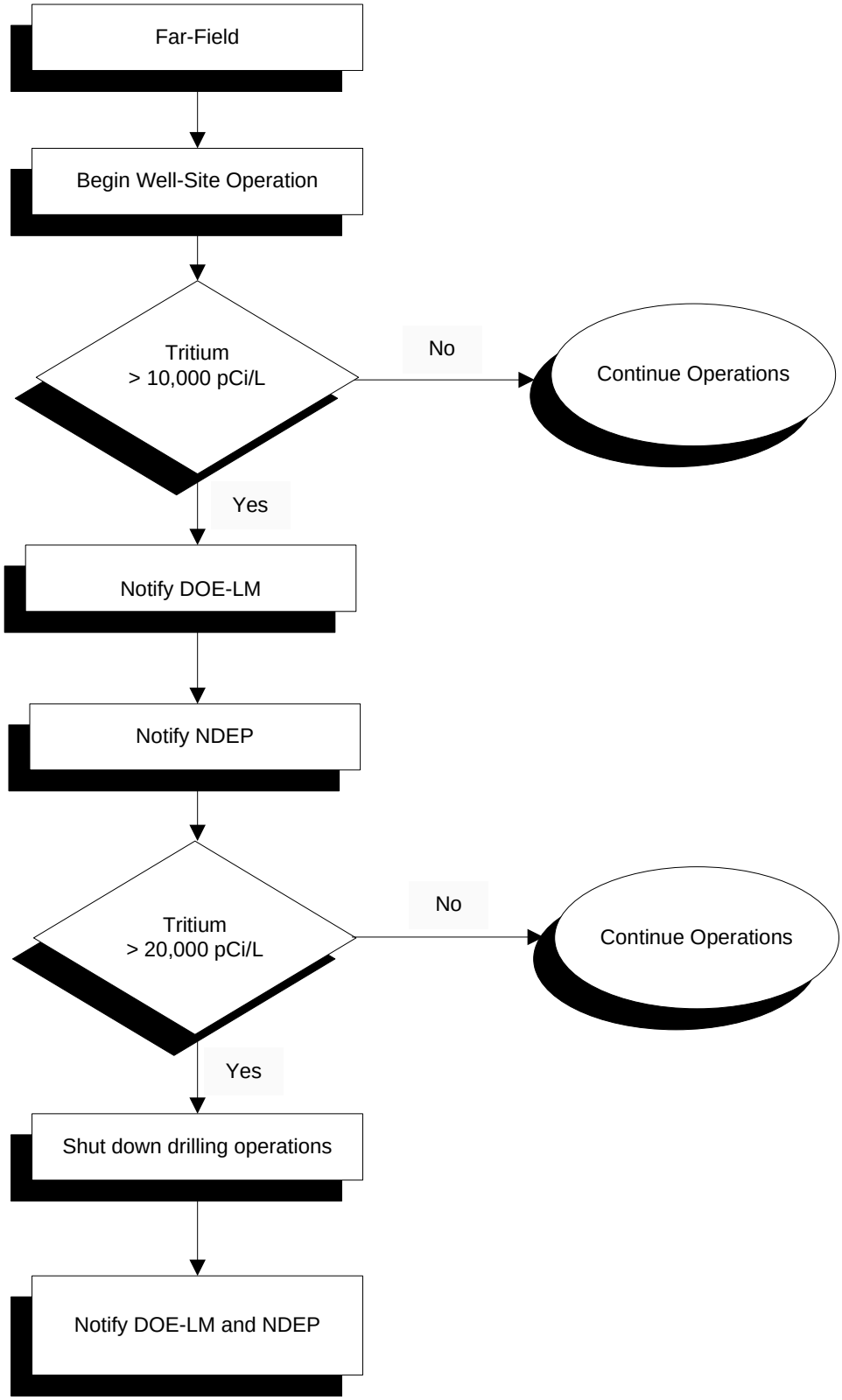

Figure 4–2. Far-Field Monitoring Decision Diagram

4.2.2 Monitoring

During other well-site activities, a tritium sample will be collected periodically at the discharge line. Monitoring samples may be analyzed on site or off site but will be analyzed weekly at a minimum. Further reduction or elimination of tritium monitoring shall be based on process knowledge and approval from LM and NDEP.

4.3 Changes to Strategy

If monitoring at a designated far-field well site detects tritium concentrations that exceed the fluid management criteria for far-field wells (i.e., concentrations greater than 20,000 pCi/L), operations shall cease immediately, and LM shall be notified. LM shall subsequently notify NDEP, and the drilling program objectives and fluid management protocols will be reevaluated. This could involve a change to a near-field strategy and development and implementation of a near-field fluid management plan.

4.4 Final Disposition of Far-Field Fluids

Under a far-field strategy, it is anticipated that fluids will be contained and managed in infiltration basins throughout the duration of drilling or other well-site activities. Fluids remaining in infiltration basins at the conclusion of site activities will be allowed to evaporate until final reclamation of the site. Minor amounts of fluids may require spreading or movement during regrading, recontouring, or other reclamation activities. This will not impose any further analytical requirements.

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5.0 Management of Miscellaneous Materials

The following miscellaneous materials may be generated during activities identified in this FMP:

- Disposable sampling equipment, including filtration devices, filters, tubing, and sample containers
- Disposable personal protective equipment (PPE)
- Decontamination fluids
- Excess samples
- Rock cuttings
- Excess drilling mud and additives
- Grout
- Cement

All disposable equipment and materials generated during far-field operations will be decontaminated with clean water and managed as solid waste. Disposable PPE and other trash will be scanned for radioactive contamination. If radioactivity is detected, the PPE and trash will be bagged in labeled radioactive bags and managed as residual low-level waste. If no radioactivity is detected, the PPE and trash will be disposed of as solid waste.

All materials generated under far-field drilling activities are assumed to be nonhazardous and will be managed as such. The decontamination fluids and excess samples can be placed in the fluid containment areas and managed with the drilling fluids or contained separately. Assuming fluid concentrations of tritium remain below 20,000 pCi/L during drilling, the rock cuttings may be placed in an infiltration basin and covered with surface soils at the completion of site activities. If the drilling mud is known to contain additives that are not environmentally friendly, the mud must be containerized and sampled for known additives prior to off-site disposal. Excess grout and cement will be managed as construction or municipal landfill debris if it has not been contaminated by site activities.

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6.0 Reporting Requirements

LM shall comply with the following reporting requirements for all investigation activities covered in this FMP, which are undertaken in support of the CNTA Project:

- ***Fluid Release Reporting***. NDEP shall be notified if fluids containing tritium in concentrations that exceed the Nevada Drinking Water Standard, as defined by this FMP, are discharged into an infiltration basin or infiltration area in volumes greater than 1 cubic meter (264 gallons). Such notification must be provided by telephone prior to the end of the next business day following verification of the incident. Telephone notification shall be followed by a written report that includes elements described in spill-reporting regulations within 10 calendar days.
- ***Well-Site Operation Strategy Letter***. LM will submit a well-site operation strategy letter to NDEP for approval before well-site activities begin.
- ***Well-Site Activity Reporting (Morning Reports)***. The synopsis of well-site activities occurring within a 24-hour period (i.e., the morning report) shall be transmitted by fax or e-mail to NDEP each day for all activities covered in this FMP. Fluid releases not reportable under "Fluid Release Reporting" above will be discussed in these morning reports.

All correspondence to NDEP shall be addressed to:

Off-Sites Supervisor
Nevada Division of Environmental Protection
2030 E. Flamingo Road, Suite 230
Las Vegas, NV 89119

All field and laboratory data generated in support of the CNTA well-construction activities will be archived and made available for inspection by NDEP upon request. The following data will be generated and retained on file. These data shall be made available to the appropriate NDEP staff for inspection upon request.

- Legible copies of daily drilling progress reports and records of daily well-site activities.
- Volumetric measurements of fluids generated during each stage of well construction.
- Records of make-up water delivery and usage during each stage of well construction.
- On-site fluid monitoring data.
- Laboratory analytical data with supplemental quality assurance/quality control and chain of custody records.
- Records of process materials (e.g., cement, grout, casing, screens, packing, drilling fluids) drilling additive usage, and equipment decontamination.

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7.0 Reference

FFACO (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.

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Appendix A

Nevada Division of Environmental Protection and DOE Correspondence

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ndep
NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
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STATE OF NEVADA
Department of Conservation & Natural Resources
DIVISION OF ENVIRONMENTAL PROTECTION

Jim Gibbons, Governor
Allen Biaggi, Director
Leo M. Drozdoff, P.E., Administrator

May 2, 2008

Mr. Mark Kautsky
Site Manager
U.S. Department of Energy
Office of Legacy Management
2597 B ¾ Road
Grand Junction, CO 81503

RE: Fluid Management Plan for Corrective Action Unit 443: CNTA, Subsurface, Nevada, March 2008 Federal Facility Agreement and Consent Order

Dear Mr. Kautsky:

The Nevada Division of Environmental Protection, Bureau of Federal Facilities (NDEP) has reviewed the U.S. Department of Energy, Office of Legacy Management's Fluid Management Plan for Corrective Action Unit 443: CNTA, Subsurface, Nevada, March 2008 (document) received on March 14, 2008.

The NDEP has the following comments concerning the document:

1. Pursuant to the Nevada Revised Statute (NRS) 445A.465, a discharge of a pollutant that could be carried into the waters of the State by any means without a permit is prohibited. As such, all fluids generated through either drilling or other well-site activities must be contained in either a lined infiltration basin/area or containment vessel until such time that the constituents of the fluid have been shown to be at or below the Nevada Drinking Water Standards (NDWS) or site-specific background levels.

2. The NDEP is to be notified within 24 hours if any Fluid Management Plan Parameter exceeds the NDWS or site-specific background level.

3. Page 7-1, Section 7.0, Reporting Requirements: All correspondence to NDEP should be addressed to:

Off-Sites Supervisor
Nevada Division of Environmental Protection
2030 E. Flamingo Road, Suite 230
Las Vegas, NV 89119

2030 E. Flamingo Road, Suite 230 • Las Vegas, Nevada 89119 • p: 702.486.2850 • f: 702.486.2863 • www.ndep.nv.gov

All text, tables and figures should be modified to reflect these changes.
If you have questions regarding this matter, please contact Chris Andres of my staff at (702) 486-2850, ext. 232.

Sincerely,

Chris Andres for

T. H. Murphy
Chief
Bureau of Federal Facilities

MM/EAJ/CDA

cc: D. C. Loewer, DTRA/CXT1, M/S 645, Mercury, NV
W. R. Griffin, SNJV/DTRA, M/S 645, Mercury, NV
FFACO Group, PSG, NNSA/NSO, Las Vegas, NV
E. F. Di Sanza, WMP, NNSA/NSO, Las Vegas, NV
J. B. Jones, ERP, NNSA/NSO, Las Vegas, NV
R. Hutton, Stoller, Grand Junction, CO

Department of Energy
Office of Legacy Management

AUG 1 2 2008

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

RESPONSES TO COMMENTS ON THE FLUID MANAGEMENT PLAN FOR CORRECTIVE ACTION UNIT 443: CNTA, SUBSURFACE, NEVADA, DATED MARCH 2008

Dear Mr. Murphy:

The U.S. Department of Energy (DOE) Office of Legacy Management is providing responses to comments received from the Nevada Division of Environmental Protection (NDEP) on the Fluid Management Plan (FMP) for Central Nevada Test Area (CNTA) Subsurface Corrective Action Unit 443, dated March 2008. The comments were received in a letter from the NDEP dated May 2, 2008. These comments were discussed in a subsequent meeting with your staff, and an agreement was reached on how to incorporate changes. This letter presents a summary of what we agreed upon. The original comments and DOE's responses are presented below and will be included in Appendix A of the final FMP.

Comment: Pursuant to the Nevada Revised Statute (NRS) 445A.465, a discharge of a pollutant that could be carried into the waters of the State by any means without a permit is prohibited. As such, all fluids generated through either drilling or other well-site activities must be contained in either a lined infiltration basin/area or containment vessel until such time that the constituents of the fluid have been shown to be at or below the Nevada Drinking Water Standards (NDWS) or site-specific background levels.

Response: It is understood that pollutants should not be discharged or carried into waters of the State without a permit. Past drilling at CNTA, together with ground water sample analytical results indicate that the new wells will be outside the area of existing contamination. The revised FMP will present a discussion of the analytical results, which demonstrate that the fluids produced during drilling activities will be below NDWS and that a far-field fluid management strategy is applicable. In support of the far-field determination, the discussion of the near-field strategy will be removed from the revised FMP.

2597 B 3/4 Road, Grand Junction, CO 81503	☐	3600 Collins Ferry Road, Morgantown, WV 26505
626 Cochrans Mill Road, P.O. Box 10940, Pittsburgh, PA 15236	☐	1000 Independence Ave., S.W., Washington, DC 20585
11025 Dover St., Suite 1000, Westminster, CO 80021	☐	10995 Hamilton-Cleves Highway, Harrison, OH 45030
955 Mound Road, Miamisburg, OH 45342	☐	232 Energy Way, N. Las Vegas, NV 89030

REPLY TO: Grand Junction Office

During past drilling events, a portable mud tank was used to temporarily contain fluids prior to discharge to the infiltration basin. A similar system is planned for future drilling activities at CNTA. Drilling fluids will be discharged to a portable mud tank and then to an unlined infiltration basin as part of the far-field fluid management strategy. Field-screening for tritium will be conducted at the portable mud tank as specified in the FMP and will verify the absence of contamination before the fluids are discharged to the infiltration basin. Field-screening results obtained during drilling will also be used to support fluid management decisions for other well-site activities, as discussed in the FMP. On the basis of past results, it is anticipated that fluids generated during other well-site activities will not require containment and will be discharged directly to an unlined infiltration basin/area.

Additionally, information specific to a given drilling project, such as the proposed drilling in the alluvium, will be included as part of the well-site operation strategy letter, to be submitted to NDEP prior to commencement of drilling. The strategy letter will provide analytical data, a brief discussion of the ground water flow system or hydrogeologic data, and technical justification for the anticipated fluid management strategy. Operational aspects of the fluid management system (e.g., the use of a mud tank) will also be provided in the letter.

Comment: The NDEP is to be notified within 24 hours if any Fluid Management Plan Parameter exceeds the NDWS or site-specific background level.

Response: The final FMP will note the 24-hour notification period.

Comment: Page 7-1, Section 7.0, Reporting Requirements: All correspondence to NDEP should be addressed to:

Off-Site Supervisor
Nevada Division of Environmental Protection
2030 E Flamingo Road, Suite 230
Las Vegas, NV 89119

Response: The address for reporting will be modified in the final FMP.

Please direct comments and questions to me at (970) 248-6018.

Sincerely,

Mark Kautsky

Mark Kautsky
Site Manager

AUG 1 2 2008

cc via e-mail:
C. D. Andres, NDEP, Las Vegas, NV
W.R. Griffin, SNJV/DTRA, MS 645, Mercury, NV
E.F. DiSanza, WMP, NNSA/NSO, Las Vegas, NV
J.B. Jones, ERP, NNSA/NSO, Las Vegas, NV
E.A. Jacobson, NDEP, NDEP, Las Vegas, NV
Jeffrey Fraher, DTRA/CXTS, Kirtland AFB, NM
J.B. Chapman, DRI, Las Vegas, NV
NSTec Technical Information Officer, Las Vegas, NV
FFACO Group, SNJV, Las Vegas, NV
D. Crawford, Stoller
R.C. Findlay, Stoller, Grand Junction, CO
R. Hutton, Stoller
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ndep
NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
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STATE OF NEVADA

Department of Conservation & Natural Resources
DIVISION OF ENVIRONMENTAL PROTECTION

Jim Gibbons, Governor
Allen Biaggi, Director
Leo M. Drozdoff, P.E., Administrator

August 21, 2008

Mr. Mark Kautsky
Site Manager
U.S. Department of Energy
Office of Legacy Management
2597 B ¾ Road
Grand Junction, CO 81503

RE: Responses to Comments on the Fluid Management Plan for Corrective Action Unit 443: CNTA, Subsurface, Nevada, Dated March 2008
Federal Facility Agreement and Consent Order

Dear Mr. Kautsky:

The Nevada Division of Environmental Protection, Bureau of Federal Facilities (NDEP) has received the Department of Energy – Office of Legacy Management's Responses to Comment letter, dated August 12, 2008, on the Fluid Management Pan (FMP) for the Central Nevada Test Area (CNTA). The NDEP agrees with the responses presented and anticipates the arrival of the Final FMP.

If you have questions or concerns regarding this letter, please contact Chris Andres of my staff at (702) 486-2850, ext. 232.

Sincerely,

T. H. Murphy
Chief
Bureau of Federal Facilities

MM/EAJ/CDA

cc: W. R. Griffin, SNJV/DTRA, M/S 645, Mercury, NV
FFACO Group, PSG, NNSA/NSO, Las Vegas, NV
E. F. Di Sanza, WMP, NNSA/NSO, Las Vegas, NV
K. Cabble, ERP, NNSA/NSO, Las Vegas, NV
Jeffrey Fraher, DTRA/CXTS, Kirtland AFB, NM
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