

**2014 Annual Land-Use Covenant  
Inspection Report  
for DOE Areas at the Laboratory  
for Energy-Related Health  
Research/Old Campus Landfill  
Superfund Site  
University of California, Davis**

**January 2015**



U.S. DEPARTMENT OF  
**ENERGY**

Legacy  
Management

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## **REPORT DISTRIBUTION**

John Bystra  
State of California  
Department of Toxic Substances Control  
8800 Cal Center Drive  
Sacramento, CA 95826

Cliff Carpenter  
U. S. Department of Energy  
Office of Legacy Management  
99 Research Park Road  
Morgantown, WV 26505

Sue Fields  
University of California, Davis  
Environmental Health and Safety Unit  
One Shields Avenue  
Davis, CA 95616

Durin Linderholm  
California Regional Water Quality Control Board, Central Valley Region  
11020 Sun Center Drive, No. 200  
Rancho Cordova, CA 95670

David Stensby  
United States Environmental Protection Agency, Region 9  
75 Hawthorne Street, 9th Floor, SFD-8-1  
San Francisco, CA 94105

Jeff Wong  
California Department of Public Health  
Radiologic Health Branch  
850 Marina Bay Parkway  
Richmond, CA 94804-6403

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Appendix D	Photographs of Groundwater Monitoring Wells
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## Abbreviations

DOE	U.S. Department of Energy
DSS	Domestic Septic System
DTSC	Department of Toxic Substances Control
EDPs	Eastern Dog Pens
EH&S	Environmental Health and Safety
Land-Use Covenant	<i>Covenant to Restrict Use of Property, Environmental Restriction</i>
LEHR	Laboratory for Energy-Related Health Research
Ra/Sr	Radium/Strontium
SMP	Soil Management Plan
SWT	Southwest Trenches
UC Davis	University of California, Davis
EPA	U.S. Environmental Protection Agency
Weiss	Weiss Associates

## 1.0 Introduction

This report documents inspection of land-use restrictions implemented by the U.S. Department of Energy (DOE) to control exposure to residual soil contaminants at DOE areas of the Laboratory for Energy-Related Health Research/Old Campus Landfill Superfund Site (LEHR site) located at the University of California, Davis (UC Davis) (Figure 1). By controlling land use at the LEHR site, DOE meets the requirement of the Comprehensive Environmental Response, Compensation, and Liability Act to protect human health and the environment from any potential effects of contamination remaining at the DOE areas at the LEHR site. The selection of land-use controls for eight DOE areas at the LEHR site is documented in the *Record of Decision for DOE Areas at the Laboratory for Energy-Related Health Research, University of California, Davis* (DOE 2009). The land-use restrictions were recorded in the *Covenant to Restrict Use of Property, Environmental Restriction (Land-Use Covenant)* (Solano County 2014). Methods for implementation of the land-use restrictions are provided in the *Remedial Design/Remedial Action Work Plan for the Former Laboratory for Energy-Related Health Research Federal Facility, University of California, Davis* (DOE 2010).

The DOE areas subject to land-use restrictions (Figure 2) are the Radium/Strontium (Ra/Sr) Treatment Systems Area, Domestic Septic System (DSS) 3 and DSS 4 Areas, Dry Wells A–E Area, Eastern Dog Pens (EDPs), and the Southwest Trenches (SWT) Area. The DSS 2 Area is located within the Ra/Sr Treatment Systems Area. The DSS 4 Area contains a portion subject to a prohibition on residential use.

The Western Remediation Support Area and Eastern Remediation Support Area shown on Figure 2 do not contain residual contamination, but are designated for staging of equipment and supplies if contingent remedial action were implemented at the Ra/Sr Treatment Systems Area, DSS 3 and DSS 4 Areas, Dry Wells AE Area, EDPs, or SWT Area.

The Land-Use Covenant states that:

- Residential use, use for day care for children, and cultivation of crops for human consumption are prohibited at the location in the DSS 4 Area shown on Figure 2.
- Soil management must be implemented per the Soil Management Plan (SMP) (DOE 2010) at the Ra/Sr Treatment Systems Area, DSS 3 Area, DSS 4 Area, Dry Wells A–E Area, EDPs Area, and the SWT Area.
- Interference, tampering with, or destruction of the groundwater monitoring system is prohibited.
- The California Department of Toxic Substances Control (DTSC) and the U.S. Environmental Protection Agency (EPA), Region 9 shall have reasonable right-of-entry and access to the property for periodic inspections to ensure compliance with land-use restrictions.
- Access must be granted to DOE for the purpose of collecting samples and maintaining groundwater monitoring wells.
- An annual inspection verifying compliance with the Land-Use Covenant shall be conducted.

These restrictions shall be maintained until the concentrations of contaminants in the soil are at or below cleanup levels specified in the Record of Decision (DOE 2009).

## **1.1 Inspection and Reporting Requirements**

Annual inspection for compliance with the Land-Use Covenant is required. The inspection must include verification of permits obtained for any soil-disturbing activities, a review of soil-disturbing activities for compliance with the SMP (DOE 2010), review of disposal practices for waste generated during soil-disturbing activities, and suggested changes to the SMP.

The inspection report is required to contain:

- The dates, times, and names of those who conducted the inspection and reviewed the report.
- How the observations were performed that were the basis for the statements and conclusions (e.g., drive by, fly-over, walk-through).
- The annual inspection results.
- Review of compliance with the requirements of the SMP.
- Certification of compliance with the Land-Use Covenant.
- Discussion of any soil-disturbing activities and wastes generated.

If violations are noted, the annual inspection report must detail the steps taken to return to compliance. The inspection report is due to the DTSC and EPA on or before January 15.

## **1.2 Period Covered**

This report covers the period from December 10, 2013, to December 9, 2014.

## **1.3 Activities Conducted During the Reporting Period**

Inspections of groundwater monitoring wells, land survey monuments, and DOE areas subject to land-use restrictions were conducted. The UC Davis Environmental Health and Safety (EH&S) Unit conducted annual training to communicate soil management requirements to appropriate units performing or contracting work. The Land-Use Covenant was recorded by the Solano County Recorder's Office on July 11, 2014.



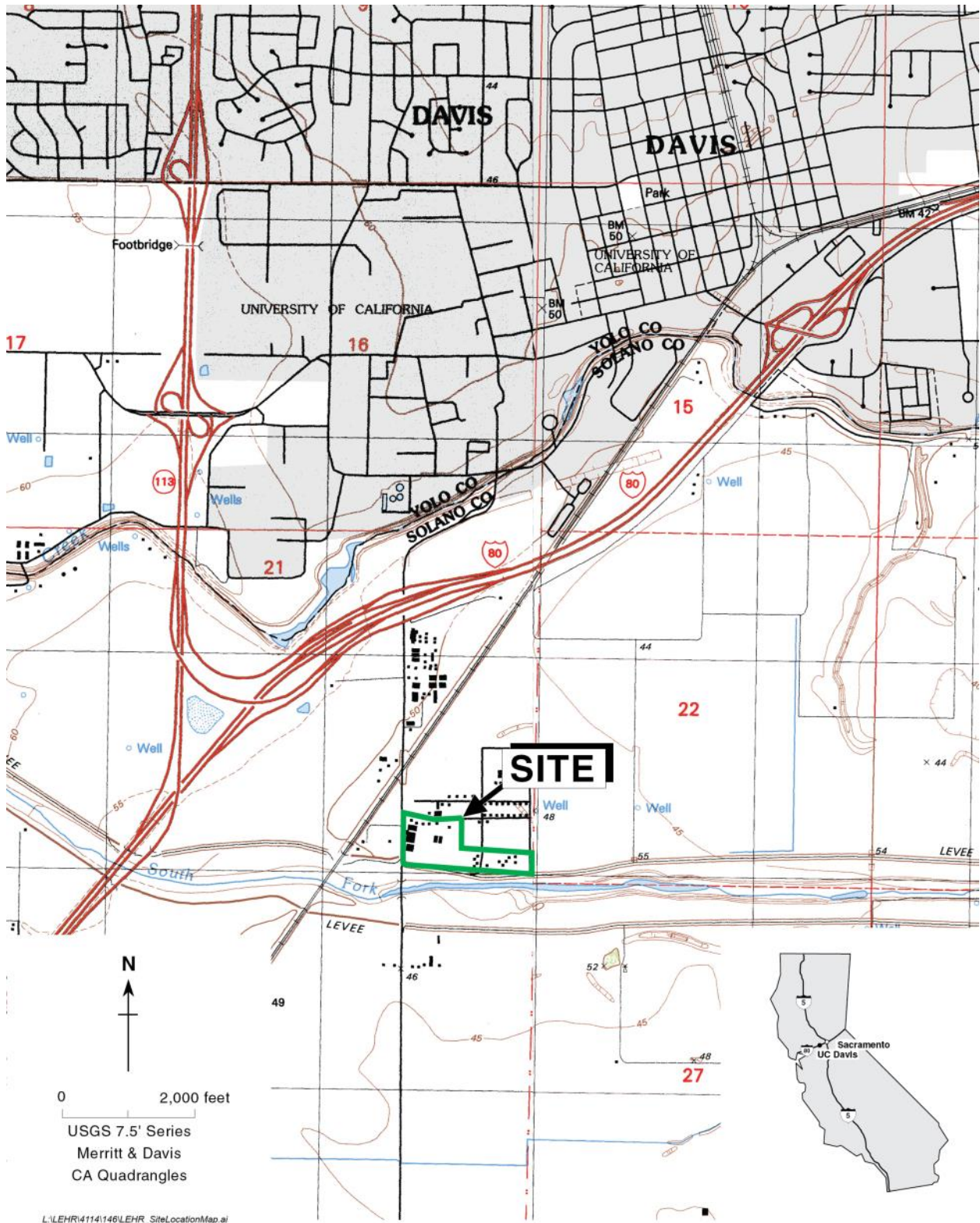


Figure 1. Location of the LEHR Superfund Site, UC Davis, Solano County, California

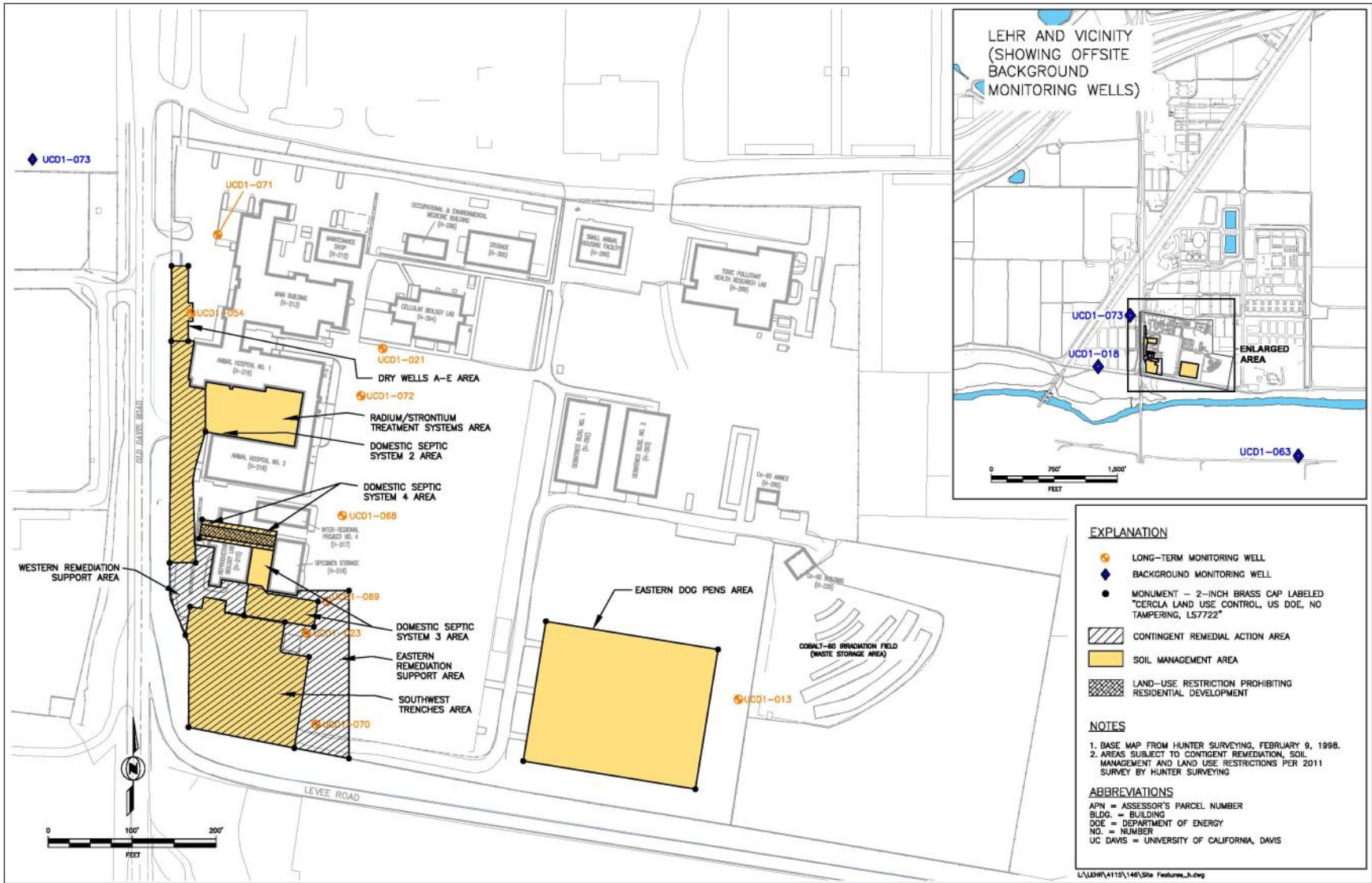


Figure 2. Areas of the LEHR Superfund Site Subject to Land-Use Restrictions

## 2.0 Inspections

Inspections of DOE areas subject to land-use restrictions were conducted using an updated checklist modified to include:

- Inspection of the DSS 4 Area for evidence of residential use, use for day care for children, or cultivation of crops for human consumption.
- Clarification that the DSS 2 Area is within the Ra/Sr Treatment Systems Area.
- Inspection of the condition of well locks or bolts, plaques, and concrete pads; and pump and well functionality.

On November 6, 2014, between 10:59 a.m. and 2:03 p.m., Tim Utterback of Weiss Associates (Weiss) performed a walk-through inspection of monuments that define the areas subject to land-use restrictions (Figure 3). All 24 monuments were in good condition. Evidence of minor soil disturbance from a burrowing animal was observed at monument M18. The burrow penetrates into the foot of the levee south of the perimeter fence and outside of the LEHR site boundary. Soil cast from the burrow by animal activity is mounded north of the perimeter fence in the Eastern Remediation Support Area. This burrowing activity does not present a risk of bringing contaminated soil from DOE areas to the surface because the burrow is located more than 50 feet from the nearest DOE area containing residual soil contamination (SWT Area). Appendix A provides the completed inspection checklist; Appendix B provides photographs of the monuments.

### 2.1 Inspection of Domestic Septic System 4 Area for Prohibited Land Uses

On November 6, 2014, at 9:30 a.m., Tim Utterback of Weiss performed a walk-through inspection of the DSS 4 Area. No residential use, use for day care for children, or cultivation of crops for human consumption was observed in the DSS 4 Area.

### 2.2 Inspections of DOE Areas for Compliance with Requirements of the Soil Management Plan

On November 6, 2014, between 9:00 and 11:10 a.m., Tim Utterback of Weiss performed a walk-through inspection of the DOE areas subject to land-use restrictions to look for signs of soil disturbance. No indication of soil disturbance was found. Appendix A provides the inspection checklist, and Appendix C provides photographs documenting the area inspections.

#### 2.2.1 Soil Management Compliance Interview

On November 6, 2014, at 4:30 p.m., Tim Utterback of Weiss interviewed Jim Aborn of the UC Davis EH&S Unit to determine if the unit was aware of any soil-disturbing activities within the DOE areas subject to land-use restrictions. Mr. Aborn reported that no soil-disturbing activities occurred within the DOE areas subject to land-use restrictions during the reporting period at the time of the interview. Appendix A provides copies of the interview checklists.





Figure 3. Monitoring Wells and Corner Point Monuments at the LEHR Superfund Site

On December 9, 2014, at 5:30 p.m., Bob Devany of Weiss conducted a follow-up interview with Jim Aborn of the UC Davis EH&S Unit to determine if the unit was aware of any soil-disturbing activities since the November 6, 2014, inspection. Mr. Aborn reported that no soil-disturbing activities had occurred within the DOE areas subject to land-use restrictions between November 6 and December 9, 2014.

### **2.2.2 Inspections of DOE Areas for Evidence of Soil-Disturbing Activities**

During this reporting period, no soil-disturbing activities occurred within the DOE areas subject to land-use restrictions; therefore, no inspections were necessary to comply with the requirements of the SMP (DOE 2010).

### **2.3 Inspections of Groundwater Monitoring Wells**

On November 6, 2014, between 11:20 a.m. and 5:00 p.m., Tim Utterback of Weiss performed a walk-through inspection of groundwater monitoring wells UCD1-013, UCD1-018, UCD1-021, UCD1-023, UCD1-054, UCD1-063, and wells UCD1-068 through UCD1-073 (Figure 3). None of the wells showed evidence of tampering. Wells with standpipe completions (UCD1-013, UCD1-018, UCD1-063, UCD1-070, and UCD1-073) were observed to be secured with functioning padlocks. Wells UCD1-054, UCD1-068, UCD1-069, UCD1-071 and UCD1-072 have surface completions and were observed to be secured with bolts. Wells UCD1-021 and UCD1-023 have surface completions and screw-on lids. All well completions were structurally sound, and the wells were in good condition.

Well UCD1-021 has surface cracks and chips in the cement pad, but the underlying structural cement around the vault appears to be sound. The cement pad at the base of the standpipe at well UCD1-070 has a crack but the standpipe is sound. Cement pads at the remainder of the DOE areas wells and at the background wells were structurally sound with no surface damage.

A pump controller was connected to pumps at wells UCD1-018, UCD1-021, UCD1-023, and UCD1-054 and operated to deliver groundwater into a container. These four wells and their pumps were observed to properly deliver water for groundwater sample collection. The status of pump and well functionality was not determined on November 6, 2014, for wells UCD1-013, UCD1-063, and wells UCD1-068 through UCD1-073 due to water levels below the pumps. Groundwater samples were collected from all of the wells in 2014 demonstrating that the pumps and wells were functional within the period covered by this report. There was no indication of pump or well failure during the inspection on November 6, 2014. Water levels are expected to rise above the pumps before groundwater samples are collected in early 2015. Fall water levels for 2014 are several feet lower than typical due to drought conditions.

Some minor well maintenance issues were noted during the November 6, 2014, inspection:

- Vault lid bolts were difficult to fasten to the anchorage threads at wells UCD1-068 and UCD1-071.
- The casing cap in well UCD1-069 was missing a stopper in the water level measurement port.

Appendix D provides photographs of the wells; Appendix A provides a copy of the inspection checklist.

On November 20, 2014, at 3:21 p.m., Alan Bainbridge of Weiss cleaned the anchorage threads at well UCD1-068 and tightened the bolts to secure the vault lid.

On November 21, 2014, between 8:33 and 8:53 a.m., Alan Bainbridge of Weiss performed the following well maintenance tasks:

- Cleaned the anchorage threads at well UCD1-071 and tightened the bolts to secure the vault lid.
- Installed a silicone stopper in the water level measurement port in well UCD1-069.

Appendix E provides photographs of the well repairs. Appendix A provides a copy of the field activity log.

## **3.0 Soil Management Plan Implementation**

In accordance with an agreement with DOE, the EH&S Unit at UC Davis is responsible for implementation of the SMP (DOE 2010).

### **3.1 Training**

The EH&S Unit conducted annual training to communicate soil management requirements to applicable units that may perform, manage, or contract for work at and near the project site. Additionally, personnel working in departments located on the project site or near it received annual training.

Information on the following topics was provided:

- Roles and responsibilities for soil management in the DOE areas.
- Areas and contaminants subject to soil management requirements.
- Soil management during excavation or construction.
- Permits for soil-disturbing activities.
- Plans and documentation.
- Soil management during emergency work.
- Waste management.
- Waste characterization and disposal.
- Inspections

### **3.2 Soil-Disturbing Activities**

Based on site inspections and the November 6, 2014, interview with Jim Aborn of the EH&S Unit at UC Davis, no soil-disturbing activities (routine or emergency) occurred in any of the DOE areas subject to the requirements of the SMP during this reporting period. Consequently, no permits for soil disturbance were issued. The EH&S Unit is providing ongoing training and guidance to university staff to avoid unnecessary soil-disturbing activities in the areas subject to the SMP.

Pacific Gas and Electric continues to evaluate options to replace its gas transmission line along Old Davis Road. There is ongoing communication on this project with UC Davis as they would oversee and permit the work if soil disturbing activities were planned in the DOE areas. DOE is working closely with UC Davis on this issue and will notify DTSC and EPA if Pacific Gas and Electric plans to conduct soil disturbing activities in the DOE areas.

### **3.3 Soil Disposal**

Based on site inspections and interview documented in this report, no soil from the DOE areas subject to the requirements of the SMP was disposed of during this reporting period.

### **3.4 Soil Management Plan Changes**

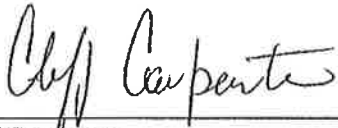
There are no suggested changes to the SMP as of this inspection report.

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## 4.0 Certification

The U.S. Department of Energy hereby certifies to the best of its knowledge that the information contained in this inspection report is true and accurate and no exceptions to the Land-Use Covenant terms and conditions occurred during this reporting period.



Date: \_\_\_\_\_

1/12/15

Cliff Carpenter  
Site Manager  
U.S. Department of Energy  
Office of Legacy Management  
99 Research Park Road  
Morgantown, WV 26505

The University of California hereby certifies to the best of its knowledge that the information contained in this inspection report is true and accurate and no exceptions to the Land-Use Covenant terms and conditions occurred during this reporting period.



Date: \_\_\_\_\_

1/12/15

Sue Fields  
Environmental Manager  
UC Davis Environmental Health and Safety  
One Shields Avenue  
Davis, CA 95616

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## 5.0 References

DOE (U.S. Department of Energy), 2009. *Record of Decision for DOE Areas at the Laboratory for Energy-Related Health Research, University of California, Davis*, LMS/LEH/S05069, Office of Legacy Management, September.

DOE (U.S. Department of Energy), 2010. *Remedial Design/Remedial Action Work Plan for the Former Laboratory for Energy-Related Health Research Federal Facility, University of California, Davis*, LMS/LEH/S05822, Office of Legacy Management, November.

Solano County, 2014. *Covenant to Restrict Use of Property, Environmental Restriction*, (Re: Portions of County of Solano Assessor's Parcel No. 110-05-04 UC Davis, Laboratory for Energy-related Health Research/Old Campus Landfill [LEHR/OCL] Superfund Site, Site Code 100424), Solano County Recorder Division Document Number 201400051822, July 11, 2014, 3:11 p.m.

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## **Appendix A**

### **Inspection and Maintenance Checklists**

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## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Utterback

Inspection Date 11-6-14

DOE Area: Southwest Trenches

Inspection Period December 10, 2013 – December 9, 2014

Inspection Item	Y	N	NA	Comments
Were any indications of soil disturbance observed during walk-thru inspection? If yes, explain. <sup>1,2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:09AM
Were any soil disturbance permit requests filed with UC Davis Environmental Health and Safety (EH&S) Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Aborn</u> 4:30 PM
Were any soil disturbance permits issued by the EH&S Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Aborn</u> 4:30 PM
Were permitted soil disturbing activities conducted in this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Aborn</u> 4:30 PM
If permitted soil disturbing activities were conducted in this DOE Area since December 10, 2013, were the activities in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Aborn</u> 4:30 PM
If waste was generated due to soil disturbing activities since December 10, 2013, was the soil managed and/or disposed in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Aborn</u> 4:30 PM
Are there any suggested changes to the Soil Management Plan at this time? If yes, explain.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Aborn</u> 4:30 PM

Notes:

<sup>1</sup> Soil disturbing activities include, but are not limited to excavation, grading, trenching, utility installation or repair, and any other human activities that could potentially bring contaminated soil to the surface.

<sup>2</sup> Does not apply to landscaping, fire protection, or maintenance work that is conducted at depths less than 1 foot below ground surface and less than 5 cubic yards of soil waste is significantly displaced (e.g., stockpiled, placed in containers) and all soil is returned to the disturbed area. Such work may proceed without restriction.

## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Ytterback

Inspection Date 11-6-14

DOE Area: Southwest Trenches

Inspection Period December 10, 2013 – December 9, 2014

Photograph Description	Photo No.	Comments
View southeast over Southwest Trenches Area; North levee in background.	2411	Time recorded on photo
View east over Southwest Trenches Area; Storage shed to left; north levee to right; Western Dog Pens Area and UC Davis Southern Trenches Area in background.	2412	↓
View north over northwest corner of Southwest Trenches Area.	2413	
View south over Southwest Trenches Area; North levee in background; shoulder of Old Davis Road to right.	2414	
View southeast over Southwest Trenches Area.	2415	
View west over Southwest Trenches Area; shoulder of Old Davis Road in background.	2416	
View northwest over Southwest Trenches Area.	2417	
View north over Southwest Trenches Area.	2418	
View north from center of Southwest Trenches Area.	2419	
View west from center of Southwest Trenches Area.	2420	
View south from center of Southwest Trenches Area.	2421	
View east from center of Southwest Trenches Area.	2422	↓



## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Utterback

Inspection Date 11-6-14

DOE Area: Domestic Septic System 3

Inspection Period December 10, 2013 – December 9, 2014

Inspection Item	Y	N	NA	Comments
Were any indications of soil disturbance observed during walk-thru inspection? If yes, explain. <sup>1,2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:28 AM
Were any soil disturbance permit requests filed with UC Davis Environmental Health and Safety (EH&S) Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:31 PM
Were any soil disturbance permits issued by the EH&S Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:31 PM
Were permitted soil disturbing activities conducted in this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:31 PM
If permitted soil disturbing activities were conducted in this DOE Area since December 10, 2013, were the activities in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:31 PM
If waste was generated due to soil disturbing activities since December 10, 2013, was the soil managed and/or disposed in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:31 PM
Are there any suggested changes to the Soil Management Plan at this time? If yes, explain.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:31 PM

Notes:

<sup>1</sup> Soil disturbing activities include, but are not limited to excavation, grading, trenching, utility installation or repair, and any other human activities that could potentially bring contaminated soil to the surface.

<sup>2</sup> Does not apply to landscaping, fire protection, or maintenance work that is conducted at depths less than 1 foot below ground surface and less than 5 cubic yards of soil waste is significantly displaced (e.g., stockpiled, placed in containers) and all soil is returned to the disturbed area. Such work may proceed without restriction.



## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Utterback

Inspection Date 11-6-14

DOE Area: Domestic Septic System 4

Inspection Period December 10, 2013 – December 9, 2014

Inspection Item	Y	N	NA	Comments
Were any indications of soil disturbance observed during walk-thru inspection? If yes, explain. <sup>1,2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:34 AM
Were any indications of a residence, growing plants for human consumption, or a day care center for children observed during walk-thru inspection? If yes, explain.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:34 AM
Were any indications of a change in land use observed during walk-thru inspection? If yes, explain. <sup>2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:34 AM
Were any soil disturbance permit requests filed with UC Davis Environmental Health and Safety (EH&S) Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Aborn</u> 4:32 PM
Were any soil disturbance permits issued by the EH&S Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Aborn</u> 4:32 PM
Were permitted soil disturbing activities conducted in this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Aborn</u> 4:32 PM
If permitted soil disturbing activities were conducted in this DOE Area since December 10, 2013, were the activities in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Aborn</u> 4:32 PM
If waste was generated due to soil disturbing activities since December 10, 2013, was the soil managed and/or disposed in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Aborn</u> 4:32 PM

Notes:

<sup>1</sup> Soil disturbing activities include, but are not limited to excavation, grading, trenching, utility installation or repair, and any other human activities that could potentially bring contaminated soil to the surface.

<sup>2</sup> Does not apply to landscaping, fire protection, or maintenance work that is conducted at depths less than 1 foot below ground surface and less than 5 cubic yards of soil waste is significantly displaced (e.g., stockpiled, placed in containers) and all soil is returned to the disturbed area. Such work may proceed without restriction.





## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Utterback

Inspection Date 11-6-14

DOE Area: Radium/Strontium Treatment Systems Area  
Inclusive of Domestic Septic System 2

Inspection Period December 10, 2013 – December 9, 2014

Inspection Item	Y	N	NA	Comments
Were any indications of soil disturbance observed during walk-thru inspection? If yes, explain. <sup>1,2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9:53 AM
Were any soil disturbance permit requests filed with UC Davis Environmental Health and Safety (EH&S) Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:33 PM
Were any soil disturbance permits issued by the EH&S Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:33 PM
Were permitted soil disturbing activities conducted in this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:33 PM
If permitted soil disturbing activities were conducted in this DOE Area since December 10, 2013, were the activities in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:33 PM
If waste was generated due to soil disturbing activities since December 10, 2013, was the soil managed and/or disposed in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:33 PM
Are there any suggested changes to the Soil Management Plan at this time? If yes, explain.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:33 PM

Notes:

<sup>1</sup> Soil disturbing activities include, but are not limited to excavation, grading, trenching, utility installation or repair, and any other human activities that could potentially bring contaminated soil to the surface.

<sup>2</sup> Does not apply to landscaping, fire protection, or maintenance work that is conducted at depths less than 1 foot below ground surface and less than 5 cubic yards of soil waste is significantly displaced (e.g., stockpiled, placed in containers) and all soil is returned to the disturbed area. Such work may proceed without restriction.

## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Uterback

Inspection Date 11-6-14

DOE Area: Radium/Strontium Treatment Systems Area  
Inclusive of Domestic Septic System 2

Inspection Period December 10, 2013 – December 9, 2014

Photograph Description	Photo No.	Comments
View north over southern portion of Radium/Strontium Treatment Systems Area. Building H-215 to right; Building H-218 back/right.	2435	Time recorded on photo
View north over middle portion of Radium/Strontium Treatment Systems Area. Building H-218 to right; Building H-219 back/right.	2436	↓
View south over southern portion of Radium/Strontium Treatment Systems Area. Building H-215 to left.	2437	
View north over northern portion of Radium/Strontium Treatment Systems Area. Building H-219 to right.	2438	
View south over middle/south portion of Radium/Strontium Treatment Systems Area. Building H-218 to left; Old Davis Road to right.	2439	
View east over middle portion of Radium/Strontium Treatment Systems Area. Building H-218 to right; Building H-219 to left.	2440	
View southeast over Domestic Septic System 2 area within Radium/Strontium Treatment Systems Area; Building H-218 behind.	2441	
View west over middle-west portion of Radium/Strontium Treatment Systems Area, west perimeter fence, and Old Davis Road.	2442	
Roof-level view west over middle portion of Radium/Strontium Treatment Systems Area. Building H-219 to right; Building H-218 to left; Old Davis Road in background.	2443	





## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Utterback

Inspection Date 11-6-14

DOE Area: Dry Wells A – E Area

Inspection Period December 10, 2013 – December 9, 2014

Inspection Item	Y	N	NA	Comments
Were any indications of soil disturbance observed during walk-thru inspection? If yes, explain. <sup>1,2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:06 AM
Were any soil disturbance permit requests filed with UC Davis Environmental Health and Safety (EH&S) Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:34 PM
Were any soil disturbance permits issued by the EH&S Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:34 PM
Were permitted soil disturbing activities conducted in this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:34 PM
If permitted soil disturbing activities were conducted in this DOE Area since December 10, 2013, were the activities in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:34 PM
If waste was generated due to soil disturbing activities since December 10, 2013, was the soil managed and/or disposed in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:34 PM
Are there any suggested changes to the Soil Management Plan at this time? If yes, explain.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:34 PM

Notes:

<sup>1</sup> Soil disturbing activities include, but are not limited to excavation, grading, trenching, utility installation or repair, and any other human activities that could potentially bring contaminated soil to the surface.

<sup>2</sup> Does not apply to landscaping, fire protection, or maintenance work that is conducted at depths less than 1 foot below ground surface and less than 5 cubic yards of soil waste is significantly displaced (e.g., stockpiled, placed in containers) and all soil is returned to the disturbed area. Such work may proceed without restriction.





## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Utterback

Inspection Date 11-6-14

DOE Area: Eastern Dog Pens Area

Inspection Period December 10, 2013 – December 9, 2014

Inspection Item	Y	N	NA	Comments
Were any indications of soil disturbance observed during walk-thru inspection? If yes, explain. <sup>1,2</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10:45 AM
Were any soil disturbance permit requests filed with UC Davis Environmental Health and Safety (EH&S) Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:35 PM
Were any soil disturbance permits issued by the EH&S Unit for this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:35 PM
Were permitted soil disturbing activities conducted in this DOE Area since December 10, 2013?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:35 PM
If permitted soil disturbing activities were conducted in this DOE Area since December 10, 2013, were the activities in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:35 PM
If waste was generated due to soil disturbing activities since December 10, 2013, was the soil managed and/or disposed in compliance with the Soil Management Plan? If no, explain.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:35 PM
Are there any suggested changes to the Soil Management Plan at this time? If yes, explain.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EH&S person contacted: <u>Jim Abern</u> 4:35 PM

Notes:

<sup>1</sup> Soil disturbing activities include, but are not limited to excavation, grading, trenching, utility installation or repair, and any other human activities that could potentially bring contaminated soil to the surface.

<sup>2</sup> Does not apply to landscaping, fire protection, or maintenance work that is conducted at depths less than 1 foot below ground surface and less than 5 cubic yards of soil waste is significantly displaced (e.g., stockpiled, placed in containers) and all soil is returned to the disturbed area. Such work may proceed without restriction.

## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Utterback

Inspection Date 11-6-14

DOE Area: Eastern Dog Pens Area

Inspection Period December 10, 2013 – December 9, 2014

Photograph Description	Photo No.	Comments
View northeast over Eastern Dog Pens Area from southwest corner.	2458	Time recorded on photo ↓
View east over Eastern Dog Pens Area.	2452	
View southeast over Eastern Dog Pens Area from northwest corner.	2453	
View south over Eastern Dog Pens Area.	2454	
View southwest over Eastern Dog Pens Area from northeast corner.	2455	
View west over Eastern Dog Pens Area.	2456	
View northwest into Eastern Dog Pens Area from southeast corner	2457	
View north over Eastern Dog Pens Area from north levee.	2473	



## LAND USE CONTROL INSPECTION CHECKLIST

 Inspector Tim Utterback

 Inspection Date 11-6-14

DOE Areas Monitoring Wells

 Inspection Period December 10, 2013 – December 9, 2014

Well ID and Completion Type	Photographs		Evidence of tampering? (Y/N) If Y, explain	Locks/Bolts Secure? <sup>3</sup> (Y/N) If N, explain	ID Plaques OK? <sup>4</sup> (Y/N) If N, explain	Vault and Seal Sound? <sup>5</sup> (Y/N) If N, explain	Pump OK? <sup>6</sup> (Y/N) If N, explain	Comments
	Wellhead / tag <sup>1</sup>	Vault / tag <sup>2</sup>						
UCD1-013 standpipe 11:19 AM	2468 2470	2471 2472	N	Y	Y	Y	Unknown	Water level in well was below pump
UCD1-018 standpipe 4:37 PM	2555 2556	2557 2558	N	Y	Y	Y	Y	
UCD1-021 flush 3:47 PM	2543 2544	2545 2546	N	N, but secure	Y	Y, needs work	Y	No bolts; lid is screw-on Cement pad needs resurfacing
UCD1-023 flush 12:16 PM	2479 2480	2481 2482	N	N, but secure	Y	Y	Y	No bolts; lid is screw-on
UCD1-054 flush 4:05 PM	2547 2548	2549 2550	N	Y	Y	Y	Y	
UCD1-063 standpipe 11:59 AM	2474 2476	2477 2478	N	Y	Y	Y	Unknown	Water level was below pump
UCD1-068 flush 3:14 PM	2535 2536	2537 2538	N	Y	Y	Y	Unknown	Water level was below pump <sup>note</sup> bolts & threads need cleaning
UCD1-069 flush 3:02 PM	2531 2532	2533 2534	N	Y	Y	Y	Unknown	Needs silicone stopper Water level was below pump

## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Utterback

Inspection Date 11-6-14

DOE Areas Monitoring Wells

Inspection Period December 10, 2013 – December 9, 2014

Well ID and Completion Type	Photographs		Evidence of tampering? (Y/N) If Y, explain	Locks/Bolts Secure? <sup>3</sup> (Y/N) If N, explain	ID Plaques OK? <sup>4</sup> (Y/N) If N, explain	Vault and Seal Sound? <sup>5</sup> (Y/N) If N, explain	Pump OK? <sup>6</sup> (Y/N) If N, explain	Comments
	Wellhead / tag <sup>1</sup>	Vault / tag <sup>2</sup>						
UCD1-070 standpipe 2:44 PM	2527 2528	2529 2530	N	Y	Y	N	unknown	Cracks in cement pad need to be sealed. Water level was below pump
UCD1-071 flush 4:19 PM	2551 2552	2553 2554	N	Y	Y	Y	unknown	Water level was below pump bolt hole threads need cleaning
UCD1-072 flush 3:31 PM	2539 2540	2541 2542	N	Y	Y	Y	unknown	Water level was below pump
UCD1-073 standpipe 4:55 PM	2559 2560	2561 2562	N	Y	Y	Y	unknown	water level was below pump

Notes:

<sup>1</sup> Take photograph inclusive of wellhead features including concrete pad. Take zoom photograph of wellhead identification plaque (tag). Record photograph numbers.

<sup>2</sup> Open well vault and take photograph inclusive of vault inner features. Take zoom photograph of identification plaque (tag) stored in vault. Record photograph numbers.

<sup>3</sup> Verify that standpipe well locks are present, in good condition, and secured with the lock at the time of inspection. Verify that flush mount well bolts are present, in good condition, and properly secured at the time of inspection. Document any issues.

<sup>4</sup> Verify that well identification plaques are legible and in good condition. Document any issues.

<sup>5</sup> Verify that concrete pads are structurally sound. Document any issues.

<sup>6</sup> Connect pump to controller and discharge approximately 300 milliliters of water to bucket. Document any issues.



## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Utterback

Inspection Date 11-6-14

Survey Monuments

Inspection Period December 10, 2013 - December 9, 2014

Monument No.	Close-up Photo <sup>1</sup>	Setting Photo <sup>2</sup>	Damaged or missing? (Y/N) If Y, explain	Comments
1 2:03 PM	2525	2526	N	
2 2:01 PM	2523	2524	N	
3 1:59 PM	2521	2522	N	Needs new survey ribbon tied to fence
4 1:58 PM	2519	2520	N	
5 1:51 PM	2515	2516	N	
6 1:55 PM	2517	2518	N	
7 1:49 PM	2512	2513	N	
8 1:47 PM	2510	2511	N	<del>Needs a TRU</del>
9 1:46 PM	2508	2509	N	
10 12:49 PM	2492	2493	N	
11 1:09 PM	2501	2502	N	
12 12:42 PM	2489	2488	N	
13 12:39 PM	2486	2487	N	
14 12:45 PM	2490	2491	N	
15 1:41 PM	2506	2507	N	Needs cone to find/more easily

## LAND USE CONTROL INSPECTION CHECKLIST

Inspector Tim Utterback Inspection Date 11-6-14

Survey Monuments Inspection Period December 10, 2013 – December 9, 2014

Monument No.	Close-up Photo <sup>1</sup>	Setting Photo <sup>2</sup>	Damaged or missing? (Y/N) If Y, explain	Comments
16 12:54 PM	2494	2495	N	Needs new survey ribbon tied to fence
17 12:57 PM	2496	2497	N	Needs new survey ribbon tied to fence
18 1:00 PM	2498	2500	N	Digging and mounding around monument. Needs new survey ribbon
19 11:05 AM	2461	2462	N	
20 11:10 AM	2465	2463	N	
21 10:59 AM	2460	2459	N	
22 11:14 AM	2466	2467	N	
23 1:22 PM	2503	2504	N	Needs new survey ribbon tied to fence
24 12:36 PM	2485	2484	N	

Notes:

<sup>1</sup> Take zoom photograph of monument. Record photograph number.

<sup>2</sup> Place orange ring marker around monument and step back to take photo of monument location with recognizable site features (ex. buildings, fence, road, etc) in view. Record photograph number.





## **Appendix B**

### **Photographs of Monuments at Permanent Reference Points for Areas Subject to Land-Use Restrictions**

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Monument 1: northwest corner of Dry Wells A–E Area.



View northwest: Monument 1, within orange ring in foreground; entrance sign in background.



Monument 2: northeast corner of Dry Wells A–E Area.



View west: Monument 2, within orange ring in foreground; retracted entrance gate in background.





Monument 3: southwest corner of Dry Wells A–E Area.



View west: Monument 3, within orange ring;  
west perimeter fence in background.



Monument 4: southeast corner of Dry Wells A–E Area.



View east: Monument 4, within orange ring;  
Building H219 in background.





Monument 5: northwest corner of Domestic Septic System 4.



View east: Monument 5, within orange ring;  
Building H215 in background.



Monument 6: adjacent to northwest corner of Building H-218;  
Radium/Strontium Treatment Systems Area.



View east: Monument 6, within orange ring in foreground;  
corner of Building H218 in right of background.





Monument 7: southwest corner of Domestic Septic System 4.



View east: Monument 7, within orange ring;  
Building H215 in background.



Monument 8: southwest corner of radium-226 leach trench;  
Radium/Strontium Treatment Systems Area.



View southwest: Monument 8, within orange ring;  
west perimeter fence in background.





Monument 9: southeast corner of radium-226 leach trench;  
Radium/Strontium Treatment Systems Area.



Monument 10: northeast corner of former leach field in  
Domestic Septic System 3 Area.



View east: Monument 9, within orange ring;  
Building H215 in background.



View north: Monument 10, within orange ring in foreground;  
former Western Dog Pens area to right.





*Monument 11: northeast corner of Eastern Remediation Support Area.*



*View west: Monument 11, within orange ring in foreground; Building H216 in background; staked to help locate monument within Former Western Dog Pens Area.*



*Monument 12: northwest corner of Southwest Trenches Area.*



*View south: Monument 12, within orange ring in foreground; water hydrant in background.*





*Monument 13: southwest corner of Domestic Septic System 3, at northern perimeter of Southwest Trenches Area.*



*Monument 14: southeast corner of Domestic Septic System 3.*



*View south: Monument 13 within orange ring at edge of concrete swale; rose planter in background.*



*View southwest: Monument 14, within orange ring in foreground; Well UCD1-023 and trailer shed in background.*





*Monument 15: eastern corner of Southwest Trenches Area.*



*View southeast: Monument 15, within orange ring in foreground; former Western Dog Pens silt fence to left and trailer shed fence in right of background.*



*Monument 16: southwest corner of Southwest Trenches Area.*



*View southwest: Monument 16, within orange ring; southwest corner post of perimeter fence in background.*





*Monument 17: southeast corner of Southwest Trenches Area.*



*Monument 18: southeast corner of Eastern Remediation Support Area.*



*View southeast: Monument 17, within orange ring; south perimeter fence behind; foot of North Levee in background.*



*View south: Monument 18, within orange ring; foot of North Levee in background; burrow mound in foreground.*





Monument 19: northwest corner of Eastern Dog Pens Area.



View southeast: Monument 19, within orange ring;  
Eastern Dog Pens Area in background.



Monument 20: northeast corner of Eastern Dog Pens Area.



View southwest: Monument 20, within orange ring;  
Eastern Dog Pens Area in background.





*Monument 21: southwest corner of Eastern Dog Pens Area.*



*Monument 22: southeast corner of Eastern Dog Pens Area.*



*View northeast: Monument 21, within orange ring;  
Eastern Dog Pens Area in background.*



*View northwest: Monument 22, within orange ring;  
Eastern Dog Pens Area trees in background.*





*Monument 23: western perimeter point of Southwest Trenches Area.*



*View west: Monument 23, within orange ring;  
west perimeter fence in background.*



*Monument 24: northeast corner of Southwest Trenches Area,  
at southern perimeter of Domestic Septic System 3.*



*View southeast: Monument 24, within orange ring on edge of concrete  
swale—waste bin and trailer shed behind; rose planter in right of  
background.*

## **Appendix C**

### **Photographs of DOE Areas Subject to Land-Use Restrictions**

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*View southeast over Southwest Trenches Area: North Levee in background.*



*View east over Southwest Trenches Area: storage shed to left; North Levee to right; Western Dog Pens Area and UC Davis Southern Trenches Area in background.*



*View north over northwest corner of Southwest Trenches Area.*



*View south over Southwest Trenches Area: North Levee in background; shoulder of Old Davis Road to right.*





*View southeast over Southwest Trenches Area.*



*View west over Southwest Trenches Area: shoulder of Old Davis Road in background.*



*View northwest over Southwest Trenches Area.*



*View north over Southwest Trenches Area.*





*View north from center of Southwest Trenches Area.*



*View west from center of Southwest Trenches Area.*



*View south from center of Southwest Trenches Area.*



*View east from center of Southwest Trenches Area.*





*View east over former leach field part of Domestic Septic System 3 Area: Building H-216 to left; storage unit to right; Western Dog Pens Area in background.*



*View east over eastern half of Domestic Septic System 3 Area.*



*View west over former leach field part of Domestic Septic System 3 Area: Buildings H-215 and H-216 to right; Southwest Trenches Area to left; shoulder of Old Davis Road in background.*



*View south over septic tank part of Domestic Septic System 3 Area: Building H-216 to left; Building H-215 to right.*





*View north over septic tank part of Domestic Septic System 3 Area: Building H-215 to left, Building H-216 to right; Domestic Septic System 4 Area in background.*



*View east: Building H-216 in background, standing north/left of tree.*



*View south over east end of Domestic Septic System 3 leach field: trailer in background.*



*View east: Building H-216 in background, standing south/right of tree.*





*View north over Domestic Septic System 4 septic tank location and east end of leach field: Building H-215 to left, Building H-216 to right; Building H-217 in background.*



*View west over east end of Domestic Septic System 4 leach field: Building H-215 in background.*



*View east over Domestic Septic System 4 septic tank location: Building H-216 in background.*



*View east over western portion of Domestic Septic System 4 Area: Building H-215 in background.*





*View north over southern portion of Radium/Strontium Treatment Systems Area: Building H-215 to right; Buildings H-218 and H-219 in background.*



*View north over middle portion of Radium/Strontium Treatment Systems Area: Building H-218 at the upper right-hand corner, Building H-219 in background.*



*View south over southern portion of Radium/Strontium Treatment Systems Area: Building H-215 to left.*



*View north over northern portion of Radium/Strontium Treatment Systems Area: Building H-219 to right.*





*View south over the middle-south portion of Radium/Strontium Treatment Systems Area: Building H-218 to left; Old Davis Road to right.*



*View east over middle portion of Radium/Strontium Treatment Systems Area: Building H-218 to right; Building H-219 to left.*



*View south over Domestic Septic System 2 area within Radium/Strontium Treatment Systems Area: Building H-218 in background.*



*View west over middle-west portion of Radium/Strontium Treatment Systems Area, west perimeter fence, and Old Davis Road.*





*Roof-level view west over middle portion of Radium/Strontium Treatment Systems Area: Building H-219 to right, Building H-218 to left.*



*Roof-level view southwest over Domestic Septic System 2 area within middle portion of Radium/Strontium Treatment Systems Area: Building H-218 in background.*



*Roof-level view northwest over middle portion of Radium/Strontium Treatment Systems Area: Building H-219 in background.*



*View south over northern portion of Radium/Strontium Treatment Systems Area.*





*View north over Dry Wells A-E Area: Old Davis Road to left.*



*View south over Dry Wells A-E Area: Building H-219 in background/left; facility entrance in the lower right-hand corner.*



*View west over Dry Wells A-E Area: site entrance gate and Old Davis Road in background.*



*View southwest over Dry Wells A-E Area: Old Davis Road in background.*





*View northeast over Eastern Dog Pens Area from southwest corner.*



*View east over Eastern Dog Pens Area.*



*View southeast over Eastern Dog Pens Area from northwest corner.*



*View south over Eastern Dog Pens Area.*

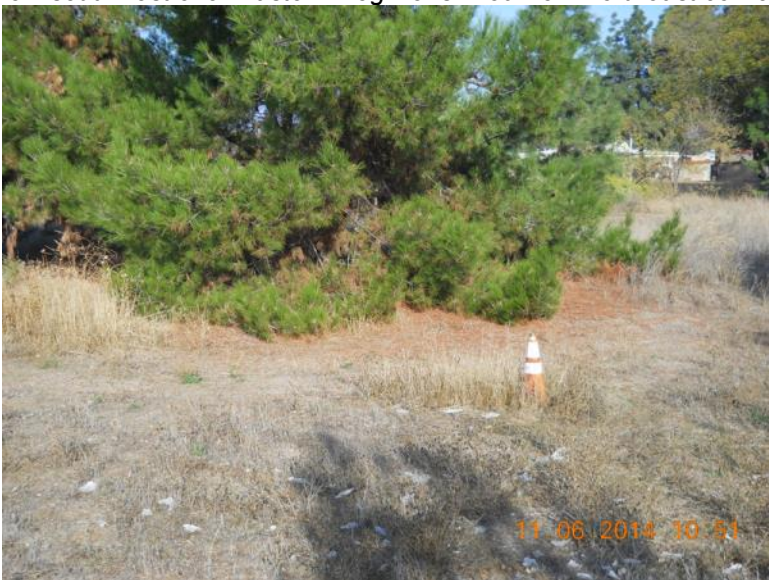




*View southwest over Eastern Dog Pens Area from northeast corner.*



*View west over Eastern Dog Pens Area.*



*View northwest into Eastern Dog Pens Area from southeast corner; obscured by trees.*



*View north over Eastern Dog Pens Area from North Levee.*

## **Appendix D**

### **Photographs of Groundwater Monitoring Wells**

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*UCD1-013 Wellhead.*



*UCD1-013 Wellhead Plaque.*



*UCD1-013 Interior.*



*UCD1-013 Interior Plaque.*





*UCD1-018 Wellhead.*



*UCD1-018 Wellhead Plaque.*



*UCD1-018 Interior.*



*UCD1-018 Interior Plaque.*



*UCD1-021 Wellhead.*



*UCD1-021 Wellhead Plaque.*



*UCD1-021 Interior.*



*UCD1-021 Interior Plaque.*





*UCD1-023 Wellhead.*



*UCD1-023 Wellhead Plaque.*



*UCD1-023 Interior.*



*UCD1-023 Interior Plaque.*





UCD1-054 Wellhead.



UCD1-054 Wellhead Plaque.



UCD1-054 Interior.



UCD1-054 Interior Plaque.



*UCD1-063 Wellhead.*



*UCD1-063 Wellhead Plaque.*



*UCD1-063 Interior.*



*UCD1-063 Interior Plaque.*





UCD1-068 Wellhead (photo of completed maintenance in Appendix E).



UCD1-068 Wellhead Plaque.



UCD1-068 Interior.



UCD1-068 Interior Plaque.





UCD1-069 Wellhead.



UCD1-069 Wellhead Plaque.



UCD1-069 Interior (photo of completed maintenance in Appendix E).



UCD1-069 Interior Plaque.





*UCD1-070 Wellhead.*



*UCD1-070 Wellhead Plaque.*



*UCD1-070 Interior.*



*UCD1-070 Interior Plaque.*





UCD1-071 Wellhead (photo of completed maintenance in Appendix E).



UCD1-071 Interior.



UCD1-071 Wellhead Plaque.



UCD1-071 Interior Plaque.





*UCD1-072 Wellhead.*



*UCD1-072 Wellhead Plaque.*



*UCD1-072 Interior.*



*UCD1-072 Interior Plaque.*





*UCD1-073 Wellhead.*



*UCD1-073 Wellhead Plaque.*



*UCD1-073 Interior.*



*UCD1-073 Interior Plaque.*



## **Appendix E**

### **Photographs of Completed Maintenance Work**

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*UCD1-068: threads cleaned, bolts tightened, and lid secured.*



*UCD1-069: new silicone stopper in water level measurement port.*



*UCD1-071: threads cleaned, bolts tightened, and lid secured.*

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