

Monticello, Utah, National Priorities List Sites Federal Facilities Agreement (FFA) Quarterly Report: April 1–June 30, 2010

This report summarizes project status and activities implemented April through June 2010, and provides a schedule of near-term activities for the Monticello Mill Tailings Site (MMTS) and the Monticello Vicinity Properties (MVP) Site. This report also includes disposal cell and Pond 4 leachate collection data, quarterly site inspection reports, site meteorological data, and a performance summary for the ex situ groundwater treatment system.

1.0 MMTS Activities and Status

1.1 Repository Site Inspections

- Monthly and quarterly inspections of the repository site (waste disposal cell, Pond 4, and associated infrastructure) identified no abnormalities or unacceptable conditions (see attached inspection reports).
- Repository leachate collection in the upper sumps (Leachate Collection and Recovery System [LCRS]) was normal for the quarter. Leachate production has decreased in quantity from approximately 30,000 gallons per week following final waste encapsulation in 1999 to current values of about 1,000 gallons per week or less for each of the two sumps (LCRS 1 and LCRS 2; see attached graph).
- The LCRS 1 water level transducer has needed to be replaced since July 2009. The transducer activates the sump pump at a specified water level in the sump. Health and safety evaluations were not completed in time for replacing the transducer in 2009. Health and safety evaluations have since been completed; however, until recently heavy snow cover now prevented replacing the transducer. The transducer is scheduled to be replaced in July 2010. The LCRS 1 pump is operated manually each month since the transducer became defective in 2009. The integrity of the leachate management system not compromised by this method of operation. All remaining repository and Pond 4 telemetry components are functional.
- Pond 4 LCRS operation was normal (no water collected during the quarter).
- Disposal cell and Pond 4 leachate collection in the lower sumps (Leachate Detection System) remains at zero (see attached graphs).

1.2 Former Millsite

- No land use or groundwater use compliance issues were observed or reported by long-term surveillance and maintenance (LTSM) on-site staff. Heavy snow cover inhibited normal use of the park during April.

1.3 Peripheral Properties (Private and City-Owned)

- An apparent play fort constructed of tree limbs and trunks was discovered by project personnel during the week of May 25, 2010, on City-owned property MP-01070-VL, Ph II. This is a supplemental standards property that was transferred to the City by DOE in 2000.

Conditions of the land transfer for this and the remaining parcels were that the City maintains the lands for public day-use recreation with no overnight camping. The presence of the lean-to (play fort), including new stone fire rings, and off-road vehicle use, was recognized by project personnel as a potential violation of the land use restriction. DOE was promptly notified of the condition as is required in *DOE LM LTSM Plan for the Monticello NPL Sites*. DOE and project personnel determined that the activity was play-related to a local youth. DOE contacted the adjacent land-owner whose grandson was identified as the likely youth. The landowner confirmed the likeliness that the youth was using the property as described and that he would instruct the youth of the no camping restriction. The landowner questioned whether the boundary of the supplemental was adequately posted to indicate the day-use only/no overnight camping restrictions. The supplemental standards area is clearly delineated by a three-strand wire fence (no barbs) installed by DOE during site restoration. At that time the fence was adequately posted with signs provided by DOE. The signs have since been removed by unknown parties. DOE will determine if additional posting is needed to more effectively communicate the land use restrictions. If additional signage is necessary, DOE will coordinate with the City of Monticello to resolve the issue. On-site personnel returned to the play fort on June 19 and 20, 2010. The follow-up visits identified no further disturbance or evidence of continued use or evidence that soil had been removed from the disturbed area. Radiological scans of the disturbed area indicated activities consistent with background levels. DOE expects to modify the quarterly inspection forms to explicitly include surveillance observations on the supplemental standards properties.

- The U.S. Department of Energy (DOE) continues the process to excess DOE-owned property MP-01080-VL, east of the repository site. GSA representatives from Salt Lake City, Utah, visited the property on June 16, 2010. The GSA representatives were escorted by project and on-site personnel.

1.4 Temporary Storage Facility (TSF)

- Approximately 55 cubic yards of radiologically contaminated material were transferred from the TSF to the DOE LM Grand Junction Disposal, Grand Junction, Colorado, on June 22 and 23, 2010. DOE site manager was present in Monticello to observe the activity on June 22, 2010. DOE typically initiates material transfer when TSF contents approach 75 cubic yards. DOE requested that the TSF transfer occur at lesser volume on this occasion in anticipation of the planned construction activities in Monticello this season. The Utah department of radiation control was notified of the shipment on June 25, 2010.

1.5 Operable Unit (OU) III (Surface Water and Groundwater)

- No issues were observed by project staff or on-site personnel and none were reported by outside parties regarding the OU III institutional controls that affect land use and groundwater use.
- Biomonitoring was conducted during June 16 through 18, 2010, under Program Directive MNT-2010-03 and accompanying sampling and analysis plan. The Program Directive and sampling analysis plan were reviewed by EPA and UDEQ prior to conducting the field work. The work scope consisted of the collection of benthic macroinvertebrates on site at Wetland 3 and the Sediment Pond, and off site at Verdure Creek (analog location) and upstream of the former mill site on Montezuma Creek. Preliminary results for

biomonitoring conducted in June 2010 are expected to be available to the BTAG by mid-August, 2010.

1.6 Ex Situ Groundwater Treatment System

- Water samples are collected monthly at influent and effluent locations to monitor the performance of the treatment system in removing uranium and to monitor compliance with the pH and iron discharge allowances.
- Discharge allowances to Montezuma Creek were negotiated between DOE, EPA, UDEQ, and Utah Department of Water Quality (DWQ) in May 2008. These allowances are based on the Utah standard for acute iron toxicity to aquatic wildlife (1 mg/L) and the in-stream standard for pH for all water-use categories. The default perennial flow rate for the receiving surface water (Montezuma Creek) is 2 cubic feet per second, as established by DWQ. The maximum allowed discharge rate of treated water to Montezuma Creek is 10 gpm. Discharge of treated water to the infiltration trench was negotiated with the UDEQ Underground Injection Control Program in June 2005.
- Table 1 provides monthly results of total iron and pH for the combined effluent of the two treatment cells. Iron concentration and pH for May and June are within the discharge allowances as specified by the Utah Division of Water Quality. The treatment was not sampled in April 2010 because of planning and scheduling errors. March, May, and June 2010 results for pH and iron were well within the compliance allowances. Flow rates in April 2010 were less than March and greater than May 2010 rates and so the compliance allowance likely were met in April.
- Table 2 summarizes recent treatment system performance. Flow information is from the DOE Office of Legacy Management (LM) Systems Operations and Analysis at Remote Sites telemetry system. Uranium concentrations are from inflow and outflow water samples collected monthly. Prior to June 2008, water samples were analyzed at the LM Environmental Sciences Laboratory (ESL) in Grand Junction. Samples have since been analyzed at the LM contract laboratory in Fort Collins, Colorado. DOE on occasion analyzes a split of selected samples at the ESL.
- Flow rates were modified and the configuration of the outfall plumbing and metering was modified on several occasions during the quarter. These activities were conducted in attempt to calibrate the outfall meters with the inflow meters. Calibration is needed in order to accurately measure the rate that treated water is discharged to the creek (not to exceed 10 gpm) while some of the treated water is discharge to the infiltration trench. The flow rate was increased to about 8 gpm in the last week of June 2010.
- No water was discharged to the infiltration trench during the quarter.
- Approximately 0.7 million gallons of water were treated during the quarter, and approximately 1.5 pounds of uranium were removed from the aquifer during the quarter as a result of groundwater treatment.
- The treatment media was most recently changed out on March 18, 2009. Uranium removal from the influent groundwater remained highly effective through the quarter.

Table 1. Treatment System Compliance Summary

Outfall to Creek (sample location TCOU)	March 2010	April 2010	May 2010	June 2010
pH ^a	7.42	No data	6.86	7.34
Iron (total, micrograms per liter) ^b	20	No data	12	17.4

^aDischarge allowance range = 6.5–9 standard units

^bDischarge limit = 45.4 milligrams per liter at outfall to creek

Table 2. Treatment System Performance Summary

Treatment Parameter	March 2010	April 2010	May 2010	June 2010
Gallons treated	456,490	340,275	178,280	181,700
Average treatment rate, gpm	10.0	7.9	4.0	4.2
Uranium influent, micrograms per liter	350	285 ^a	220	258.5
Uranium outfall, micrograms per liter	11	7.9 ^a	4.7	13.3
Uranium mass removed, pounds	1.29	0.80	0.32	0.37
Cumulative uranium mass removed, pounds	35.0	35.8	36.1	36.5
Cumulative volume treated, gallons	14,252,798	14,593,073	14,771,353	14,953,053

^aAssumed value based on median of March and May 2010 results.

2.0 MVP Activities and Status

2.1 City Streets and Utilities, and Utah Department of Transportation (UDOT) Rights-of-Way

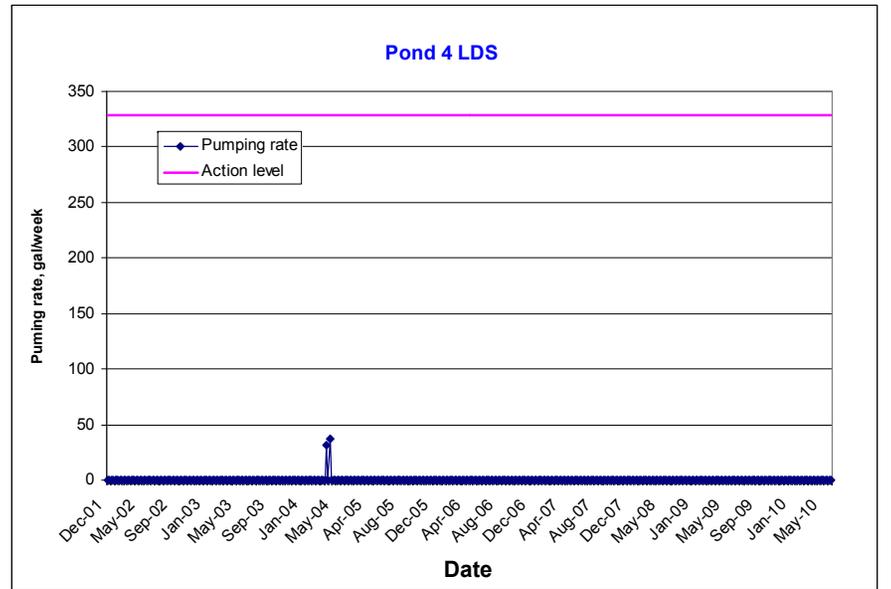
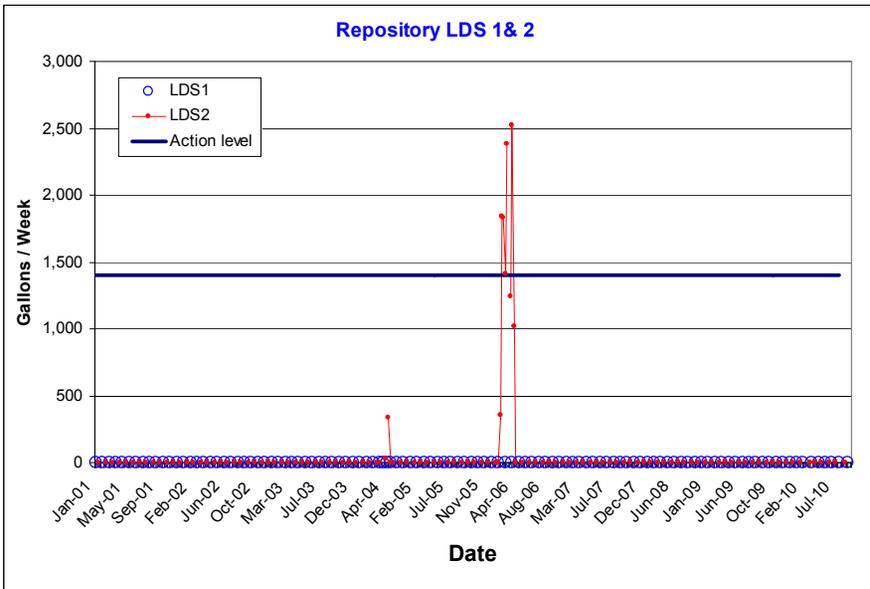
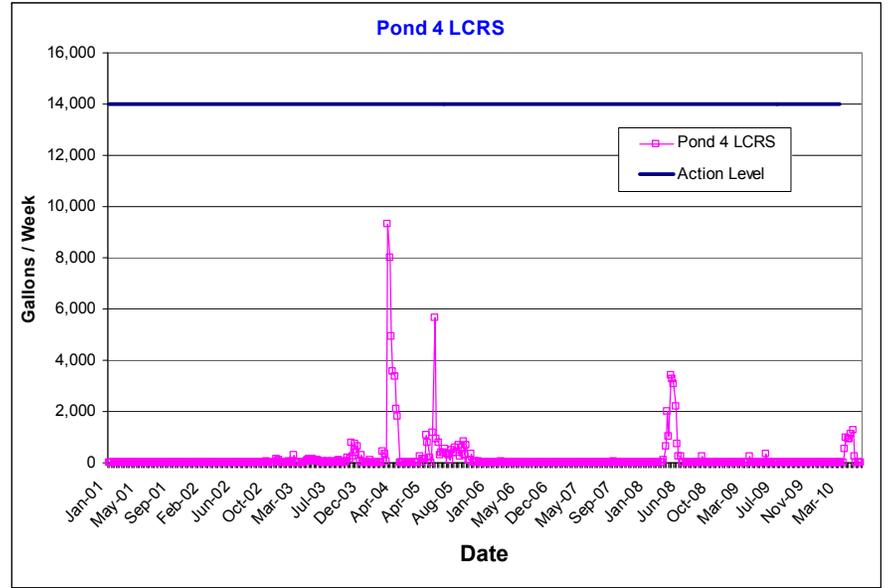
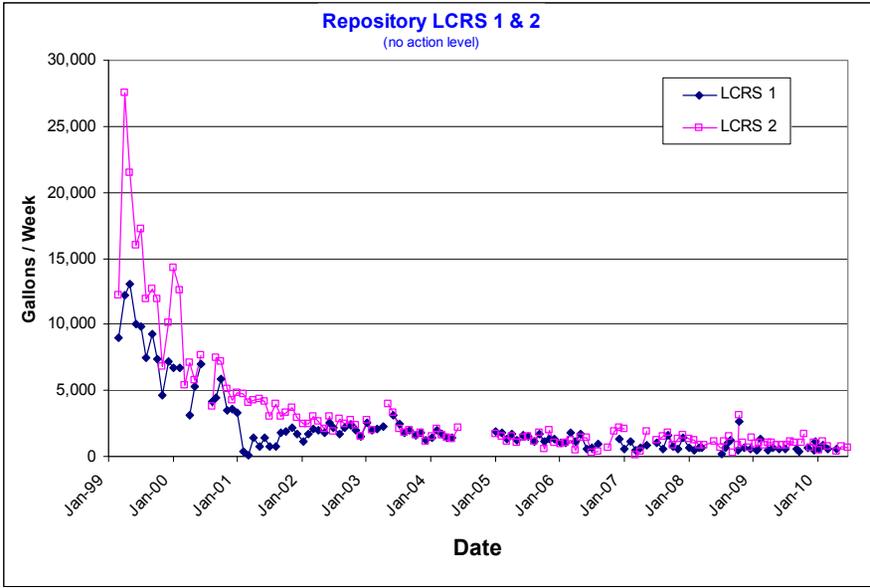
- On-site LTSM staff continue to coordinate with City, UDOT, and utility company officials regarding radiological control at highway, street, and utility excavations.
- Annual updates to the radiological as-built drawings were completed in and delivered to on-site staff in May 2010. The drawings document the location of radiological contamination encountered in City Streets and Utilities and UDOT Rights-of-Way supplemental standards properties. The updated maps are provided to on-site staff for field use during the year.
- On-site LTSM staff report that City construction activities resumed in May 2010 to install/replace storm drains in the southeast section of the city. The City received significant funding to rebuilt sections of several roads in the city. The natural gas provider (Questar) awarded the contract for gas service upgrades in the city. The work is expected to begin end of July or early August, 2010. Mill tailings and or radiologically contaminated soil are expected to be encountered during each of these activities.

3.0 Schedule and Deliverables

- In correspondence dated March 25, 2010, DOE documented that DOE, EPA, and UDEQ agreed to modify the deliverable schedule for the annual site management plan so that the update to Draft status is due to EPA and UDEQ for review by August 1 annually. The previous submittal schedule was Draft Final by September 30 annually. As of April 7, 2010, per a telephone conversation, EPA wants to reconfirm its position to the deliverable status of the annual update.

Table 1. Near-Term Activity and Deliverables Schedule

Near Term Activity/Deliverable	Status/Schedule
FFA quarterly report for January 2010–March 2010	Submitted by e-mail to EPA and UDEQ on April 9, 2010.
FFA semi-annual meeting	Held in Grand Junction, CO, April 21, 2010. Meeting minutes submitted by e-mail on May 10, 2010, after EPA and UDEQ review.
Site Management Plan, Section 5.0, 2010 annual update	Submittal date to be determined.
Remedial Design/Remedial Action Work Plan for Groundwater Remediation Expansion	Submittal date to be determined.
MMTS OU III Annual Groundwater Report, May 2009 through April 2010	Submit to EPA and UDEQ in September 2010.
Analyze and distribute 2010 biomonitoring results	Reporting format and schedule to be determined.
BTAG meeting/conference call regarding future scope	Schedule to be determined pending availability of 2010 results
Annual Site Inspection	September 2010
FFA Meeting	September 2010 concurrent with site inspection
FFA quarterly report for July 2010–September 2010	Submit to EPA and UDEQ by October 10, 2010.



Repository Area Surveillance Checklist

Monthly Surveillance Quarterly Surveillance (Feb., May, Aug., Nov.)

Storm Event Triggered Surveillance due to inches of rainfall over the past 24 hours.

Inspection Item	Acceptable (Yes/No)	Comments and Recommendations
Condition of:		
Fences and gates	<u>YES</u>	_____
Roads ^a	<u>YES</u>	_____
Signs	<u>YES</u>	_____
Site monuments	<u>YES</u>	_____
Drainage ditches ^a	<u>YES</u>	_____
Manholes	<u>YES</u>	_____
Vegetation	<u>YES</u>	_____
Evidence of erosion of:		
Top of disposal cell ^a	<u>NO</u>	_____
Disposal cell sideslopes ^a	<u>NO</u>	_____
Ditches	<u>NO</u>	_____
Surrounding area	<u>NO</u>	_____
Evidence of:		
Vandalism	<u>NO</u>	_____
Intrusion by livestock	<u>NO</u>	_____
Burrowing animal damage	<u>NO</u>	_____
Intrusion by humans	<u>NO</u>	_____
Accumulation of trash	<u>NO</u>	_____

Additional Quarterly Surveillance Requirements

Note: All transects, shown in Figure 3-1, must be walked during this inspection.

Condition of:		
Settlement plate structures	<u>YES</u>	_____
Manholes ^b	<u>YES</u>	_____
Sediment Ponds	<u>NA</u>	_____
Evidence of:		
Structural Instability	<u>NO</u>	_____

Additional Comments Still a lot of SNOW ON COVER

Signature Jaded Moon
Monticello LM Representative

Date 4-2-2010

^aInspections required following a significant storm event
^bOpen to inspect quarterly

Repository Area Surveillance Checklist

Monthly Surveillance Quarterly Surveillance (Feb. May, Aug., Nov.)

Storm Event Triggered Surveillance due to _____ inches of rainfall over the past 24 hours.

Inspection Item	Acceptable (Yes/No)	Comments and Recommendations
Condition of:		
Fences and gates	<u>Yes</u>	_____
Roads ^a	<u>Yes</u>	_____
Signs	<u>Yes</u>	_____
Site monuments	<u>Yes</u>	_____
Drainage ditches ^a	<u>Yes</u>	_____
Manholes	<u>Yes</u>	_____
Vegetation	<u>Yes</u>	_____
Evidence of erosion of:		
Top of disposal cell ^a	<u>NO</u>	_____
Disposal cell sideslopes ^a	<u>NO</u>	_____
Ditches	<u>NO</u>	_____
Surrounding area	<u>NO</u>	_____
Evidence of:		
Vandalism	<u>NO</u>	_____
Intrusion by livestock	<u>NO</u>	_____
Burrowing animal damage	<u>NO</u>	_____
Intrusion by humans	<u>NO</u>	_____
Accumulation of trash	<u>NO</u>	_____

Additional Quarterly Surveillance Requirements

Note: All transects, shown in Figure 3-1, must be walked during this inspection.

Condition of:		
Settlement plate structures	<u>YES</u>	_____
Manholes ^b	<u>YES</u>	_____
Sediment Ponds	<u>NA</u>	_____

Evidence of:		
Structural Instability	<u>NO</u>	_____

Additional Comments still snow drifts on portions of cover

Signature *Jed Mann*
 Monticello LM Representative

Date 05-03-2010

^aInspections required following a significant storm event
^bOpen to inspect quarterly

Repository Area Surveillance Checklist

Monthly Surveillance Quarterly Surveillance (Feb., May, Aug., Nov.)

Storm Event Triggered Surveillance due to inches of rainfall over the past 24 hours.

Inspection Item	Acceptable (Yes/No)	Comments and Recommendations
Condition of:		
Fences and gates	yes	
Roads ^a	yes	
Signs	yes	
Site monuments	yes	
Drainage ditches ^a	yes	
Manholes	yes	
Vegetation	yes	
Evidence of erosion of:		
Top of disposal cell ^a	NO	
Disposal cell sideslopes ^a	NO	
Ditches	NO	
Surrounding area	NO	
Evidence of:		
Vandalism	NO	
Intrusion by livestock	NO	
Burrowing animal damage	NO	
Intrusion by humans	NO	
Accumulation of trash	NO	

Additional Quarterly Surveillance Requirements

Note: All transects, shown in Figure 3-1, must be walked during this inspection.

Condition of:		
Settlement plate structures	_____	_____
Manholes ^b	_____	_____
Sediment Ponds	_____	_____
Evidence of:		
Structural Instability	_____	_____

Additional Comments Cover is finally snow free

Signature Zodd Moon
 Monticello LM Representative

Date 06-03-2010

^aInspections required following a significant storm event
^bOpen to inspect quarterly

Monthly Pond 4 Surveillance Checklist

Level of Water in Pond 4 4.2

Inspection Item	Acceptable (Yes/No)	Comments & Recommendation
Condition of:		
Fences, gates, and locks	<u>yes</u>	_____
Roads	<u>yes</u>	_____
Signs	<u>yes</u>	_____
Visible piping	<u>yes</u>	_____
Visible liner and anchors	<u>yes</u>	_____
Rescue equipment	<u>yes</u>	_____
Evidence of erosion of:		
Top of Pond 4 berm	<u>NO</u>	_____
Pond 4 sideslopes	<u>NO</u>	_____
Ditches	<u>NO</u>	_____
Surrounding area	<u>NO</u>	_____
Seepage from Pond 4	<u>NO</u>	_____
Overtopping of Pond 4	<u>NO</u>	_____
Evidence of:		
Vandalism	<u>NO</u>	_____
Intrusion by wildlife	<u>NO</u>	_____
Intrusion by humans	<u>NO</u>	_____
Accumulation of trash	<u>NO</u>	_____

Additional Comments lots of snow & ice covering pond 4

Monticello LM Representative Judd Moon Date 4-2-2010

Monthly Pond 4 Surveillance Checklist

Level of Water in Pond 4 3.9

Inspection Item	Acceptable (Yes/No)	Comments & Recommendation
Condition of:		
Fences, gates, and locks	<u>yes</u>	
Roads	<u>yes</u>	
Signs	<u>yes</u>	
Visible piping	<u>yes</u>	
Visible liner and anchors	<u>yes</u>	
Rescue equipment	<u>yes</u>	

Evidence of erosion of:		
Top of Pond 4 berm	<u>NO</u>	
Pond 4 sideslopes	<u>NO</u>	
Ditches	<u>NO</u>	
Surrounding area	<u>NO</u>	
Seepage from Pond 4	<u>NO</u>	
Overtopping of Pond 4	<u>NO</u>	

Evidence of:		
Vandalism	<u>NO</u>	
Intrusion by wildlife	<u>NO</u>	
Intrusion by humans	<u>NO</u>	
Accumulation of trash	<u>NO</u>	

Additional Comments Still lots of frozen snow

Monticello LM Representative Judd Moon Date 5-3-2010

Monthly Pond 4 Surveillance Checklist

Level of Water in Pond 4 3.5

Inspection Item	Acceptable (Yes/No)	Comments & Recommendation
Condition of:		
Fences, gates, and locks	<u>yes</u>	
Roads	<u>yes</u>	
Signs	<u>NO</u>	<u>Some missing</u>
Visible piping	<u>yes</u>	
Visible liner and anchors	<u>yes</u>	
Rescue equipment	<u>yes</u>	
Evidence of erosion of:		
Top of Pond 4 berm	<u>NO</u>	
Pond 4 sideslopes	<u>NO</u>	
Ditches	<u>NO</u>	
Surrounding area	<u>NO</u>	
Seepage from Pond 4	<u>NO</u>	
Overtopping of Pond 4	<u>NO</u>	
Evidence of:		
Vandalism	<u>NO</u>	
Intrusion by wildlife	<u>NO</u>	
Intrusion by humans	<u>NO</u>	
Accumulation of trash	<u>NO</u>	

Additional Comments Red rope & signs need to be replaced.

Monticello LM Representative Zodd Mann Date 6-3-2010

**Monticello Long-Term Surveillance and Maintenance
Temporary Storage Facility Record Book
Inspection Report**

**Acceptable?
Yes / No**

- Y Was the gate locked upon arrival?
- Y Are signs posted in accordance with Section 3.4.4?
- Y Are all postings legible?
- Y Are enclosures on the concrete bin and stored drum containers tight?
- Y Are containers in good physical condition (no rust, no holes, no bulges, etc.)?
- 50 How much radiologically contaminated material is in the concrete bin? Note: the material should be shipped when the volume in storage approaches 75 percent of the storage capacity.
- Y Is the surface area of the TSF in good physical condition (no erosion, no flood damage, no excessive vegetation growth, etc.)?
- Y Has radiological monitoring been conducted in accordance with Section 3.4.5?
- Y Is the security fence in good condition?

Comments: _____

 Todd Moon
Signature of Monticello LM Representative

 4-2-2010
Date of Inspection

**Monticello Long-Term Surveillance and Maintenance
Temporary Storage Facility Record Book
Inspection Report**

Acceptable?

Yes / No

- 4 Was the gate locked upon arrival?
- 4 Are signs posted in accordance with Section 3.4.4?
- 4 Are all postings legible?
- 4 Are enclosures on the concrete bin and stored drum containers tight?
- 4 Are containers in good physical condition (no rust, no holes, no bulges, etc.)?
- 50 How much radiologically contaminated material is in the concrete bin? Note: the material should be shipped when the volume in storage approaches 75 percent of the storage capacity.
- 4 Is the surface area of the TSF in good physical condition (no erosion, no flood damage, no excessive vegetation growth, etc.)?
- 4 Has radiological monitoring been conducted in accordance with Section 3.4.5?
- 4 Is the security fence in good condition?

Comments: _____

Judd Moon
Signature of Monticello LM Representative

5-5-10
Date of Inspection

Monticello Long-Term Surveillance and Maintenance
Temporary Storage Facility Record Book
Inspection Report

Acceptable?
Yes / No

- Was the gate locked upon arrival?
- Are signs posted in accordance with Section 3.4.4?
- Are all postings legible?
- Are enclosures on the concrete bin and stored drum containers tight?
- Are containers in good physical condition (no rust, no holes, no bulges, etc.)?
- How much radiologically contaminated material is in the concrete bin? Note: the material should be shipped when the volume in storage approaches 75 percent of the storage capacity.
- Is the surface area of the TSF in good physical condition (no erosion, no flood damage, no excessive vegetation growth, etc.)?
- Has radiological monitoring been conducted in accordance with Section 3.4.5?
- Is the security fence in good condition?

Comments: George Rice & Chris Baird 6-22-10 08:00-14:30 1 Loader
George Rice & Chris Baird 6-23-10 07:30-11:00 1 Loader

Jodd Moon
Signature of Monticello LM Representative

6-23-10
Date of Inspection

MONTHLY CLIMATOLOGICAL SUMMARY for APR. 2010

NAME: Monticello CITY: STATE:
 ELEV: 7000 ft LAT: 37° 36' 00" N LONG: 122° 06' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	29.8	39.2	12:30a	23.2	10:00p	35.2	0.0	0.20	9.3	31.0	12:30a	SSW
2	28.7	36.2	3:30p	19.7	2:30a	36.3	0.0	0.01	7.8	27.0	9:00a	NNW
3	34.7	44.1	4:30p	23.6	7:00a	30.3	0.0	0.00	8.7	28.0	5:30a	S
4	42.2	51.7	6:00p	30.1	7:00a	22.8	0.0	0.00	10.1	30.0	11:00p	SSW
5	43.5	52.6	3:30p	34.3	12:00m	21.5	0.0	0.00	18.8	45.0	12:00m	SSW
6	30.4	35.6	4:30p	24.7	7:00a	34.6	0.0	0.00	12.5	48.0	12:30a	NW
7	32.0	41.7	4:00p	23.2	7:00a	33.0	0.0	0.00	11.3	26.0	9:00a	NNW
8	37.9	49.4	6:00p	25.9	6:00a	27.1	0.0	0.00	5.5	20.0	4:30p	S
9	46.7	58.1	5:30p	35.5	3:30a	18.3	0.0	0.00	7.1	22.0	2:30p	SSW
10	48.4	58.9	5:00p	36.6	5:30a	16.6	0.0	0.00	7.1	23.0	2:30p	SSW
11	50.1	62.3	5:00p	36.8	6:30a	14.9	0.0	0.00	7.5	26.0	4:30p	SSE
12	50.6	62.9	3:30p	35.9	12:00m	14.4	0.0	0.00	15.4	44.0	4:30p	SSW
13	36.7	47.0	4:30p	29.5	7:00a	28.3	0.0	0.03	9.1	26.0	12:30a	SSW
14	44.0	56.6	6:00p	31.2	5:30a	21.0	0.0	0.00	7.1	28.0	12:30p	W
15	51.9	65.1	4:30p	39.0	5:30a	13.1	0.0	0.00	4.4	18.0	1:00p	W
16	54.0	66.6	4:00p	42.2	7:00a	11.1	0.0	0.00	7.1	29.0	9:30p	W
17	51.4	62.0	4:00p	42.0	3:30a	13.6	0.0	0.00	8.7	35.0	3:30p	SSW
18	54.1	64.9	2:30p	41.7	6:30a	10.9	0.0	0.00	6.2	33.0	3:30p	S
19	53.9	66.8	4:00p	43.8	6:30a	11.1	0.1	0.00	6.3	30.0	4:30p	S
20	53.6	63.8	4:00p	41.8	5:30a	11.4	0.0	0.00	7.2	27.0	3:30p	S
21	47.8	57.8	11:30a	31.5	12:00m	17.2	0.0	0.27	12.6	34.0	11:30a	S
22	34.4	44.1	5:30p	24.5	8:00a	30.6	0.0	0.15	6.8	18.0	6:00p	SSE
23	39.5	44.6	12:30p	30.7	6:30a	25.5	0.0	0.00	11.8	35.0	12:00m	NNW
24	45.3	55.3	4:00p	36.6	7:00a	19.7	0.0	0.00	15.0	41.0	2:30a	NNW
25	49.7	60.1	3:30p	38.3	6:00a	15.3	0.0	0.00	8.0	27.0	12:30p	NNW
26	46.7	58.2	5:00p	37.0	4:00a	18.3	0.0	0.00	10.8	30.0	9:30a	NNW
27	53.8	65.8	5:00p	37.3	4:30a	11.2	0.0	0.00	10.0	34.0	11:00p	SSW
28	56.5	66.6	3:00p	46.3	7:30a	8.5	0.1	0.00	18.8	45.0	5:30p	SW
29	34.1	52.0	12:30a	26.0	12:00m	30.9	0.0	0.04	12.1	46.0	2:00a	NNW
30	34.4	43.5	4:00p	25.6	2:00a	30.6	0.0	0.00	9.9	29.0	11:30a	NNW
	43.9	66.8	19	19.7	2	633.3	0.2	0.70	9.8	48.0	6	SSW

Max >= 90.0: 0
 Max <= 32.0: 0
 Min <= 32.0: 14
 Min <= 0.0: 0
 Max Rain: 0.27 ON 04/21/10
 Days of Rain: 5 (>.01 in) 3 (>.1 in) 0 (>1 in)
 Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for MAY, 2010

NAME: Monticello CITY: STATE:
 ELEV: 7000 ft LAT: 37° 36' 00" N LONG: 122° 06' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	37.9	48.6	3:30p	28.1	6:30a	27.1	0.0	0.00	9.6	33.0	6:00p	NNW
2	36.9	46.8	6:00p	28.2	6:00a	28.1	0.0	0.00	11.5	34.0	12:30p	NNW
3	45.8	56.7	5:30p	33.1	6:30a	19.2	0.0	0.00	10.5	27.0	5:00p	NNW
4	54.1	67.0	3:00p	40.0	4:30a	11.0	0.1	0.00	11.1	31.0	5:00p	SSW
5	56.3	67.5	4:30p	43.4	4:30a	8.9	0.3	0.00	9.7	33.0	7:00p	N
6	51.1	63.1	1:30p	36.0	12:00m	13.9	0.0	0.00	11.2	41.0	1:30p	NNW
7	41.8	55.6	4:30p	29.9	6:30a	23.2	0.0	0.00	7.8	25.0	8:00a	N
8	53.5	67.4	4:00p	38.0	5:00a	11.6	0.1	0.00	10.5	36.0	2:30p	W
9	58.3	70.4	5:00p	42.1	6:30a	7.4	0.7	0.00	11.9	37.0	5:00p	N
10	49.4	58.6	4:30p	36.2	7:00a	15.6	0.0	0.01	9.6	32.0	4:00p	SSW
11	43.2	51.0	11:30a	32.6	12:00m	21.8	0.0	0.00	16.0	43.0	3:30p	SSW
12	39.0	49.4	3:30p	28.0	5:30a	26.0	0.0	0.01	6.7	21.0	4:00p	SSW
13	40.0	47.4	6:00p	34.6	6:00a	25.0	0.0	0.32	3.5	20.0	1:30p	ENE
14	45.2	53.7	12:30p	36.9	3:00a	19.8	0.0	0.02	5.5	23.0	1:30p	NW
15	46.7	58.1	6:00p	33.4	5:00a	18.3	0.0	0.00	3.7	19.0	2:30p	NW
16	52.5	66.0	5:30p	38.4	6:00a	12.5	0.0	0.00	4.3	18.0	1:00p	NW
17	59.8	71.6	4:30p	43.4	4:30a	6.5	1.3	0.00	8.9	30.0	11:30a	SSW
18	52.6	59.6	12:30a	44.0	11:30p	12.4	0.0	0.09	10.6	36.0	4:00a	SSW
19	51.2	61.5	5:00p	39.3	6:00a	13.8	0.0	0.00	10.1	28.0	10:30a	NNW
20	56.6	68.9	5:00p	40.4	6:30a	9.0	0.6	0.00	5.7	23.0	5:30p	SSW
21	61.4	74.3	5:00p	43.7	6:30a	5.9	2.4	0.01	13.9	45.0	5:30p	SSW
22	59.3	69.0	2:30p	50.3	12:00m	6.0	0.3	-4.49	20.1	44.0	10:00a	SSW
23	54.1	63.5	5:30p	44.3	3:30a	10.9	0.0	5.85	17.0	43.0	5:30p	SSW
24	42.1	51.2	5:30p	31.8	6:30a	22.9	0.0	22.50	12.6	42.0	12:30a	SSW
25	51.9	64.0	4:30p	35.9	6:30a	13.1	0.0	0.00	5.4	24.0	12:30p	WNW
26	58.8	71.5	5:00p	42.9	4:30a	7.6	1.4	0.00	10.4	42.0	2:30p	S
27	64.2	76.8	3:30p	46.3	6:30a	4.5	3.7	0.00	14.3	39.0	12:30p	SSW
28	64.4	78.4	4:00p	47.6	7:00a	4.5	3.9	0.00	16.0	50.0	1:30p	SSW
29	56.8	64.9	3:00p	46.1	6:30a	8.2	0.0	0.00	7.8	28.0	1:00a	N
30	54.8	68.9	5:00p	39.1	6:30a	10.7	0.5	0.00	7.6	29.0	3:30a	N
31	61.4	74.0	5:00p	43.5	3:30a	6.0	2.4	0.00	7.2	27.0	2:00p	WNW

	51.6	78.4	28	28.0	12	431.4	17.7	24.33	10.0	50.0	28	SSW

Max >= 90.0: 0
 Max <= 32.0: 0
 Min <= 32.0: 5
 Min <= 0.0: 0

Max Rain: 22.50 ON 05/24/10

Days of Rain: 5 (>.01 in) 3 (>.1 in) 2 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for JUN. 2010

NAME: Monticello CITY: STATE:
 ELEV: 7000 ft LAT: 37° 36' 00" N LONG: 122° 06' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	61.6	71.3	4:00p	50.0	7:00a	4.6	1.2	0.00	7.5	26.0	4:00p	SW
2	63.5	71.0	5:30p	54.8	6:00a	3.0	1.5	0.00	2.7	15.0	12:30p	SSW
3	65.8	77.4	5:00p	50.5	6:30a	3.1	4.0	0.00	7.0	33.0	2:00p	SSW
4	68.7	81.6	4:30p	52.4	6:00a	2.5	6.2	0.00	7.3	28.0	12:30p	W
5	74.1	86.3	4:30p	58.7	6:00a	0.3	9.5	0.00	5.2	20.0	11:00a	W
6	76.9	88.2	5:30p	61.5	5:00a	0.2	12.1	0.00	6.9	26.0	2:00p	WNW
7	75.4	84.6	5:30p	62.3	5:30a	0.1	10.4	0.00	9.7	26.0	10:00a	SSW
8	74.2	84.5	3:00p	57.7	7:00a	0.4	9.6	0.00	6.6	26.0	3:00p	W
9	73.2	83.7	4:30p	60.6	6:30a	0.4	8.6	0.00	8.8	31.0	3:30p	SSW
10	67.6	78.9	5:00p	52.8	5:30a	2.3	4.9	0.00	10.6	36.0	2:30p	SSW
11	60.8	67.7	11:30a	51.3	4:00a	4.6	0.4	0.00	7.4	28.0	12:30p	SSW
12	50.4	59.5	2:00p	42.6	12:00m	14.6	0.0	0.54	4.8	44.0	3:00p	SE
13	49.3	60.0	5:00p	38.6	6:00a	15.7	0.0	0.07	6.5	21.0	10:00a	W
14	53.0	64.1	5:30p	41.0	5:00a	12.0	0.0	0.01	6.5	23.0	4:30p	NNE
15	59.6	71.5	5:30p	45.3	5:00a	7.0	1.6	0.00	5.1	20.0	1:00p	WNW
16	65.1	77.2	5:30p	48.9	6:00a	4.0	4.1	0.00	12.2	39.0	3:30p	SSW
17	60.5	74.3	4:00p	42.0	5:30a	6.9	2.4	0.00	7.5	24.0	12:30p	NNW
18	64.7	77.6	5:30p	49.4	5:30a	4.3	4.0	0.00	7.2	26.0	3:30p	SSW
19	66.4	78.3	4:30p	49.4	6:30a	3.2	4.6	0.00	8.8	31.0	2:00p	SSW
20	65.5	78.2	4:00p	48.1	5:30a	3.6	4.2	0.00	8.3	33.0	2:00p	SSW
21	64.4	78.9	4:30p	50.0	6:00a	4.5	3.9	0.00	7.2	29.0	1:30p	SSW
22	63.5	77.2	5:30p	47.3	6:30a	5.1	3.6	0.00	6.4	23.0	12:00p	SW
23	68.5	81.6	5:30p	52.6	5:00a	2.8	6.3	0.00	6.5	20.0	4:00p	W
24	70.9	84.1	4:00p	55.7	6:00a	1.3	7.3	0.00	7.3	25.0	4:00p	W
25	71.1	81.8	5:00p	58.4	6:00a	0.8	6.8	0.00	6.3	36.0	3:00p	SSW
26	69.9	80.9	4:30p	59.5	5:00a	0.9	5.8	0.00	6.6	26.0	2:00a	SSW
27	71.3	80.7	2:30p	60.1	6:30a	0.6	6.9	0.00	6.4	27.0	1:00p	W
28	71.0	85.8	5:00p	53.9	6:30a	1.4	7.4	0.00	7.0	23.0	1:00p	SSW
29	63.8	67.1	8:30a	60.6	6:00a	0.5	0.1	0.00	7.6	19.0	8:30a	SW
30												

	65.9	88.2	6	38.6	13	110.7	137.4	0.62	7.2	44.0	12	SSW

Max >= 90.0: 0
 Max <= 32.0: 0
 Min <= 32.0: 0
 Min <= 0.0: 0

Max Rain: 0.54 ON 06/12/10

Days of Rain: 2 (>.01 in) 1 (>.1 in) 0 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration