Department of Energy
Office of Legacy Management

FEB 16 2010

William von Till
U.S. Nuclear Regulatory Commission
Mail Stop T8 F5
Washington, DC 20555-0001

Subject: Preliminary Final Long-Term Surveillance Plan for the Maybell West, Colorado, UMTRCA Title II Disposal Site

Dear Mr. von Till:

Please find enclosed for U.S. Nuclear Regulatory Commission (NRC) acceptance the preliminary final *Long-Term Surveillance Plan for the Maybell West (UMTRCA Title II) Disposal Site, Moffat County, Colorado* (LTSP). This LTSP captures information provided in licensee site documents and establishes the post-closure care program for the site. This LTSP is intended to satisfy the requirements set forth in 10 CFR 40.28 whereby the long-term custodian must provide an LTSP to the NRC as a final step in the site transition process (i.e., termination of Umetco Minerals Corporation's specific license with the State of Colorado and inclusion of the site under the NRC general license at 10 CFR 40.28 for long-term care).

The draft LTSP was previously submitted to NRC for follow-up technical review by letter dated April 23, 2009. The enclosed document includes revisions that have been made since the previous submittal:

- Address NRC review comments received by letter dated June 10, 2009;
- Provide a copy of the recorded warranty deed for the 20-acre parcel transferred in fee from Umetco Minerals Corporation to the U.S. Department of Energy (DOE);
- Provide a copy of the recorded deed notice filed in the local public land records regarding the unsecured third-party mineral rights associated with the 20-acre parcel transferred in fee from Umetco Minerals Corporation to DOE in accordance with 10 CFR 40, Appendix A, Criterion 11-C. [Please be reminded that the prior version of the LTSP submitted to NRC for technical review included a copy of the quitclaim deed for the secured portion of the third-party mineral rights (18%) associated with the 20-acre parcel and State of Colorado concurrence that a serious and documented effort to obtain the third-party mineral rights associated with the 20-acre parcel had been made in accordance with 10 CFR 40, Appendix A, Criterion 11-C]; and
- Insert a pre-transition land ownership and use map.

DOE understands that these revisions complete the LTSP and should allow NRC to provide final acceptance of this document. However, your prompt reply with any issues regarding this preliminary final LTSP or transition of the site to DOE is appreciated.

Please call me at 970-248-6048 or Tracy Ribeiro at 970-248-6621 if you have questions.

Sincerely,

Thomas C. Pauling
Environmental Team Lead

Enclosures

cc w/enclosures:
R. Chang, NRC (4 copies)

cc w/o enclosures:
T. Gieck, Umetco Minerals Corporation
J. Smith, Umetco Minerals Corporation
D. Sollenberger, NRC
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ribeior/maybell/2-10 Preliminary Final draft LTSP

LMS/MAW/S01879

Long-Term Surveillance Plan for the Maybell West (UMTRCA Title II) Disposal Site, Moffat County, Colorado

February 2010



U.S. DEPARTMENT OF ENERGY | Legacy Management

LMS/MAW/S01879

Long-Term Surveillance Plan

for the

Maybell West (UMTRCA Title II) Disposal Site
Moffat County, Colorado

February 2010

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Acronyms and Abbreviations

BLM	Bureau of Land Management
CDPHE	Colorado Department of Public Health and the Environment
CFR	*Code of Federal Regulations*
D_{50}	median diameter
DOE	U.S. Department of Energy
EMS	environmental management system
LM	Office of Legacy Management
LTSP	Long-Term Surveillance Plan
NRC	U.S. Nuclear Regulatory Commission
PLO	Public Land Order
ROW	Right Of Way
Umetco	Umetco Minerals Corporation
UMTRCA	Uranium Mill Tailings Radiation Control Act
USC	*United States Code*

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1.0 Introduction

1.1 Purpose

This Long-Term Surveillance Plan (LTSP) explains how the U.S. Department of Energy (DOE) will fulfill general license requirements of Title 10 *Code of Federal Regulations* Part 40.28 (10 CFR 40.28) as the long-term custodian of the Maybell West disposal site (formerly known as the Umetco Minerals Corporation [Umetco] Maybell Heap Leach Facility) in Moffat County, Colorado. The DOE Office of Legacy Management (LM) is responsible for the preparation, revision, and implementation of this LTSP, which specifies procedures for inspecting the site, monitoring, conducting maintenance, fulfilling annual and other reporting requirements, and maintaining records pertaining to the Maybell West disposal site.

1.2 Legal and Regulatory Requirements

The Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978 (Title 42, *United States Code*, Section 7901 [42 USC § 7901]), as amended, provides for the remediation (or reclamation) and regulation of uranium mill tailings under either Title I or Title II of the act. Title I addresses former uranium millsites that were unlicensed as of January 1, 1978, and essentially abandoned. Title II addresses uranium millsites under specific license as of January 1, 1978. In both cases, the licensing agency for uranium production is the U.S. Nuclear Regulatory Commission (NRC) or, in the case of certain Title II disposal sites, an Agreement State. The Maybell West disposal site is regulated under Title II of UMTRCA. The State of Colorado is an Agreement State.

Federal regulations at 10 CFR 40.28 provide for the licensing, custody, and long-term care of uranium and thorium mill tailings sites closed (reclaimed) under Title II of UMTRCA.

A general license is issued by NRC for the custody and long-term care—including monitoring, maintenance, and emergency measures—necessary to ensure that uranium and thorium mill tailings disposal sites will be cared for in such a manner as to protect public health, safety, and the environment after closure (completion of reclamation activities).

The general license becomes effective when NRC or an Agreement State approves the site reclamation terminates the operating license, and NRC accepts a site-specific LTSP (this document).

Requirements of the LTSP and general requirements for the long-term custody of the Maybell West disposal site specified in 10 CFR 40 are addressed in various sections of the LTSP as shown in Table 1–1.

The plans, procedures, and specifications in this LTSP are based on *Guidance for Implementing the Long-Term Surveillance Program for UMTRCA Title I and Title II Disposal Sites* (DOE 2001). Rationale and procedures in the guidance document are considered part of this LTSP.

Table 1–1. Requirements of the LTSP and the Long-Term Custodian of the Maybell West, Colorado, Disposal Site

Requirements of the LTSP		
	Requirement	***LTSP Section***
1.	Description of final site conditions	Section 2.0
2.	Legal description of site	Appendix A
3.	Description of the long-term surveillance program	Section 3.0
4.	Criteria for follow-up inspections	Section 3.5.1
5.	Criteria for routine site maintenance and emergency measures	Section 3.6.3
Requirements for the Long-Term Custodian (DOE)		
	Requirement	***LTSP Section***
1.	Notification to NRC of changes to the LTSP	Section 3.1
2.	NRC permanent right-of-entry	Section 3.1
3.	Notification to NRC of significant construction, actions, or repairs at the site.	Sections 3.5 and 3.6

1.3 Role of the U.S. Department of Energy

In 1988, DOE designated the Grand Junction facility as the program office for managing long-term surveillance and maintenance of DOE disposal sites that contain regulated low-level radioactive materials and portions of sites that no longer had a DOE mission after cleanup, as well as other sites (including UMTRCA Title I and Title II disposal sites) as assigned, and to establish a common office for the security, surveillance, monitoring, and maintenance of those sites.

In December 2003, DOE formally established the LM office. The LM mission includes "implementing long-term surveillance and maintenance projects at sites transferred to LM to ensure sustainable protection of human health and the environment." LM is responsible for implementing this LTSP after it is accepted by NRC and the site becomes regulated under the general license.

According to the objectives of DOE Order 450.1A, *Environmental Protection Program* (DOE 2008), or current guidance, DOE sites must implement sound stewardship practices protective of the air, water, land and other natural and cultural resources potentially affected by their operations. DOE Order 450.1A requires DOE sites to have an environmental management system (EMS) to implement these practices. The LM EMS incorporates federal mandates specified in Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* and DOE Order 430.2B, *Departmental Energy Renewable Energy and Transportation Management.*

The LM EMS is a systematic process for reducing the environmental impacts resulting from LM and contractor work activities, products, and services; and directs work to occur in a manner that protects workers, the public, and the environment. The process adheres to "Plan-Do-Check-Act" principles, mandates environmental compliance, and integrates green initiatives into all phases of work, including scoping, planning, construction, subcontracts, and operations. The EMS provides specific procedures that anticipate and mitigate negative impacts on the environment by promoting use of recycled materials; recycling to the extent practicable; conserving fuel, energy, and natural resources; and minimizing the generation of greenhouse gases, use of toxic chemicals, and generation of hazardous wastes.

2.0 Final Site Conditions

Reclamation at the Maybell West disposal site consisted of stabilizing the heap leach cells, salvaging equipment that could be decontaminated, demolishing the balance of site structures and equipment, and disposing of the resulting debris on site in the reclaimed heap leach cells or the reclaimed evaporation pond area. Contaminated millsite soils also were consolidated and disposed of on site. All disposed materials are isolated from the environment in engineered disposal structures.

2.1 Site History

The Maybell West disposal site was the former location of a heap leaching operation, with heap leach cells constructed and operated from 1975 through 1982 by Umetco. The site is located in a historic uranium-mining district characterized by large open pit mines and associated overburden piles (Umetco 2002).

The heap leach cells were constructed by placing and compacting a 1-foot clay liner, installing a liquor drain collection system, and constructing surrounding embankments from overburden materials. During operations, low-grade uranium ore (i.e., subgrade ore, less than 0.05 percent uranium) mined from local pits was placed into 35- to 55-foot-high heap leach cells. Sulfuric acid was used to leach the material to extract uranium minerals. The pregnant leachate was then collected by the drain system and piped to an adjacent processing plant for concentration. The plant consisted of a series of holding ponds where the leachate was either recycled to the heaps for upgrading or processed by ion exchange within the outdoor plant. Additional processing resulted in a uranium oxide precipitate that was sent off site for final purification (Umetco 2002).

Processing operations ceased in 1982, but liquid waste management operations continued. Liquid waste was managed by evaporation of pond liquids and evaporation from the surface of the heap leach cells. A spray evaporation system to increase liquid waste disposal efficiency was installed in 1988 and operated until 1994. In 1991, the sides and a portion of the top of the pile were regraded and an interim revegetated cover was placed over the heap leach materials (Umetco 1995a).

Formal decommissioning and reclamation of the site under an approved reclamation plan began in 1995 (Umetco 1995b). Final reclamation construction activities were completed in 2005 and approved by the Colorado Department of Public Health and Environment (CDPHE). A final Completion Review Report that includes post-reclamation site plans, a 2005 post-reclamation aerial photo, and pre/post-reclamation photos was submitted by CDPHE to NRC for their review in support of Umetco's license termination (CDPHE 2007).

In June 2007, NRC concurred that site reclamation was complete. The State of Colorado then terminated Umetco's operating license upon NRC's acceptance of this LTSP and inclusion of the site under the NRC general license.

A total of 1,975,000 tons of leached low-grade ore (i.e., tailings) are stabilized at the Maybell West disposal site. The total Radium-226 activity of the radioactive waste material is approximately 96 curies. The main disposal structure is referred to as the heap leach repository in site-related documentation. A smaller ancillary cell is also referenced and contains evaporation pond materials and residual contaminated debris generated at the close of reclamation activities.

2.2 General Description of the Disposal Site Vicinity

The 180-acre Maybell West disposal site is in northwestern Colorado in Moffat County, approximately 4 miles north-northeast of the town of Maybell and 25 miles west of Craig (Figure 2–1).

The site is about 2 miles northeast of the Yampa River at an elevation of about 6,200 feet. This location is within the Wyoming Basin physiographic province. Topography of the site is rolling terrain with small dry washes that flow only during intense rainfall events. The washes drain to the Yampa River. Precipitation averages 12 inches per year with a concomitant high evapotranspiration rate. Vegetation is generally sparse and consists primarily of sagebrush, saltbrush, and short grasses (Umetco 1995c). Except for the oil and gas and mineral-related activities that have occurred in the vicinity, virtually all the land near the site is used for grazing. Much of the surrounding property is administered by the U.S. Bureau of Land Management (BLM), and is not available for residential development.

2.3 Disposal Site Description

2.3.1 Site Ownership

Upon completion of reclamation work, and subsequent termination of Umetco's operating license and NRC acceptance of this LTSP, the United States Government assumed ownership of the Maybell West disposal site property. The site includes the reclaimed heap leach cells, ancillary cell, run on and runoff diversion channels, and drains and associated erosion protection systems. The site layout is illustrated on Figure 2–2.

Approximately 20-acres of the site were acquired by DOE in fee from Umetco, with the balance of the site being included under a public land order (PLO) permanent withdrawal issued by BLM. The acquired fee land included the surface rights and only a small portion of the subsurface mineral rights (18 percent); the remaining subsurface mineral rights were not included in the transfer. Permanent withdrawal protects the site with regard to both surface and subsurface interests from the point at which the PLO was posted in the Federal Register (April 18, 2008). Any existing interests that pre-date the withdrawal are considered senior to the withdrawal. However, because the site is being used for the disposal of radioactive materials, protections are afforded to the disposal site under the NRC general license at Title 10 *Code of Federal Regulations* Part 40.28 (10 CFR 40.28). Additional information regarding subsurface minerals, and the associated regulatory protections, is provided in Section 3.8.

Supporting real estate information for the site is presented in Appendix A and includes a copy of the following:

- Warranty deed.
- Permanent withdrawal notice (PLO No. 7700; Transfer of Public Land for the Maybell West, Colorado, Uranium Repository).
- Legal description for the disposal site property.

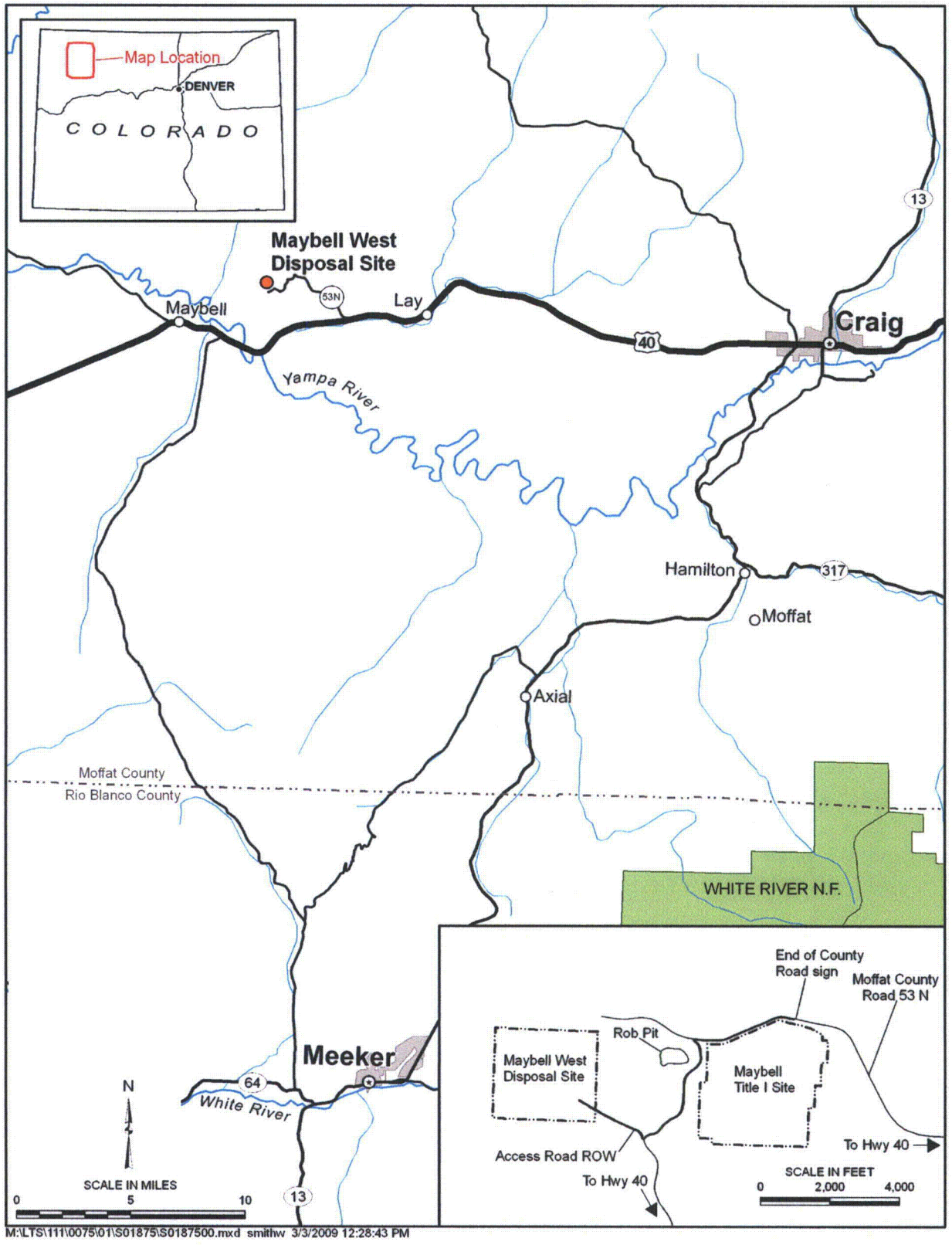


Figure 2–1. General Location Map of the Maybell West, Colorado, Disposal Site

- Fee minerals resolution documentation (i.e., deed notification to the public land record for the remaining unsecured third-party minerals, quitclaim deed for the 18 percent minerals acquired, regulatory concurrences regarding process).
- Perpetual unfettered access route right-of-way (ROW) grant with legal description (BLM serial number COC73142; 20-year issuance, renewable upon request).
- Pre-Transition Land Ownership and Use Map

2.3.2 Directions to the Disposal Site

From Maybell, Colorado, travel east on U.S. Highway 40 approximately 11 miles to the junction with County Road 53 N (Figure 2–1). Turn left and proceed northwest on County Road 53 N approximately 3 miles to the Maybell, Colorado, Title I site, where an "End of County Road" sign is posted. Continue on the dirt track that runs along the northern boundary of the Maybell Title I site; past the disposal cell. At the northwest corner of the Title I site, take the first left and follow the dirt track that winds around the Rob Pit. Continue approximately one-half mile and turn right at the first "T" in the road. Continue on for approximately one-quarter mile to the Maybell West disposal site entrance gate, which is located at the southeast corner of the site. The BLM permitted ROW that designates the official perpetual access road to the Maybell West disposal site begins at the end of County Road 53 N (Appendix A).

2.3.3 Description of Surface Conditions

The final surface conditions at the Maybell West disposal site are a combination of rock armoring and contouring to achieve the necessary surface water run on and runoff control and erosion protection to satisfy the longevity design requirements. Revegetation of disturbed areas of the site was performed to provide additional erosion protection.

The contaminated materials are contained in the reclaimed heap leach cells and the reclaimed evaporation ponds (Umetco 1995b). These two waste containment structures are referred to as the disposal cell and the ancillary cell, respectively, and are shown on Figure 2–2. The entire reclaimed heap leach cell and evaporation pond areas are riprap armored. The heap leach cells are graded to drain surface water to the center of the heap leach cell cover. A graded and riprap-armored channel (Channel No. 1) conveys surface water from the center of the disposal cell cover, down the east side slope, and discharging it offsite into the adjacent former open pit mine known as the Rob Pit. An energy dissipating structure (launch rock) was constructed at the outfall of Channel No. 1 at NRC's recommendation to protect the disposal cell from long-term erosion (CDPHE 2007).

The disposal cell (reclaimed heap leach area) occupies about 60 acres and the ancillary cell (reclaimed evaporation pond area) occupies 4.5 acres (Umetco 1995a).The 8-acre former processing area was directly adjacent to the heap leach cells and consisted of a processing plant and the evaporation ponds. The total contiguous riprap covering over the disposal cell (heap leach area) and the ancillary cell (reclaimed evaporation ponds) is approximately 72 acres of the 180-acre disposal site property. There are no monitor wells at the Maybell West disposal site. The engineered features of the site are enclosed within a standard four-strand barbed wire stock fence.

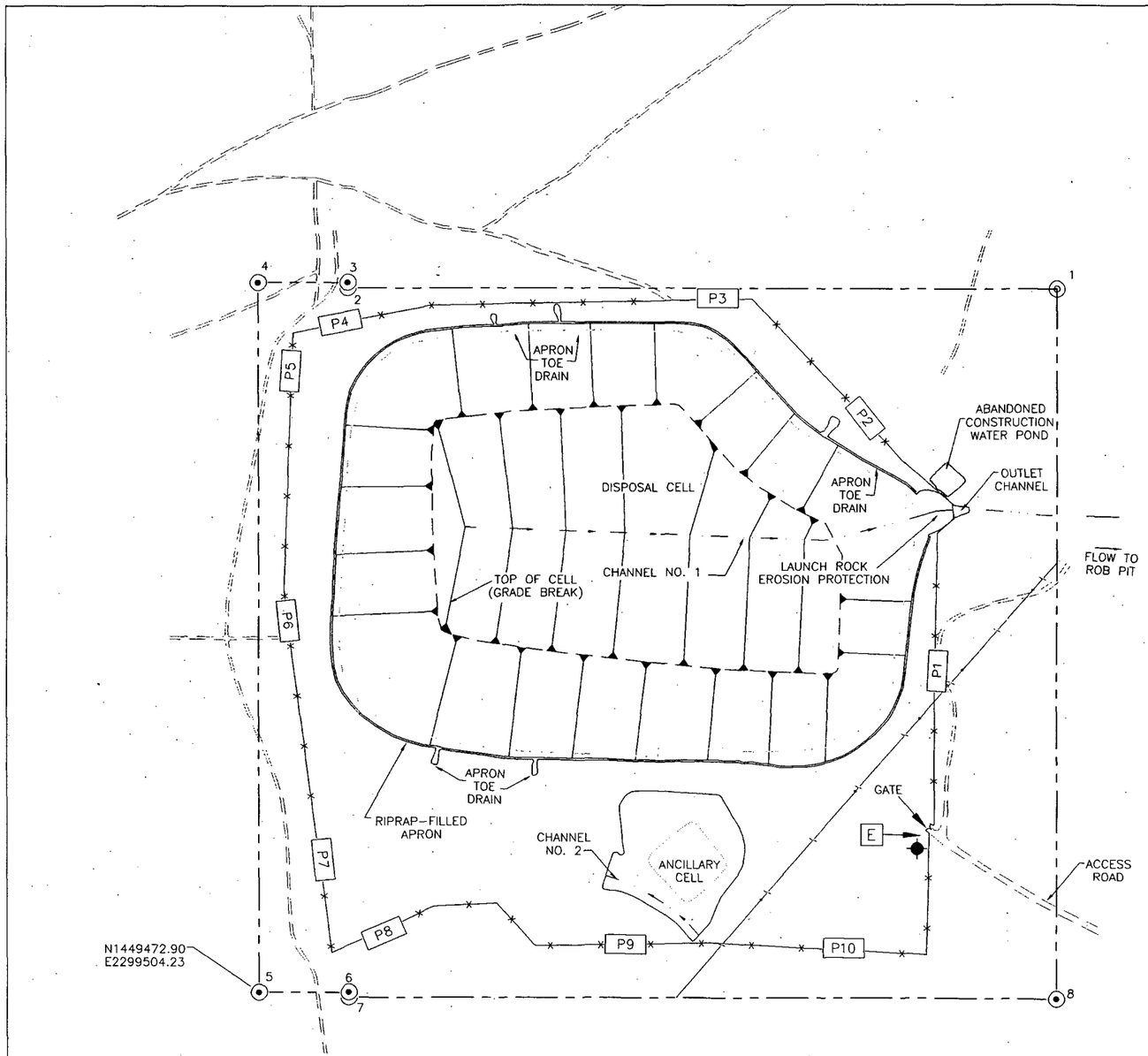


Figure 2–2. Maybell West, Colorado, Disposal Site Map

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2.3.4 Permanent Site Surveillance Features

Eight boundary monuments, one site marker, and ten perimeter/warning signs are the permanent long-term surveillance features at the Maybell West disposal site (Figure 2–2). These features will be inspected and maintained as necessary as part of the controls for the site.

The unpolished granite site marker, with an incised message identifying the location of the isolated contaminated materials on the Maybell West disposal site property, is placed just inside the main entrance gate at the southeast corner of the site. The message on the granite site marker is shown on Figure 2–3.

In order to provide public notice, ten perimeter/warning signs displaying the DOE 24-hour telephone number (970-248-6070) (Figure 2–4) are positioned on the four-strand barbed-wire fence that surrounds the disposal cell. One of the perimeter/warning signs is placed near the main entrance to the site property and is considered the site entrance sign.

2.3.5 Site Geology and Hydrology

The hydrogeologic and environmental conditions at the Maybell West site are conducive to containment, immobilization and isolation of contaminants. The site is in an area that has not been subject to significant erosion or downcutting for over 10,000 years and groundwater is from 200 to 220 feet deep with intervening silty sandstone that geochemically separates the waste materials from the local water table (CDPHE 2007).

The Maybell West site is situated on gently rolling terrain that ultimately drains toward the Yampa River, to the south. The Browns Park Formation (Miocene) directly underlies the site and is the host rock for the uranium ore in the area (Umetco 1995c). This formation is composed of white to light gray and tan, partly tuffaceous sandstone with thin layers of conglomerate, siltstone, rhyolitic air-fall tuff, and minor limestone lenses. The sandstone was deposited in fluvio-lacustine and eolian environments. The thickness of the Browns Park Formation is variable but is believed to be approximately 1,000 feet at the site. No distinct or recognizable stratigraphic layers are present beneath the site. The homogeneous nature of the Browns Park sandstone is visible in the high wall of the Rob Pit located directly east of the site. Regionally, the Browns Park Formation unconformably overlies older rock units ranging in age from Paleocene to Precambrian. The Mancos Shale underlies the Browns Park Formation at the site and consists of a very thick sequence of dark gray marine shale (Umetco 1995c). A simplified stratigraphic column is shown on Figure 2–5.

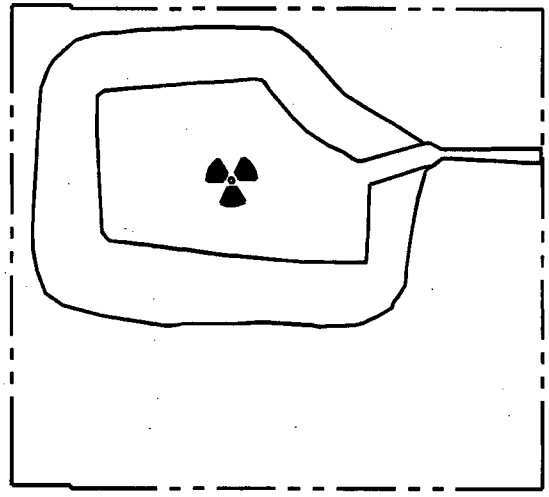
The reclaimed heap leach facility is situated south of the axis of the east-west trending geologic feature known as the Browns Park Syncline which is a depositional feature reflecting Miocene paleo-topography. Beneath the unconformity at the base of the Browns Park Formation the structural aspect changes abruptly to beds that are inclined steeply to the north (Umetco 1995c).

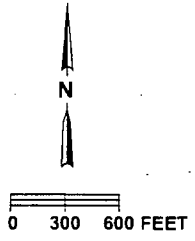
MAYBELL WEST, COLORADO

DATE OF CLOSURE: **AUGUST 2005**

TONS OF TAILINGS: **1,975,000**

RADIOACTIVITY: **96 Curies, Ra-226**

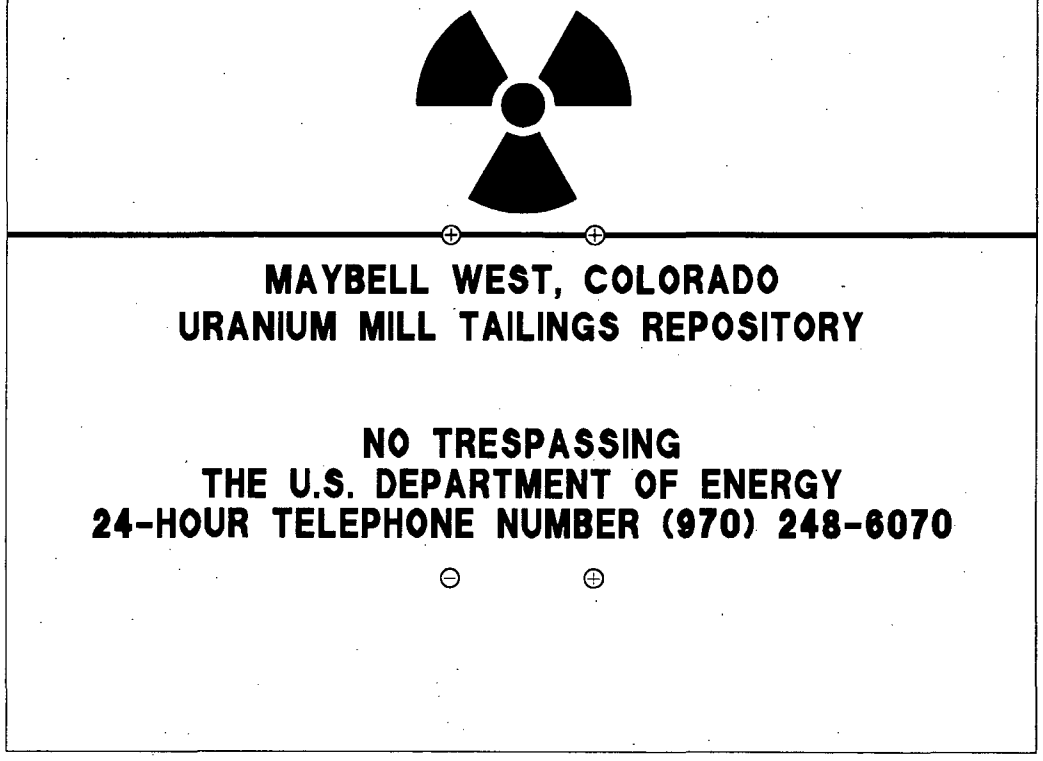




U.S. DEPARTMENT OF ENERGY GRAND JUNCTION, COLORADO	Work Performed by S.M. Stoller Corporation Under DOE Contract No. DE–AC01–02GJ79491
SITE MARKER AT MAYBELL WEST, COLORADO DISPOSAL SITE	
DATE PREPARED: MARCH 27, 2007	FILENAME: S0187800

M:\LTS\111\0075\01\S01878\S0187800.DWG 03/27/07 3:44pm WhitneyJ

Figure 2–3. Message on Site Marker at the Maybell West, Colorado, Disposal Site

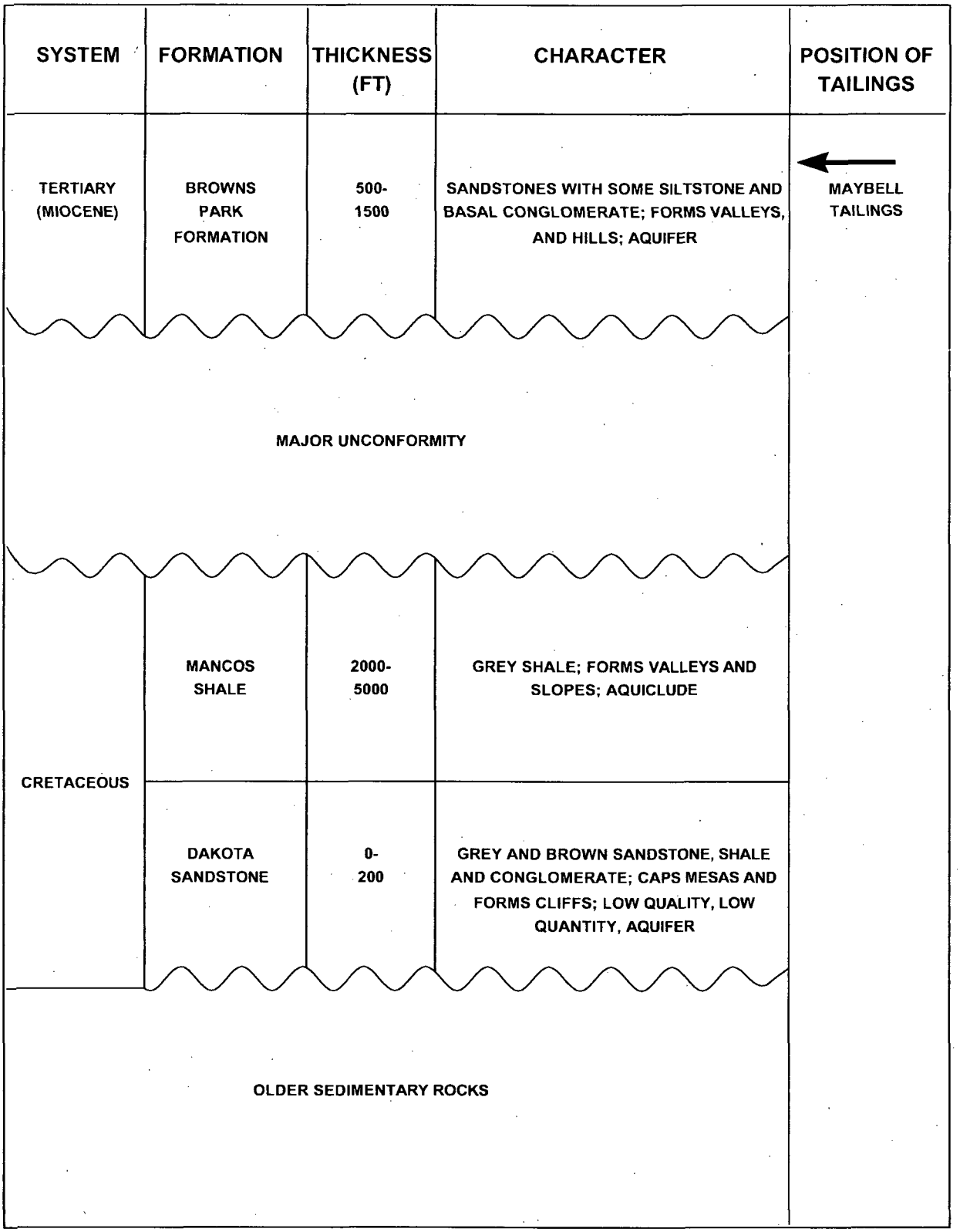


SCHEMATIC-NOT TO SCALE

U.S. DEPARTMENT OF ENERGY GRAND JUNCTION, COLORADO	Work Performed by S.M. Stoller Corporation Under DOE Contract No. DE-AC01-02GJ79491
WARNING SIGN AT MAYBELL WEST, COLORADO DISPOSAL SITE	
DATE PREPARED: JUNE 21, 2005	FILENAME: S0187700

M:\LTS\111\0075\01\S01877\S0187700.DWG 06/21/05 11:33am J50191

Figure 2–4. Perimeter/Warning Sign at Maybell West, Colorado, Disposal Site



M:\LTS\111\0075\01\S01876\S0187600.DWG 07/21/05 08:08am J50191

Figure 2–5. Simplified Stratigraphic Column, Maybell West, Colorado, Disposal Site

Groundwater beneath the site occurs within the Browns Park Formation, under unconfined conditions, at a depth of approximately 200 feet. Recharge to the Browns Park Formation in the site vicinity is by infiltration of precipitation but is minimal due to low precipitation and high evaporation. Groundwater ultimately discharges to the Yampa River southwest of the site (Umetco 1995c).

2.4 Tailings Impoundment Design

The heap leach repository (disposal cell) is in the location of the former heap leach facility. During processing, the uranium ore was placed in the heap leach cells on a compacted clay liner. The uranium was recovered by flooding the cells with a dilute sulfuric acid solution that leached uranium from the ore and discharged the pregnant solution through slotted collection pipes at the bottom of the cells. In 1991, the sides and a portion of the top of the pile were regraded and an interim (6-inch-thick nominal) cover was placed over the heap leach materials (Umetco 2002). Contaminated materials and equipment from the site, including demolition debris from the former processing plant, were consolidated from 1991 to 1996 into an above-grade, stabilized-in-place embankment extending to a maximum height of 75 feet above the prevailing surface grade (CDPHE 2007).

2.4.1 Encapsulation Design

The waste disposal impoundments were designed and constructed with the objective of isolating the heap leach materials (tailings) and associated wastes from the surrounding environment. This was accomplished by constructing impoundments designed to physically contain the contaminated materials and prevent dispersion, along with controlling radon emissions and minimizing the infiltration of precipitation that could potentially leach contaminants into the subsurface. A clay liner underlying the waste material controls the discharge of contaminants to the subsurface. A clayey soil cover and random fill control precipitation infiltration and radon emissions. Riprap armoring provides erosion protection for the encapsulated materials.

During the operational period, when the heap leach cells were initially constructed, a minimum 12-inch-thick clay liner was placed at the base of the cells. During the reclamation phase, the heap materials were reshaped and covered to conform to the reclamation design. The cover consists of a minimum 18-inch-thick clayey soil layer (radon barrier material) placed over the reshaped heap materials. Frost and erosion protection materials, along with a drainage/filterbed layer designed to shed precipitation-related water, were in turn placed over the radon barrier material. On top of the clayey soil layer is a 42- to 48-inch-thick layer of random fill that is covered by a 6-inch-thick layer of riprap/bedding material having a median diameter (D_{50}) of 3/8 to 1½ inches. A 12-inch-thick layer of 5- to 8-inch D_{50} riprap covers the 5:1 side slopes of the reclaimed heap leach pile. The cover was designed to reduce radon gas emission rates (flux) to below the regulatory standard of 20 picocuries per square meter per second ($pCi/m^2/s$). A typical cover cross section is shown on Figure 2–6.

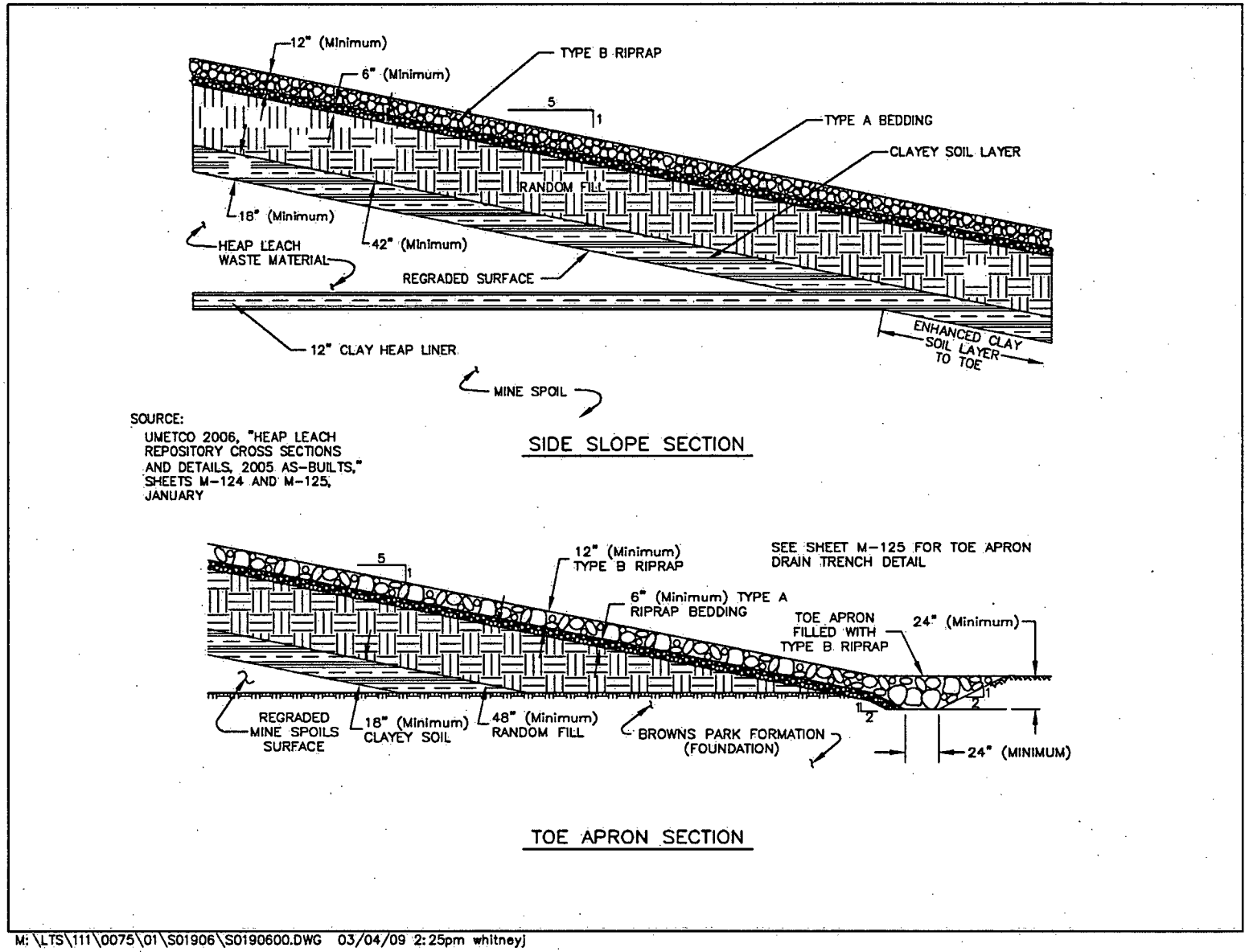


Figure 2–6. Typical Cover Cross-Section, Maybell West, Colorado, Disposal Cell

2.4.2 Ancillary Cell

The ancillary cell was constructed to contain all waste materials associated with the reclaimed evaporation pond area; an existing heap drainage storage pond that was constructed below grade and adjacent to the heap leach repository was used. Synthetic pond liner material, evaporation pond material, and other contaminated debris remaining on the site at the close of reclamation activities were compacted in this cell. The ancillary cell was covered with a minimum of 5.5 feet of cover, including radon barrier clay, random fill, and erosion protection material (CDPHE 2007).

2.4.3 Surface Water Diversion System

The cover of the disposal cell (reclaimed heap leach area) is graded to drain to a channel in the center of the cover. This channel, referred to as Channel No. 1 on Figure 2–2, then discharges incident precipitation runoff through the channel outlet to the former open pit uranium mine known as the Rob Pit, directly east of the reclaimed heap leach pile. The outlet to Channel No. 1 is further protected by a launch rock basin designed to stop headward erosion in the channel by releasing large riprap into the channel outlet as headward erosion occurs. Three different riprap sizes are used for erosion protection in the channel depending on channel slope and water velocity estimates. The largest channel riprap is an 18- to 24-inch D_{50}. This large riprap is also used for the launch rock. The reclaimed heap leach pile area and surface water diversion channel layout is shown on Figure 2–2.

Precipitation-related surface water runoff from the side slopes of the disposal cell is conveyed by an apron at the toe of the cell to several appropriately spaced toe drains that lie perpendicular to, and slope away from, the apron. The apron and toe drains are constructed channels with a minimum depth of 24 inches that is filled with Type B riprap (12-inch-minimum-diameter rock size). The disposal cell was designed to control surface water runoff resulting from the probable maximum flood event. The upgradient catchment area for the site is less than 40 acres, and no major surface water drainages are adjacent to the encapsulated waste materials.

2.5 Groundwater Conditions

Groundwater quality monitoring (i.e., sampling and analysis) was performed at the site during uranium processing operations (1975 through 1982), post-operational waste management (1982 through 1994), and site reclamation (1995 through 2005). Comparison of the results from the upgradient/background wells, the downgradient/point-of-compliance wells, and the chemical composition of the heap leachate, suggest that the groundwater has not been contaminated by the leachate. This conclusion is supported by several arguments outlined below.

The groundwater is a calcium-sulfate type water, which is distinct from the magnesium-sulfate composition of the leachate. Increases in the calcium and sulfate concentrations in the groundwater are attributed to the dissolution of calcite and gypsum from the formation as the groundwater migrates downgradient to the southwest (Umetco 1995c). Additionally, the chloride, magnesium, uranium, and radium concentrations in the groundwater at the downgradient wells are not significantly higher than the concentrations found in the upgradient wells (Umetco 1995c).

In summary, the heap leach operations at Maybell West have produced a leach liquid with high concentrations of sulfate, magnesium, sodium, chloride, uranium (natural), and radium-226. None of these constituents have impacted the calcium-sulfate type groundwater at the site. Historical results from Umetco's detection-monitoring program, in place for 30 years at the Maybell West disposal site, were found to show no significant change in groundwater quality in the saturated zone of the Browns Park Formation downgradient of the former heap leach pile. These monitoring results demonstrated that no increase in concentrations in the groundwater of any analytes found in elevated concentrations in the heap leachate occurred (Umetco 1995c).

Therefore, based on these extensive monitoring results—30 years of water quality data that includes 23 years of post-operational monitoring—the conclusion was reached that groundwater quality in the uppermost aquifer had not been measurably affected by site operations and that no further groundwater monitoring is required for the Maybell West disposal site (CDPHE 2007).

3.0 Long-Term Surveillance Program

3.1 General License for Long-Term Custody

States have right of first refusal for custody and long-term care of Title II disposal sites (UMTRCA, Section 202 [a]). On April 2, 1996, the State of Colorado exercised its right of first refusal and declined the custody and long-term care of the Maybell West site (Appendix B). Because the state declined this right, the site was transferred to DOE for custody and long-term care.

Upon NRC acceptance of this LTSP and termination of Umetco's Colorado Radioactive Materials License Number 660-01 by the State of Colorado, the site was included under the NRC general license for custody and long-term care (10 CFR 40.28 [b]). Concurrent with this action, a deed and title for the portion of the site owned by Umetco were transferred to DOE (Appendix A). The balance of the site, which is federally owned, was withdrawn by BLM from public use and placed under DOE's jurisdiction for custody and long-term care (Appendix A).

Although disposal structures are designed to last "for up to 1,000 years, to the extent reasonably achievable, and, in any case, for at least 200 years" (10 CFR 40, Appendix A, Criterion 6), there is no termination of the general license for the DOE's custody and long-term care of the site (10 CFR 40.28 [b]).

Should changes to this LTSP be necessary, NRC must be notified of the changes, and the changes must not conflict with the requirements of the general license. Additionally, NRC representatives must be guaranteed permanent right of entry for the purpose of periodic site inspections. Access to the site, as shown on Figure 2–1, is unimpeded from public roads across federal property as authorized by a BLM ROW grant (Appendix A).

3.2 Requirements of the General License

To meet the requirements of NRC's license at 10 CFR 40, Section 28, and Appendix A, Criterion 12, the long-term custodian must, at a minimum, fulfill the following requirements. The section in the LTSP in which each requirement is addressed is given in parentheses.

- Annual site inspection. (Section 3.3)
- Annual inspection report. (Section 3.4)
- Follow-up inspections and inspection reports, as necessary. (Section 3.5)
- Site maintenance, as necessary. (Section 3.6)
- Emergency measures in the event of catastrophe. (Section 3.6)
- Environmental monitoring. (Section 3.7)

3.3 Annual Site Inspections

3.3.1 Frequency of Inspections

At a minimum, sites must be inspected annually to confirm the integrity of visible features at the site and to determine the need, if any, for maintenance, additional inspections, or monitoring (10 CFR 40, Appendix A, Criterion 12).

To meet this requirement, DOE will inspect the Maybell West disposal site once each calendar year. The date of the inspection may vary from year to year, but DOE will endeavor to inspect the site approximately once every 12 months unless circumstances warrant a variance. Any variance to this inspection frequency will be explained in the inspection report. DOE will notify NRC and the State of Colorado of the inspection at least 30 days in advance of the scheduled inspection date.

3.3.2 Inspection Procedure

For the purposes of inspection, the Maybell West disposal site will be divided into sections called *transects*. Each transect will be inspected individually. Proposed transects for the first inspection of the Maybell West site are listed in Table 3–1 and shown on Figure 3–1.

Table 3–1. Transects Used During Inspection of the Maybell West Site

Transect	Description
Top Slope of Disposal Cell	Top slope of riprap-covered repository.
Side slopes of Disposal Cell	Riprap covered side slopes.
Ancillary Cell	Riprap covered side and top slopes.
Diversion/Drainage Channels	Discharge channel, riprap in critical areas, and sediment deposition.
Site Perimeter and Balance of Site	Site perimeter including 0.25 mile beyond site boundary, area between closure cell and leach tanks and site boundary, site entrance, boundary monuments, entrance sign, and site marker.

The annual inspection will be a visual walkthrough. The primary purpose of the inspection will be to look for evidence of disposal cell settlement, slumping, or cracking; riprap or rock mulch degradation; wind or water erosion, structural discontinuity of the containment features; vegetation condition; animal or human intrusions that could result in adverse impacts; or other modifying processes. Special attention will be given to the launch rock basin area of the outlet channel, where by design, headward erosion of the outlet channel is to be controlled by the launch rock. Any headward erosion observed occurring in the outlet channel will be documented annually (photographs and description) in order to monitor its progression; repairs will be made, as needed, if the erosion is determined to be impacting the performance of the outlet channel and threatening the integrity of the disposal cell. NRC will be notified of any repairs made to the disposal cell, ancillary cell, or associated features.

Any changes in site vegetation will be noted during routine site inspections. If encroachment of deep-rooted vegetation is observed in the vicinity of the disposal cell, an evaluation will be conducted to determine if any action is necessary. State, local, or federally listed noxious weeds present on site will be controlled.

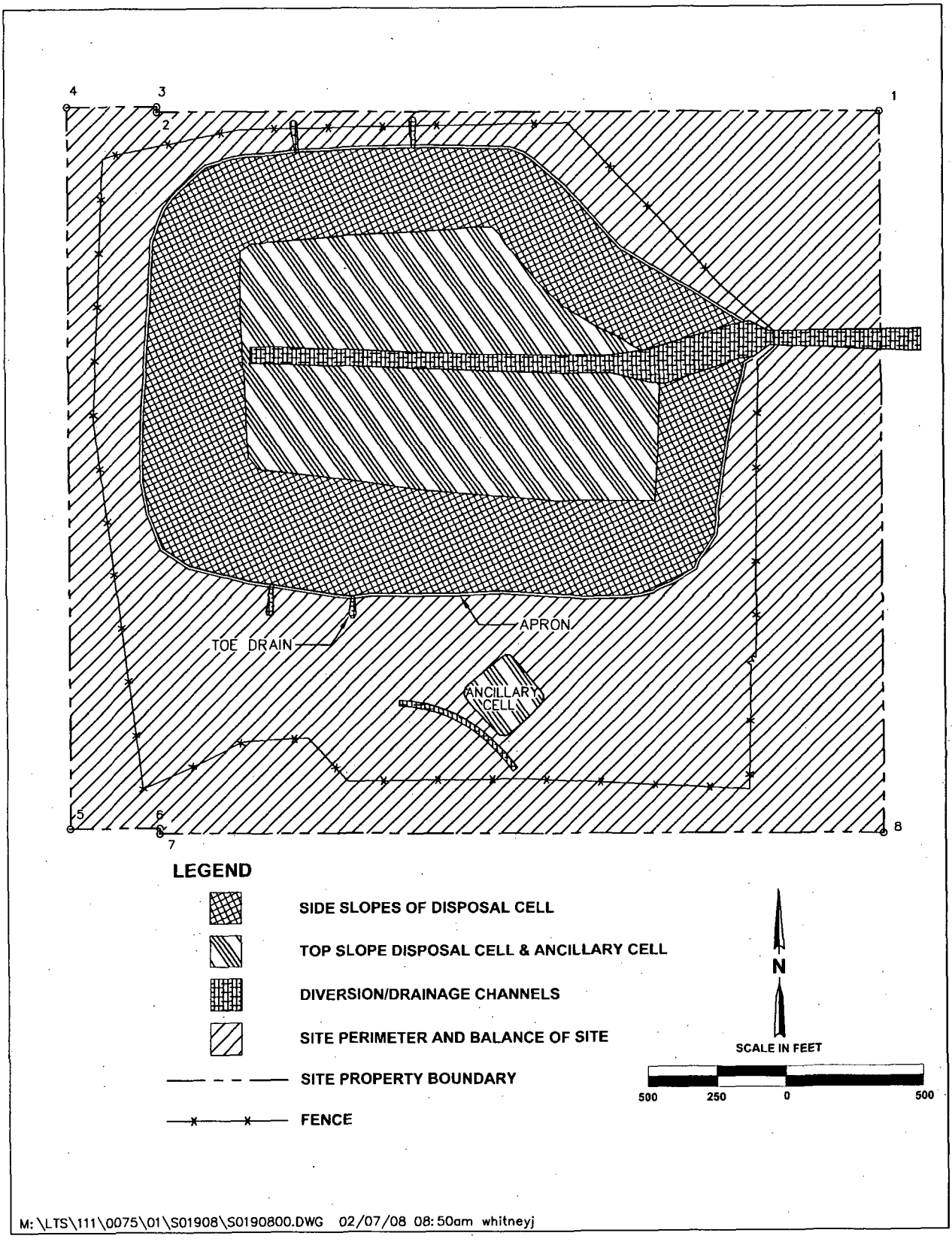


Figure 3–1. Map of Inspection Transects for the Maybell West, Colorado, Disposal Site

In addition to inspection of the site itself, inspectors will note changes and developments in the area surrounding the site, especially changes within the surrounding watershed basin. Significant changes within this area could include oil and gas or mineral-related activity, development or expansion of human habitation, erosion, road building, or other change in land use. Changes in land use in the area immediately surrounding the site could affect overland water flow characteristics and general site management considerations. Therefore, they should be evaluated.

It may be necessary to document certain observations with photographs. Observations warranting photographs include evidence of vandalism or a slow modifying process, such as rill erosion, that should be monitored more closely during general site inspections. Photographs will be documented in a field photograph log (Appendix C).

Disposal site and disposal cell inspection techniques are described in detail in Attachment 4 of the guidance document (DOE 2001).

3.3.3 Inspection Checklist

The inspection checklist guides the inspection. The initial site-specific inspection checklist for the Maybell West disposal site is presented in Appendix D.

The checklist is subject to revision. At the conclusion of an annual site inspection, inspectors will make notes regarding revisions to the checklist in anticipation of the next annual site inspection. Revisions to the checklist will include such items as new discoveries or changes in site conditions that must be inspected and evaluated during the next annual inspection.

3.3.4 Personnel

Annual inspections normally will be performed by a minimum of two inspectors. Inspectors will be experienced engineers and scientists who have been specifically trained to conduct site inspections (through participation in previous site inspections).

Engineers typically will be geotechnical, geological, or civil engineers. Scientists will include geologists, hydrologists, biologists, and environmental scientists representing various fields (e.g., ecology, soils, range management). If serious or unique problems develop at the site, more than two inspectors may be assigned to the inspection. Inspectors specialized in specific fields may be assigned to the inspection to evaluate serious or unusual problems and make recommendations.

3.4 Annual Inspection Reports

Results of annual site inspections will be reported to NRC within 90 days of the last site inspection of that calendar year (10 CFR 40, Appendix A, Criterion 12). In the event the annual report cannot be submitted within 90 days, DOE will notify NRC of the circumstances. Annual inspection reports also will be distributed to the State and any other stakeholders who request a copy. The annual inspection report for the Maybell West disposal site is included in a document containing the annual inspection reports for all sites licensed under 10 CFR 40.28.

3.5 Follow-up Inspections

Follow-up inspections are unscheduled inspections that are targeted to evaluate specific findings or concerns.

3.5.1 Criteria for Follow-up Inspections

Criteria necessitating follow-up inspections are required by 10 CFR 40.28 (b)(4). DOE will conduct follow-up inspections should the following occur.

- A condition is identified during the annual site inspection or other site visit that requires personnel, perhaps with specific expertise, to return to the site to evaluate the condition.
- DOE is notified by a citizen or outside agency that conditions at the site are substantially changed.
- An extreme natural condition such as a 6.5-Richter-scale earthquake or a rainfall event of 7.05 inches or more in 1 hour (Umetco 1995b).

With respect to citizens and outside agencies, DOE will establish and maintain lines of communication with local law enforcement and emergency response agencies to facilitate notification in the event of significant trespass, vandalism, or natural disaster. Due to the remote location of the Maybell West site, DOE recognizes that local agencies may not necessarily be aware of current conditions at the site. However, these agencies will be requested to notify DOE or provide information should they become aware of a significant event that might affect the security or integrity of the site.

DOE may request the assistance of local agencies to confirm the seriousness of a condition before conducting a follow-up inspection or emergency response.

The public may use the 24-hour DOE telephone number (970-248-6070) posted prominently on the entrance sign to request information or to report a problem at the site.

Once a condition or concern is identified at the site, DOE will evaluate the information and determine whether a follow-up inspection is warranted. Conditions that may require a routine follow-up inspection include changes in erosion, storm damage, low-impact human intrusion, vegetation, minor vandalism, or the need to evaluate, define, or perform maintenance tasks.

Conditions that threaten the safety or the integrity of the disposal site may require a more immediate follow-up inspection. Slope failure, disastrous storm, major seismic event, and deliberate human intrusion are among these conditions.

DOE will use a graded approach with respect to follow-up inspections. The urgency of the follow-up inspection will be in proportion to the seriousness of the condition. Timing of the inspection may be governed by seasonal considerations. For example, a follow-up inspection to investigate a vegetation problem may be scheduled for a particular time of year when growing conditions are optimum. A routine follow-up inspection to perform maintenance or to evaluate an erosion problem might be scheduled to avoid snow cover or frozen ground.

In the event of "unusual damage or disruption" (10 CFR 40, Appendix A, Criterion 12) that threatens or compromises site safety, security, or integrity, DOE will:

- Notify NRC pursuant to 10 CFR 40, Appendix A, Criterion 12, or 10 CFR 40.60, whichever is determined to apply;
- Begin the DOE Environment, Safety, and Health Reporting process (DOE Order 231.1A, Chg. 1; or current guidance);
- Respond with an immediate follow-up inspection or emergency response team; and
- Implement measures as necessary to contain or prevent dispersion of radioactive materials (Section 3.6).

3.5.2 Personnel

Inspectors assigned to follow-up inspections will be selected on the same basis as for the annual site inspection (see Section 3.3.4).

3.5.3 Reports of Follow-up Inspections

Results of routine follow-up inspections will be included in the next annual inspection report (Section 3.4). Separate reports will not be prepared unless DOE determines that it is advisable to notify NRC or other outside agency of a problem at the site.

If follow-up inspections are required for more serious or emergency reasons, DOE will submit to NRC a preliminary report of the follow-up inspection within 60 days (10 CFR 40, Appendix A, Criterion 12).

3.6 Routine Site Maintenance and Emergency Measures

3.6.1 Routine Site Maintenance

UMTRCA disposal sites are designed and constructed so that "ongoing active maintenance is not necessary to preserve isolation" of radioactive material (10 CFR 40, Appendix A, Criterion 12). The disposal cell and associated systems have been designed and constructed to minimize the need for routine maintenance.

The cover and side slopes of the disposal cell were armored with riprap of sufficient size and durability to prevent erosion that would otherwise be caused by precipitation and associated flood events. The cover of the disposal cell is designed to shed incident precipitation to an armored outlet channel. The outlet channel is further protected against headward erosion by a launch rock basin. Areas where runoff water could achieve erosional velocities have been armored with riprap. Adverse wind or water erosion impacts that would require maintenance are not anticipated. The disposal site area is fenced to prevent damage from livestock grazing in the vicinity and to discourage intentional or unintentional trespassing.

If an inspection of the disposal site reveals failure or degradation of an as-built feature that compromises site protectiveness, repairs will be conducted to re-establish or surpass the durability of the as-built condition. DOE will perform routine site maintenance, where and when

needed to maintain protectiveness. Results of routine site maintenance will be summarized in the annual site inspection report.

In alignment with the LM EMS, proposed site maintenance activities will be assessed for opportunities to improve environmental performance and sustainable environmental practices. Some areas for consideration include reusing and recycling products or wastes, using environmentally preferable products (i.e., products with recycled content, such as concrete and asphalt; products with reduced toxicity; and energy-efficient products), using alternative fuels, and using renewable energy.

3.6.2 Emergency Measures

Emergency measures are the actions that DOE will take in response to "unusual damage or disruption" that threaten or compromise site safety, security, or integrity. DOE will contain or prevent dispersal of radioactive materials in the unlikely event of a breach in cover materials.

3.6.3 Criteria for Routine Site Maintenance and Emergency Measures

Conceptually, there is a continuum in the progression from minor routine maintenance to large-scale reconstruction of the tailings impoundment following a potential disaster. Although required by 10 CFR 40.28 (b)(5), criteria for triggering particular DOE responses for each increasingly serious level of intervention are not easily defined because the nature and scale of all potential problems cannot be foreseen. The information in Table 3–2, however, serves as a guide for appropriate DOE responses. The table shows that the difference between routine maintenance and emergency response is primarily one of urgency and degree of threat or risk. DOE's priority (urgency) in column 1 of Table 3–2 bears an inverse relationship with DOE's estimate of probability. The highest priority response is also believed to be the least likely to occur.

Table 3–2. DOE Criteria for Maintenance and Emergency Measures

Priority	Description[a]	Example	Response
1	Breach of disposal cell with dispersal of radioactive material.	Seismic event that exceeds design basis and causes massive discontinuity in cover.	Notify NRC. Immediate follow-up inspection by DOE emergency response team. Emergency actions to prevent further dispersal, recover radioactive materials, and repair breach.
2	Breach of disposal cell without dispersal of radioactive material.	Partial or threatened exposure of radioactive materials.	Notify NRC. Immediate follow-up inspection by DOE emergency response team. Emergency actions to repair the breach.
3	Breach of site security.	Human intrusion, vandalism.	Restore security; urgency based on assessment of risk.
4	Maintenance of specific site surveillance features.	Deterioration of signs, markers.	Repair at first opportunity.
5	Minor erosion or undesirable changes in vegetation.	Erosion not immediately affecting disposal cell, invasion of undesirable plant species.	Evaluate, assess impact, respond as appropriate to address problem.

[a] Other changes or conditions will be evaluated and treated similarly on the basis of risk.

3.6.4 Reporting Maintenance and Emergency Measures

Routine maintenance completed during the previous 12 months will be summarized in the annual inspection report.

In accordance with 10 CFR 40.60, within 4 hours of discovery of any Priority 1 or 2 events listed in Table 3–2, DOE will notify the following group at NRC:

- Decommissioning and Uranium Recovery Licensing Directorate, Division of Waste Management and Environmental Protection, Office of Federal and State Materials and Environmental Management Programs

Required notifications are made through the NRC Operations Center, at telephone number (301) 816-5100.

3.7 Environmental Monitoring

3.7.1 Groundwater Monitoring

Groundwater monitoring is not required at the Maybell West disposal site because 30 years of historical monitoring performed at the site determined the groundwater had not been contaminated by site-related activities (see Section 2.5).

3.7.2 Land Use Monitoring

During each annual site inspection, DOE will monitor land use in the area surrounding the site to ensure that changes in land or water use do not affect site protectiveness. For example, a resurgence of interest in uranium mining and processing or oil and gas exploration could lead to increased activity in the vicinity of the site and an increased potential for site disturbance.

3.8 Institutional Controls

The Maybell West disposal site is owned by the U.S. Government, which serves as the primary institutional control protecting the site. Other institutional controls DOE uses to protect the site include perimeter warning signs, inspections, and a deed notice. DOE may also choose to use fences and gates to control site access, and does so at this site.

Protection of both the surface and subsurface interests at the site is required. Surface protection of the site is provided through federal ownership; a PLO permanent withdrawal is the mechanism used for those portions of the site which were not transferred or acquired in fee from Umetco, the former licensee (see Section 2.3.1). Permanent withdrawal also provides protection with regard to subsurface interests on the federal (BLM) land withdrawn from the point at which the PLO is posted in the Federal Register (April 18, 2008). However, because all of the fee (privately held) minerals were unable to be acquired by Umetco and transferred to DOE, a deed notice was recorded and filed with the public land records, as required, to provide notification that the site is being used for the disposal of radioactive materials and subject to an NRC license. Additional discussion regarding the requirements of this deed notice is provided below.

In accordance with regulations at 10 CFR 40, Appendix A, Criterion 11-C, a "serious effort" was made by Umetco to obtain all third-party subsurface (mineral) rights associated with the 20-acre

parcel DOE acquired in fee. Each of the five mineral owners received a best and final offer based on the assessed fair market value of the minerals at the time. In doing so, the owners were informed that the site was being used for the disposal of radioactive materials and subject to a NRC general license at 10 CFR 40.28 which provides the following protections:

> 10 CFR 40.28 (d) 1, 2, and 3 states:
>
> "(d) Upon application, the Commission may issue a specific license, as specified in the Uranium Mill Tailings Radiation Control Act of 1978, as amended, permitting the use of surface and/or subsurface estates transferred to the United States or a State. Although an application may be received from any person, if permission is granted, the person who transferred the land to DOE or the State shall receive the right of first refusal with respect to this use of the land. The application must demonstrate that:
>
> (1) The proposed action does not endanger the public health, safety, welfare, or the environment;
>
> (2) Whether the proposed action is of a temporary or permanent nature, the site would be maintained and/or restored to meet requirements in Appendix A of this part for closed sites; and
>
> (3) Adequate financial arrangements are in place to ensure that the byproduct materials will not be disturbed, or if disturbed that the applicant is able to restore the site to a safe and environmentally sound condition."

Through this serious effort Umetco was able to purchase 18 percent of the outstanding third-party minerals; the quitclaim deed for these acquired mineral rights was transferred to DOE (Appendix A). Because Umetco was not able to obtain all of the outstanding third-party minerals associated with the fee land, a deed notification was filed with the local public land records in accordance with 10 CRF 40, Appendix A, Criterion 11-C which states:

> "...the applicant/operator must demonstrate a serious effort to obtain such subsurface rights, and must, in the event that certain rights cannot be obtained, provide notification in local public land records of the fact that the land is being used for the disposal of radioactive material and is subject to either an NRC general or specific license prohibiting the disruption and disturbance of the tailings".

Because Colorado is an Agreement State, NRC requested that CDPHE determine if Umetco had made the required serious effort to obtain the outstanding third-party minerals. CDPHE reviewed the relevant documentation and concluded that Umetco had satisfied the requirement. Therefore, in accordance with the regulations, Umetco filed the deed notice with the local public land records. Regulatory concurrence that the "serious effort" to obtain the minerals was made, along with the required deed notice, are provided in Appendix A.

3.9 Records

LM receives and maintains selected records to support post-closure site maintenance. Inactive records are preserved at a federal records center. Site records contain critical information

required to protect human health and the environment, manage land and assets, protect legal interests of DOE and the public, and mitigate community impacts resulting from the cleanup of legacy waste.

The records are managed in accordance with the following requirements.

- Title 44, UUSC 29, "Records Management by the Archivist of the United States and by the Administrator of General Services"; 44 USC 31, "Records Management by Federal Agencies"; and 44 USC 33, "Disposal of Records."
- 36 CFR 12, Subchapter B, "Records Management."
- DOE Guide 1324.5B, *Implementation Guide*.
- LM Information and Records Management Transition Guidance.

Records available include, but are not limited to:

- Completion Review Report For the Maybell Site Located in Moffat County, Colorado (CDPHE 2007).
- Reclamation Plan Final Design, Plans and Specifications for the Maybell Heap Leach Facility (Umetco 1995b).
- Nuclear regulatory Commission Final Site Walkover, Maybell West, CO, Disposal Site;
- Environmental Site Assessment Report.

3.10 Quality Assurance

All activities related to the surveillance and maintenance of the Maybell West site will comply with DOE Order 414.1C, *Quality Assurance*, or current guidance. Quality assurance requirements are routinely fulfilled by use of a work planning process, standard operating procedures, trained personnel, documents and records maintenance, and assessment activities. Requirements will be transmitted through procurement documents to subcontractors if/when appropriate.

3.11 Health and Safety

Health and safety requirements and procedures for LM activities are consistent with DOE Orders, federal regulations, applicable codes and standards, and current guidance. The DOE Integrated Safety Management process serves as the basis for the contractor's health and safety program.

Specific guidance is contained in the *Office of Land and Site Management Project Safety Plan* (DOE 2007) or current guidance. This Project Safety Plan identifies specific hazards associated with the anticipated scope of work and provides direction for the control of these hazards. During the pre-inspection briefing, inspectors are required to review this document to ensure that they have an understanding of the site. All personnel accessing the site are briefed prior to entry of the potential hazards and the health and safety requirements associated with the site and any work to be performed.

4.0 References

ASQC (American Society for Quality Control), 1994. *Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs,* ANSI/ASQC E4-1994, Energy and Environmental Quality Division, Environmental Issues Group.

CDPHE (Colorado Department of Public Health and the Environment), 2007. *Completion Review Report for the Maybell Site Located in Moffat County, Colorado*, Colorado, RML #660-01, March.

DOE (U.S. Department of Energy), 2001. *Guidance for Implementing the Long-Term Surveillance Program for UMTRCA Title I and Title II Disposal Sites*, GJO–2001–215–TAR, Grand Junction, Colorado, April.

DOE (U.S. Department of Energy), 2007. *Office of Land and Site Management Project Safety Plan*, DOE–LM/GJ1116-2006, Rev. 0, prepared for the U.S. Department of Energy, Office of Legacy Management, Grand Junction, Colorado, January.

DOE Orders: 231.1A, Chg. 1, *Environment, Safety, and Health Reporting,* June 2004.

414.1C, *Quality Assurance,* June 2005.
430.2B, *Departmental Energy Renewable Energy and Transportation Management,* February 27, 2008.
450.1A, *Environmental Protection Program*, Chg. 2, June 4, 2008.

Executive Order 13423. *Strengthening Federal Environmental, Energy, and Transportation Management*, January 24, 2007.

Umetco (Umetco Minerals Corporation), 1995a. *Soils Cleanup Plan, Maybell Heap Leach Facility,* March.

Umetco (Umetco Minerals Corporation), 1995b. *Reclamation Plan, Final Design, Plans and Specification for the Maybell Heap Leach Facility,* April.

Umetco (Umetco Minerals Corporation), 1995c. *Groundwater Report, Maybell Heap Leach Site, Maybell, Colorado,* July.

Umetco (Umetco Minerals Corporation), 2002. *Soil Cleanup Verification Report, Maybell Heap Leach Facility, Maybell, Colorado,* Revision 0, January.

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Appendix A

Real Estate Information

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Warranty Deed

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20100413 2/9/2010 2:30 PM Elaine Sullivan
1 of 2 WD R$11.00 D$0.00 Moffat County Clerk

NO REAL PROPERTY TRANSFER DECLARATION ACCOMPANIED THIS DOCUMENT

Prepared By and To Be Returned To: Melissa Head, Attorney, US Army Corps of Engineers 1616 Capitol Avenue, Omaha, NE 68102-4901

WARRANTY DEED

STATE DOCUMENTARY FEE
DATE 2-9-10
$ 0

Project: DOE UMTRA
Moffat County, CO

KNOW ALL MEN BY THESE PRESENTS:

That **UMETCO MINERALS CORPORATION, a Delaware Corporation**, GRANTOR, for and in consideration of the sum of Ten Dollars ($10.00), and for other good and valuable consideration the receipt of which is hereby acknowledged, hereby grants, bargains, sells and conveys to the **UNITED STATES OF AMERICA,** GRANTEE, whose address is Washington, DC, and its assigns, the following described real estate (hereinafter called the "Tract of Land") situated in the County of Moffat, State of Colorado, to wit:

The Tract of Land in the E1/2E1/2 of Section 23, Township 7 North, Range 95 West of the 6th PM, being more particularly described as follows:

Beginning at the NE Corner of Section 23, Township 7 North, Range 95 West;
Thence South 1300 feet along the Section line common to Sections 23 and 24 of the afore-named Township and Range to the TRUE POINT OF BEGINNING;
Thence West 330 feet;
Thence South 2640 feet;
Thence East 330 feet;
Thence North 2640 feet, more or less, to the TRUE POINT OF BEGINNING,

Being the same Tract of Land subject of that certain Warranty Deed dated November 14, 1989 from Sam L. McIntyre and Georgia B. McIntyre to Umetco Minerals Corporation filed of record in Book 610 at Page 946 on the public land records of Moffat County, State of Colorado.;
The Tract of Land described aforesaid contains about twenty (20) acres, more or less;

Subject, however, to existing easements for public roads and highways, public utilities, railroads, and pipelines. Subject, also, to reservations, exceptions and any other outstanding rights contained in or referred to in patents issued by the United States and to oil, gas, and mineral rights outstanding in third parties, if any, including those reserved in that deed recorded February 17, 1959 in Book 265 at Page 203, Moffat County, Colorado.

The acquiring federal agency is the Department of Energy, having an office address c/o Office of Legacy Management, 11025 Dover Street, Suite 1000, Westminster, CO 80021, Attn. Steven R Schiesswohl, Realty Officer.

20100413 2/9/2010 2:30 PM Elaine Sullivan
2 of 2 WD R$11.00 D$0.00 Moffat County Clerk

The Grantor hereby quitclaims to the Grantee all right, title, and interest which the Grantor may have in the banks, beds, and waters of any stream bordering the above-described Tract of Land, and also all interest in alleys, roads, streets, ways, strips, gores, or railroad rights-of-way abutting or adjoining said Tract of Land, and in any means of ingress or egress appurtenant thereto.

To have and to hold the Tract of Land described above, together with all the tenements, hereditaments and appurtenances thereunto belonging unto the United States of America and its assigns forever.

The Grantor hereby covenants with the United States of America and its assigns that said Grantor is lawfully seized of said Tract of Land as above noted; that said Tract of Land is free from encumbrances except as above noted; that Grantor has legal power and lawful authority to convey the same; and that Grantor warrants and will defend title to the above-described Tract of Land against the lawful claims of all persons whomsoever arising by, through, or under Grantor during its period of record ownership as above noted.

IN WITNESS WHEREOF, the Grantor has set its hand this 5th day of ~~January~~ February, 2010.

UMETCO MINERALS CORPORATION, a Delaware Corporation

BY: Gregory G. Cochran

ATTEST : Jessica Jarowski

ACKNOWLEDGMENT

STATE OF Michigan)
) ss.
County of Midland)

The foregoing instrument was acknowledged before me this 5th day of February, 2010, by Gregory G. Cochran as President officer of Umetco Minerals Corporation, a Delaware corporation.
Witness my hand and official seal.

Connie M. Bailey
Notary Public
My Commission Expires: March 19, 2012

CONNIE M. BAILEY
NOTARY PUBLIC, SAGINAW COUNTY, MI
ACTING IN MIDLAND COUNTY, MICHIGAN
MY COMMISSION EXPIRES MARCH 19, 2012

Public Land Order
(Federal Register Notice of Permanent Withdrawal)

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land from mining for a period of 20 years to preserve unique cave resources adjacent to Jewel Cave National Monument. The land has been and will remain open to such forms of disposition as may by law be made of National Forest System land and to mineral leasing.

EFFECTIVE DATE: April 18, 2008.

FOR FURTHER INFORMATION CONTACT: Valerie Hunt, U.S. Forest Service, Rocky Mountain Region, 303–275–5122 or Sandra Ward, BLM Montana State Office, 5001 Southgate Drive, Billings, Montana 59101–4669, 406–896–5052.

SUPPLEMENTARY INFORMATION: Geological formations nearby indicate that continued exploration may result in discovery of additional passageways and caverns beyond the known extent of Jewel Cave. This order protects the passageway and caverns extending beyond the exterior boundaries of the Jewel Cave National Monument.

Order

By virtue of the authority vested in the Secretary of the Interior by Section 204 of the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1714 (2000), it is ordered as follows:

1. Subject to valid existing rights, the following described National Forest System land is hereby withdrawn from settlement, sale, location or entry under the United States mining laws (30 U.S.C. Ch. 2 (2000)), to preserve unique cave resources adjacent to the Jewel Cave National Monument:

Black Hills National Forest

Black Hills Meridian

T. 4 S., R. 2 E.,
Sec. 12, E½SW¼ and SE¼;
Sec. 13, E½ and E½NW¼.
T. 4 S., R. 3 E.,
Sec. 5, lot 6 and lots 10 to 16, inclusive;
Sec. 6, lots 1 to 5, inclusive, S½NE¼, SE¼NW¼, and E½SE¼;
Sec. 7, lots 3 and 4, E½NE¼, E½SW¼, and SE¼;
Sec. 8, lots 1 to 16, inclusive;
Sec. 9, lots 4 to 8, inclusive, and lots 11 to 14, inclusive;
Sec. 16, lots 4, 5, 8, and 9, NW¼NW¼ and SE¼SW¼;
Sec. 17, lots 1 to 14, inclusive;
Sec. 18, lots 1 to 4, inclusive, E½, and E½W½;
Sec. 19, lots 1 and 2, NE¼, and E½NW¼;
Sec. 20, lots 1 to 9, inclusive, S½NE¼, SW¼NW¼, NW¼SW¼, S½SW¼, and N½SE¼;
Sec. 21, lots 1 to 9 inclusive, and NW¼SW¼.

The area described contains 4,595.78 acres in Custer County.

3. The withdrawal made by this order does not alter the applicability of those public land laws governing the use of National Forest System land under lease, license, or permit, or governing the disposal of their mineral or vegetative resources other than under the mining laws.

4. This withdrawal will expire 20 years from the effective date of this order unless, as a result of a review conducted before the expiration date pursuant to Section 204(f) of the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1714(f) (2000), the Secretary determines that the withdrawal shall be extended.

Authority: 43 CFR 2310.3–3.

Dated: April 7, 2008.

C. Stephen Allred,

Assistant Secretary—Land and Minerals Management.

[FR Doc. E8–8410 Filed 4–17–08; 8:45 am]

BILLING CODE 3410–11–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[CO–923–1430–ET; COC–69155]

Public Land Order No. 7700; Transfer of Public Land for the Maybell West Uranium Repository; Colorado

AGENCY: Bureau of Land Management, Interior.

ACTION: Public Land Order.

SUMMARY: This order permanently transfers 160 acres of public land to the Department of Energy for its Maybell West Uranium Repository, in accordance with the terms of the Uranium Mill Tailings Radiation Control Act of 1978 (Public Law 95–604), as amended.

EFFECTIVE DATE: April 18, 2008.

FOR FURTHER INFORMATION CONTACT: Andy Senti, BLM Colorado State Office, 2850 Youngfield Street, Lakewood, Colorado 80215–7093, 303–239–3713.

SUPPLEMENTARY INFORMATION: The Umetco Maybell Uranium Mill Site has been stabilized and the Department of Energy plans to convert the site to a uranium mill tailings repository. Under Public Law 95–604, the Department of Energy is legally obligated to become the long-term custodian of the stabilized Umetco Maybell Uranium Mill Site. The long-term custodial responsibility is perpetual and is administered by the DOE under a Nuclear Regulatory Commission license. The land must be transferred in order for the Department of Energy to execute its responsibilities under Public Law 95–604.

Order

By virtue of the authority vested in the Secretary of the Interior by the Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 7916 (2000)), as amended, it is ordered as follows:

1. Subject to valid existing right, the following described public land is hereby permanently transferred to the Department of Energy, and as a result of this transfer, the land is no longer subject to the operation of the general land laws, including the mining and mineral leasing laws, for the Maybell West Uranium Repository:

Sixth Principal Meridian

T. 7 N., R. 95 W.,
Sec. 24, S½NW¼ and N½SW¼.

The area described contains 160 acres in Moffat County.

2. The transfer of the above-described land to the Department of Energy vests in that Department, full management, jurisdiction, responsibility, and liability for such land and all activities conducted thereon, except as provided in Paragraph 3.

3. The Secretary of the Interior shall retain the authority to administer any existing claims, rights, and interests in this land that were established before the effective date of the transfer.

Dated: March 27, 2008.

C. Stephen Allred,

Assistant Secretary—Land and Minerals Management.

[FR Doc. E8–8418 Filed 4–17–08; 8:45 am]

BILLING CODE 4310–JB–P

DEPARTMENT OF THE INTERIOR

Minerals Management Service

[Docket No. MMS–2008–OMM–0020]

Notice of Nominations Received and Proposed Limited Alternative Energy Leases on the Outer Continental Shelf (OCS) and Initiation of Coordination and Consultation

AGENCY: Minerals Management Service (MMS), Interior.

ACTION: Announcement of nominations and processing priorities, inquiry on competing nominations for proposed limited alternative energy leases, and request for comments from interested and affected parties.

SUMMARY: On November 6, 2007, the Minerals Management Service (MMS) published in the **Federal Register** (72 FR 214, pp. 62673–62675) a request for information and nominations of areas for leases authorizing alternative energy

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Site Legal Description

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Site Legal Description

A tract of land being the south ½ of the northwest ¼ and the north ½ of the southwest ¼ of Section 24; and the east 330 feet of the southeast ¼ of the northeast ¼ and the east 330 feet of the northeast ¼ of the southeast ¼ of Section 23, all in Township 7 North, Range 95 West, Sixth Principle Meridian, Moffat County, Colorado, containing 180 acres more or less.

The real estate correspondence and instruments are maintained and filed by the U.S. Department of Energy, Grand Junction, Colorado.

A copy of the recorded deed will be included when available.

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Public Land Records Notification
For
Unsecured Fee Minerals

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20092645 7/8/2009 9:58 AM
1 of 6 NOTIC R$31.00 D$0.00
Elaine Sullivan,
Moffat County Clerk

NOTICE: DISPOSAL OF RADIOACTIVE MATERIAL

THIS NOTICE IS TO ALERT BUYERS, DEVELOPERS, MINERAL LESSEES, AND ALL OTHERS THAT RADIOACTIVE MATERIALIS DISPOSED ON THE PROPERTY HEREIN DESCRIBED

RECITALS:

A. **WHEREAS**, the owner of that certain parcel or tract of land comprising about 20 acres, more or less, adjacent to the Maybell West Uranium Repository maintained by the United States Department of Energy ("DOE") in Moffat County, State of Colorado, and more particularly described by metes and bounds in **Exhibit 1** attached hereto (the "Property"), is Umetco Minerals Corporation, a Delaware corporation, with offices at 2754 Compass drive, Suite 280, Grand Junction, Colorado 81506 (the "Owner"); and

B. **WHEREAS**, the Property was used by the Owner to process uranium mill tailings from 1975 to 1982, and the Property will be transferred by Owner to DOE as part of the adjacent Maybell West Uranium Repository, which was transferred to DOE effective April 18, 2008 by the United States Department of the Interior, Bureau of Land Management; and

C. **WHEREAS**, when heap leach operations were discontinued in 1982, about 2,000,000 tons of uranium mill tailing waste remained on the Property; and

D. WHEREAS, pursuant to the Uranium Mill Tailings Radiation Control Act of 1978 (Public Law 95-604) ("UMTRCA"), which requires the remediation of identified uranium mill tailing sites, the Owner performed excavation and disposal of the uranium mill tailings (i.e., radioactive materials) and site restoration from 1989 to 2005 on the Property; and

E. **WHEREAS**, during remedial action, all radioactive materials on the Property were removed and placed into a secure repository (the "Disposal Cell") constructed on the Property and isolated in the area shown on the map attached hereto as **Exhibit 2**; and

F. **WHEREAS**, the cleanup of the Property by the Owner has been accepted by the State of Colorado Department of Public Health and Environment ("CDPH&E") and concurred with by the United States Nuclear Regulatory Commission ("NRC"), and is documented in the *Completion Review Report For the Maybell Site Located in Moffat County, State of Colorado,* dated March 2007 (the "Completion Report"), which furnishes, *inter alia*, a discussion of the known contaminated areas, including

20092645 7/8/2009 9:58 AM Elaine Sullivan
2 of 6 NOTIC R$31.00 D$0.00 Moffat County Clerk

an estimate of the amount of contamination present, the approximate location of the radioactive contamination, and a health assessment resulting from exposure to the contaminants; and

G. **WHEREAS**, the Completion Report is a matter of public record and may be examined at, and copies obtained from, the Public Document Room located at the NRC, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852-2738. It may also be accessed electronically through the NRC Website.

NOW THEREFORE, the Owner, for itself and on behalf of CDPH&E, DOE, and NRC, hereby notifies and recommends to purchasers, developers, mineral lessees, and all others in relation to the Property as follows:

I. Verify that future development does not impact the Disposal Cell and its associated surface water diversion features, or the overall disposal-site Property in any way. If there is a possibility of impacting the Disposal Cell, the disposal-site Property, or any of its associated features, such development is subject to NRC regulations cited at 10 CFR 40.28 (d) (1), (2), and (3).

II. In accordance with 10 CFR 40.28 (d) (1), (2), and (3), if development of third-party minerals will impact the surface of the Disposal Cell, be informed that this development is to be preceded by an application to the NRC, as described below.

FURTHER, the Owner as the current surface owner, DOE as the future surface owner, and NRC as the regulator for Maybell West Uranium Repository, hereby notify purchasers, developers, mineral lessees, and all others in relation to the Property of the federal and state regulatory protections afforded to the Property in regard to potential future actions associated with the subsurface mineral rights, as follows:

I. Section 6.3.12 Exhibit L (Permanent Man-Made Structures) of the Mine Land Reclamation Rules of the State of Colorado requires assurance that activities within two hundred (200) feet of such a structure will not adversely affect the stability of the structure.

II. Provisions of the NRC General License at 10 CFR 40.28 (d) (1), (2), and (3) to which the surface acreage of the Property is subject, state that for uses of surface or subsurface estates transferred to the United States:

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3 of 6 NOTIC R$31.00 D$0.00 Moffat County Clerk

"Upon application, the Commission may issue a specific license, as specified in the Uranium Mill Tailings Radiation Control Act of 1978, as amended, permitting the use of surface and/or subsurface estates transferred to the United States or a State. Although an application may be received from any person, if permission is granted, the person who transferred the land to DOE or the State shall receive the right of first refusal with respect to this use of the land. The application must demonstrate that – (10 CFR 40.28 (d))

a. "The proposed action does not endanger the public health, safety, welfare, or the environment; " (10 CFR 40.28 (d) (1)),

b. "Whether the proposed action is of a temporary or permanent nature, the site would be maintained and/or restored to meet requirements in appendix A of the part for closed sites;" (10 CFR 40.28 (d) (2)), and

c. "Adequate financial arrangements are in place to ensure that the byproduct materials will not be disturbed, or if disturbed that the applicant is able to restore the site to a safe and environmentally sound condition." (10 CFR 40.28 (d) (3)).

Dated this 26 day of JUNE, 2009

UMETCO MINERALS CORPORATION

By: _____

Name: Charles B. Kendall
Title: Authorized Representative

STATE OF MICHIGAN)
)ss
COUNTY OF MIDLAND)

The foregoing instrument was acknowledged before me this 26 day of June, 2009, by Charles B Kendall.

Witness my hand and official seal.

_____

Notary Public

My Commission Expires:

Julie A MacMillan
Notary Public of Michigan
Bay County
Expires 01/11/2011

NOTARY PUBLIC STATE OF MICHIGAN

20092645 7/8/2009 9:58 AM Elaine Sullivan
4 of 6 NOTIC R$31.00 D$0.00 Moffat County Clerk

EXHIBIT 1

METES AND BOUNDS DESCRIPTION OF PROPERTY

In Moffat County, State of Colorado, that certain tract of land in the E1/2E1/2 of Section 23, Township 7 North, Range 95 West of the 6th PM, being more particularly described as follows:

Beginning at the NE Corner of Section 23, Township 7 North, Range 95 West;

Thence South 1300 feet along the Section line common to Sections 23 and 24 of the afore-named Township and Range to the TRUE POINT OF BEGINNING;

Thence West 330 feet;

Thence South 2640 feet;

Thence East 330 feet;

Thence North 2640 feet, more or less, to the TRUE POINT OF BEGINNING.

20092645 7/8/2009 9:58 AM Elaine Sullivan
5 of 6 NOTIC R$31.00 D$0.00 Moffat County Clerk

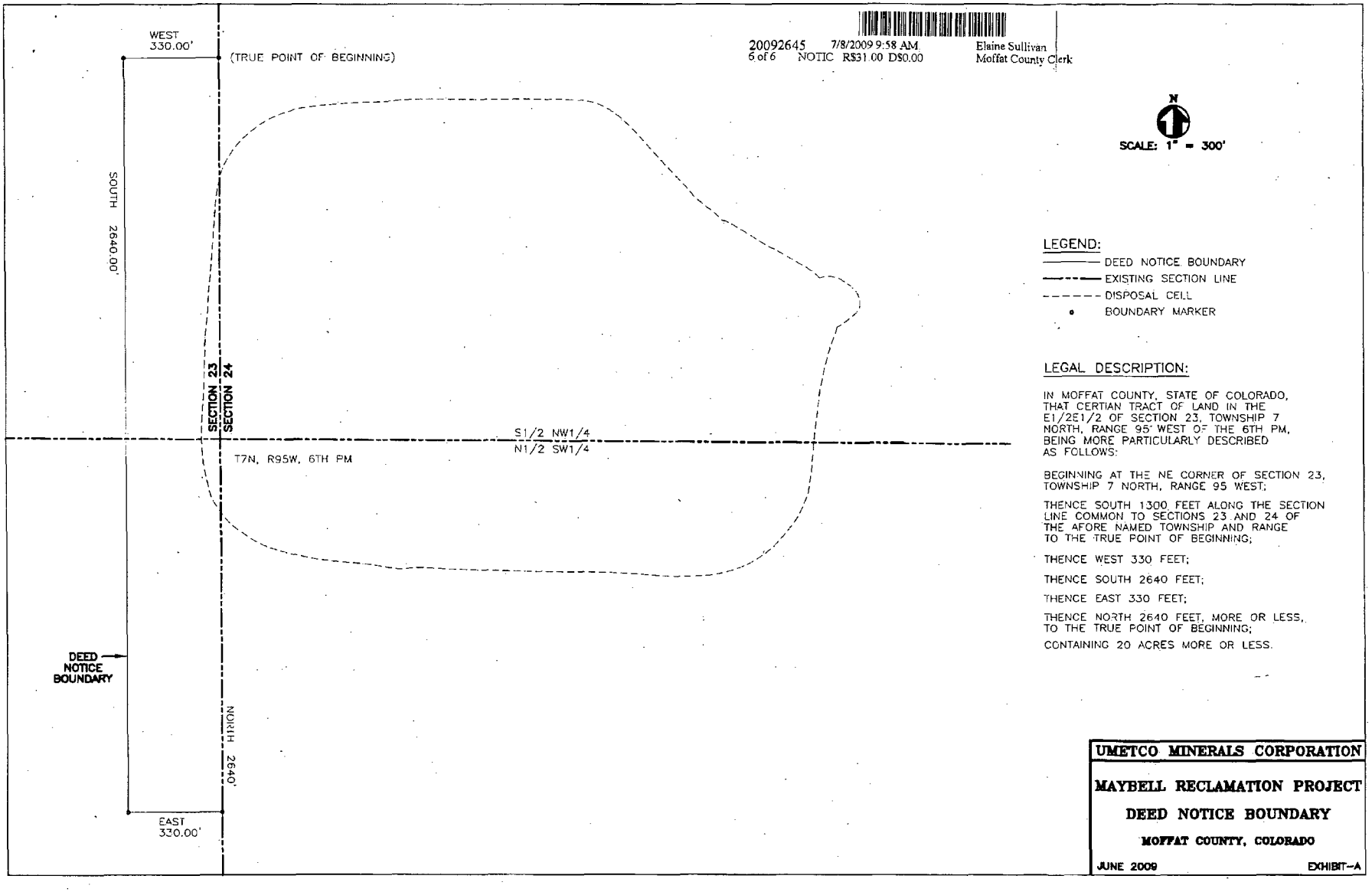
EXHIBIT 2

MAP OF PROPERTY

WITH DISPOSAL CELL SHOWN

5

20092645 7/8/2009 9:58 AM
6 of 6 NOTIC R$31.00 D$0.00
Elaine Sullivan
Moffat County Clerk



LEGEND:

- DEED NOTICE BOUNDARY
- EXISTING SECTION LINE
- DISPOSAL CELL
- BOUNDARY MARKER

LEGAL DESCRIPTION:

IN MOFFAT COUNTY, STATE OF COLORADO, THAT CERTIAN TRACT OF LAND IN THE E1/2E1/2 OF SECTION 23, TOWNSHIP 7 NORTH, RANGE 95 WEST OF THE 6TH PM, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NE CORNER OF SECTION 23, TOWNSHIP 7 NORTH, RANGE 95 WEST;

THENCE SOUTH 1300 FEET ALONG THE SECTION LINE COMMON TO SECTIONS 23 AND 24 OF THE AFORE NAMED TOWNSHIP AND RANGE TO THE TRUE POINT OF BEGINNING;

THENCE WEST 330 FEET;

THENCE SOUTH 2640 FEET;

THENCE EAST 330 FEET;

THENCE NORTH 2640 FEET, MORE OR LESS, TO THE TRUE POINT OF BEGINNING;

CONTAINING 20 ACRES MORE OR LESS.

UMETCO MINERALS CORPORATION

MAYBELL RECLAMATION PROJECT

DEED NOTICE BOUNDARY

MOFFAT COUNTY, COLORADO

JUNE 2009 **EXHIBIT–A**

Quitclaim Deed For 18 Percent Fee Minerals Secured

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Prepared By and To Be Returned To: Jason Smith, c/o Umetco Minerals Corporation, 2754 Compass Drive, Suite 280, Grand Junction, CO 81506

200849971 of 2 QCD 12/12/2008 12:00 PM R$11.00 D$0.00
Elaine Sullivan Moffat County Clerk

STATE DOCUMENTARY FEE
DATE 12-12-08
$ -0-

NO REAL PROPERTY TRANSFER DECLARATION ACCOMPANIED THIS DOCUMENT

Quitclaim Deed

THIS DEED, made this 5 day of December, 2008 by **REX ROSS WALKER**, an individual, having an office address at 911 Kimbark Street, Longmont, Colorado 80501 (the "Grantor"), in favor of **UMETCO MINERALS CORPORATION**, a Delaware corporation, having an office address at 2754 Compass Drive, Suite 280, Grand Junction, Colorado 81506 (the "Grantee");

WITNESSETH:

The Grantor, for the consideration of ten dollars and other good and valuable consideration, in hand paid, the receipt and sufficiency of which is hereby acknowledged, does hereby sell, assign, convey, grant, and quitclaim to the Grantee, its successors and assigns forever, all of the Grantor's right, title, and interest and claims, if any, in and to the minerals and mineral substances of every nature and character whatsoever, including but not limited to oil and gas, and including but not limited to those rights, title, interest and claims received by Grantor from Dolores J. Henshaw Myers, also known as Dolores J. Henshaw Kinney, by that certain Mineral Deed dated April 20, 1992 and filed of record May 18, 1992 by the County Clerk, Moffat County, State of Colorado at Book 653, Page 812, which said rights, title, interest, and claims had been earlier received by the said Dolores J. Henshaw Myers from O. R. Campbell by that certain Minerals Deed dated December 5, 1973 and filed of record by the County Clerk, Moffat County, State of Colorado at Book 389, Page 497, which said rights, title, interest, and claims had been earlier received by the said O. R. Campbell from Brenden Sullivan, also known as Brendan Sullivan, by that certain Mineral Deed dated April 6, 1965 and filed of record by the County Clerk, Moffat County, State of Colorado at Book 324, Page 886, which said rights, title, interest, and claims had been earlier reserved by the said Brenden Sullivan, also known as Brendan Sullivan, in that certain Deed dated February 17, 1959 to L. C. Winder Land Company and filed of record by the County Clerk, Moffat County, State of Colorado at Book 265, Page 203,

in, upon, and underlying that certain tract of land in the E1/2E1/2 of Section 23, Township 7 North, Range 95 West of the 6th Principal Meridian, being more particularly described as follows:

Beginning at the NE Corner of Section 23, Township 7 North, Range 95 West; Thence South 1300 feet along the Section line common to Sections 23 and 24 of the afore-named Township and Range to the TRUE POINT OF BEGINNING: Thence West 330 feet; Thence South 2640 feet; Thence East 330 feet; Thence North 2640 feet, more or less, to the TRUE POINT OF

RECEIVED
DEC 30 2008
BY:

Prepared By and To Be Returned To: Jason Smith, c/o Umetco Minerals Corporation, 2754 Compass Drive, Suite 280, Grand Junction, CO 81506

BEGINNING

being the tract of land subject of that certain Warranty Deed from Sam L. McIntyre and Georgia B. McIntyre to Grantee filed of record by the County Clerk, Moffat County, State of Colorado at Book Number 610, Page 946.

WITNESS the hand of the Grantor as of the date first written above.

REX ROSS WALKER

STATE OF COLORADO)
) ss.
COUNTY OF BOULDER)

The foregoing instrument was acknowledged before me this 3 day of December, 2008, by Rex Ross Walker

Witness my hand and official seal.

Notary Public

NOTARY PUBLIC CHRIS STILSON STATE OF COLORADO

My Commission Expires: My Commission Expires July 3, 2009

20084997 12/12/2008 12:00 PM Elaine Sullivan
2 of 2 QCD R$11.00 D$0.00 Moffat County Clerk

Regulatory Concurrence
For
Unsecured Fee Minerals

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STATE OF COLORADO

Bill Ritter, Jr., Governor
James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
TDD Line (303) 691-7700
Located in Glendale, Colorado

http://www.cdphe.state.co.us

Laboratory Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3090

Colorado Department
of Public Health
and Environment

FEB 11 2009

RECEIVED

FEB 17 2009

BY:_____

Thomas E. Gieck
Umetco Mineral Corporation
P. O. Box 1029
Grand Junction, Colorado 81502-1029

RE: Umetco Minerals Maybell Facility
Colorado Radioactive Materials License No. 660-01
Mineral Right Acquisition

Dear Mr. Gieck:

A January 27, 2009 letter concerning the *Resolution of Mineral Right Acquisition for Umetco-Owned Property at the Maybell, Colorado Uranium Mill Tailings Control Act (UMTRCA) Title II Site* was received by the Colorado Department of Public Health and Environment (the Department) on January 28, 2009. Accompanying the letter are copies of documents relating to Umetco Minerals Corporation's attempts to obtain mineral rights on land adjacent to, and partially covered by, the Maybell tailings repository.

In the January 27, 2009 letter, Umetco Minerals Corporation (Umetco) requests the Department make a determination based on the evidence presented that they have met the requirements for demonstrating a serious effort to obtain mineral rights for twenty acres adjacent to the repository and underlying land in the E1/2 E1/2 of Section 23, Township 7, Range 95 West of the 6th Principal Meridian. In the event that all subsurface rights cannot be obtained for transfer at site closure, the conditions specified in 10 CFR 40 Appendix A Criterion 11C and in Part 18 of 6 CCR 1007-1 Appendix A Criterion 9C need to be met.

The Department determines that Umetco Minerals Corporation has made a serious and documented effort to obtain mineral rights on the property specified above. Umetco must still provide evidence that notification has been made in the public land records of the fact that the land is being used for the disposal of radioactive material and is subject to an NRC general or specific license prohibiting the disruption and disturbance of the tailings.

If you have any questions or would like to set up a meeting, please call Edgar Ethington at (303) 692-3438, me at (303) 692-3423.

Sincerely,

Steve Tarlton
Radiation Management Unit Leader
Compliance Program

CC

Tracy A. Ribcrio; DOE
Edgar Ethington; CDPHE
Jerry Goad; AGO
File 660-01; 3.2

BLM Right-of-Way Grant
For
Site Access Route

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Little Snake Field Office
455 Emerson Street
Craig, Colorado 81625-1129
http://www.co.blm.gov/lsra/index.htm

TAKE PRIDE® IN AMERICA

In Reply Refer To:
2800(100)
COC73142

September 16, 2008

RECEIVED DOE
SEP 19 2008
GRAND JCT. OFFICE

CERTIFIED MAIL NO. 7008 0150 0000 8869 3533
RETURN RECEIPT REQUESTED

DECISION

United States Department of Energy 2597 B¾ Road Grand Junction, Colorado 81503	: : :	Right-of-Way Grant COC73142

Right-Of-Way Grant Issued
Rental Determined
Monitoring Fee Determined

Enclosed is a copy of your right-of-way (ROW) grant, serial number COC73142, which allows the use of public land for an access road, located on the following public land:

T.7N., R. 94W., section 19, S½NW¼NE¼, S½NE¼NW¼, SE¼NW¼NW¼, N½SW¼NW¼, SW¼SW¼NW¼, SW¼SW¼NW¼;
T.7N., R.95W., section 24, SE¼SE¼NE¼, E½NE¼SE¼, N½SE¼SE¼, N½SW¼SE¼, SW¼NW¼SE¼, 6th P.M., Moffat County, Colorado

The United States Department of Energy is exempt from paying rental in accordance with 43 CFR 2806.14(b).

The monitoring fee for this ROW is determined to be a Category 1, which is $107.00. The BLM has received your monitoring fee.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4 and the enclosed Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30

days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition (request) pursuant to regulation 43 CFR 2801.10 or 43 CFR 2881.10 for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied,

(2) The likelihood of the appellant's success on the merits,

(3) The likelihood of immediate and irreparable harm if the stay is not granted, and

(4) Whether the public interest favors granting the stay.

If you have any questions, please contact Louise McMinn, Realty Specialist, at (970) 826-5070.

For John E. Husband
Field Office Manager

Enclosures:
Right-of-Way Grant COC73142
Exhibit A (Map)
Exhibit B (Stipulations)
Appeal Form 1842-1

Form 2800-14 (August 1985)	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	Issuing Office Little Snake Field Office
	RIGHT-OF-WAY GRANT/TEMPORARY USE PERMIT	Serial Number COC73142

1. A (right-of-way) (permit) is hereby granted pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761)

2. Nature of Interest:

   a. By this instrument, the holder: United States Department of Energy
   2597 B¾ Road
   Grand Junction, Colorado 81503

   receives a right to construct, operate, maintain, and terminate an access road on public lands (or Federal land for MLA Rights-of-Way) described as follows:

   T. 7N., R.94W., 6th PM, Moffat County, Colorado
   Section 19, S½NW¼NE¼, S½NE¼NW¼, SE¼NW¼NW¼,
   N½SW¼NW¼, SW¼SW¼NW¼, SW¼SW¼NW¼;
   T. 7N., R.95W., 6th PM, Moffat County, Colorado
   Section 24, SE¼SE¼NE¼, E½NE¼SE¼,
   N½SE¼SE¼, N½SW¼SE¼, SW¼NW¼SE¼
   (within)

   b. The right-of-way or permit area granted herein is described in Exhibit A. The right-of-way is 20 feet wide and 8,956 feet long and contains 4.11 acres, more or less. If a site type facility, the facility contains 0 acres.

   c. This instrument shall terminate on December 31, 2028, 20 years from its effective date unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.

   d. This instrument may be renewed. If renewed, the right-of-way or permit shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.

   e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. Rental: Exempt according to 43 CFR 2806.14(b).

   For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

4. Terms and Conditions:

a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations part 2800 and 2880.

b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.

c. Each grant issued pursuant to the authority of paragraph (1) for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.

d. The stipulations, plans, maps, or designs set forth in Exhibit(s) A&B, attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.

e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.

f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

(Signature of Holder)	(Signature of Authorized Officer)
Realty Officer (Title)	For Field Manager (Title)
9/8/2008 (Date)	September 16, 2008 (Effective Date of Grant)

EXHIBIT A
COC73142

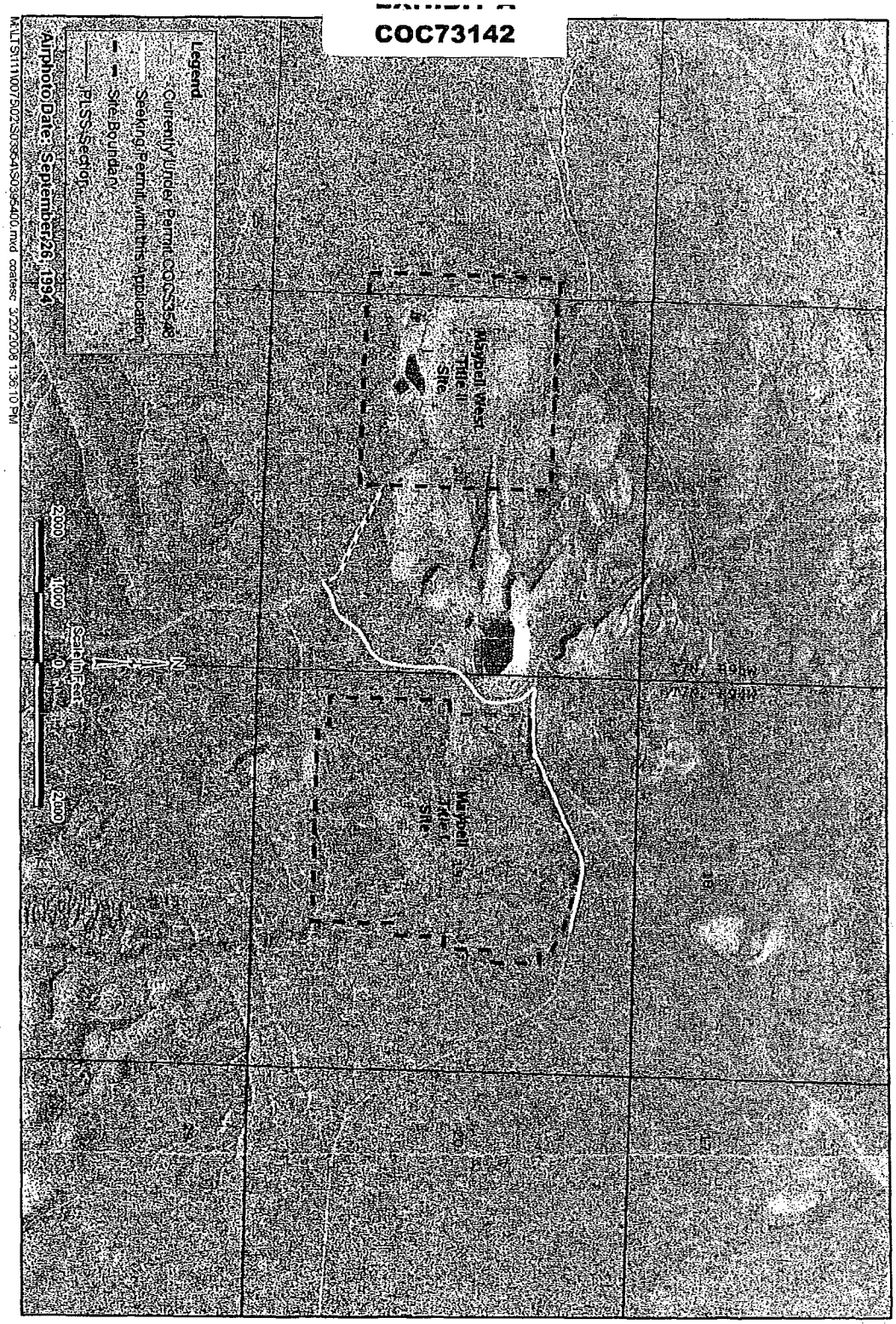


Exhibit B
Stipulations
COC73142

1. The holder shall construct, operate, and maintain the facilities, improvements, and structures within the right-of-way in strict conformity with the plan of development which was approved and made part of the grant. Any relocation, development, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved construction, operation, and termination, shall be made available on the right-of-way during the construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.

2. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 4 inches deep, the soil shall be deemed too wet to adequately support construction equipment.

5. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

6. If fossils are discovered during construction or other operations, all activity in the area will cease and the Field Office Manager will be notified immediately. An assessment of significance will be made within an agreed time frame. Operations will resume only upon written notification by the Authorized Officer.

7. The BLM is responsible for informing all persons in the areas who are associated with this project of the requirements for protecting paleontological resources. Paleontological resources found on the public lands are recognized by the BLM as constituting a fragile and nonrenewable scientific record

of the history of life on earth, and so represent an important and critical component of America's natural heritage. These resources are afforded protection under 43 CFR 3802 and 3809. Penalties possible for the collection of vertebrate fossils are under 43 CFR 8365.1-5.

8. The holder shall maintain the right-of-way in a safe, usable condition, as directed by the authorized officer. A regular maintenance program shall include any necessary blading, cleaning of ditches or other work to maintain the road.

9. Additional mitigative measures will be employed to prevent accelerated erosion if it begins to occur within or on constructed drainage and diversion ditches or surface drainages affected by the road.

10. The right-of-way shall remain open to public use.

11. The holder(s) shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) With regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant, (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) In excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

12. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. 'Waste' means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

13. The holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations).

14. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the holder shall obtain from the authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the authorized officer. The authorized officer prior to such use shall approve emergency use of pesticides in writing.

15. Prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a pretermination conference. This conference will be held to review the termination provisions of the grant.

16. RECLAMATION:
The holder is required to use the reclamation practices necessary to reclaim all disturbed areas. Reclamation will ensure surface and subsurface stability, growth of a self-regenerating permanent vegetative cover and compatibility with post land use. The vegetation will be diverse and of the same seasonal growth as adjoining vegetation. Post land use will be determined by the authorized officer but normally will be the same as adjoining uses.

Reclamation practices which must be applied or accomplished are: re-grading to the approximate original contour, effectively controlling noxious weeds, separating, storing and protecting topsoil for redistribution during final abandonment, seeding and controlling erosion. If topsoil is not present, or quantities are insufficient to achieve reclamation goals, a suitable plant growth media will be separated, stored and protected for later use. Reclamation will begin with the salvaging of topsoil and continue until the required standards are met. If use of the disturbed area is for a short time (less than one year), practices which ensure stability will be used as necessary during the project, and practices needed to achieve final abandonment will commence immediately upon completion of the approved activity use and be completed, with the exception of vegetative establishment, within one year. If use of the area is for longer periods of time (greater than one year), interim reclamation is required on the unused areas. Interim reclamation of the unused areas will begin immediately upon completion of the permanent facility(s) and be completed, with exception of vegetative establishment, within one year. For both short and long term projects vegetative establishment will be monitored annually. If the desired vegetation is not established by the end of the second growing season, cultural practices necessary for establishment will be implemented prior to the beginning of the next growing season. Interim reclamation, unless otherwise approved, will require meeting the same standards as final abandonment with the exception of original contour, which may be only partially achievable.

Annual reports consisting of reclamation practices completed and the effectiveness of the reclamation will be provided to the Little Snake Resource Area. The first report will be due in January following initiation of reclamation practices and annually thereafter until final abandonment is approved.

There are numerous reclamation practices and techniques which increase the success rate of reclamation and stabilization. With the exception of those stated above, it is the lessee's prerogative to use those (s) he chooses to accomplish the objective. However, it is recommended that state-of-the-art reclamation, stabilization and management practices be used to achieve the desired objective in a timely and cost-effective manner.

The following definitions and measurements will be used to accomplish and determine if reclamation has been achieved.

- 'permanent vegetative cover' will be accomplished if the basal cover of perennial species, adapted to the area, is at least ninety (90) percent of the basal cover of the undisturbed vegetation of adjoining land or the potential basal cover as defined in the Soil Conservation Service Range Site(s) for the area.

- 'diverse' will be accomplished if at least two (2) perennial genera and three (3) perennial species, adapted to the area, make up the basal cover of the reclaimed area in precipitation zones thirteen (13) inches or less and three (3) perennial genera and four (4) perennial species in precipitation zones greater than thirteen (13) inches. One species will not make up more than fifty (50) percent of the perennial vegetation by basal cover.

- 'self-regenerating' and 'adapted to the area' will be evident if the plant community is in good vigor, there is evidence of successful reproduction and the species are those commonly used and accepted in the area.

- 'surface stability' will be accomplished if soil movement, as measured by deposits around obstacles, depths of truncated areas, and height of pedestalling, is no greater than three tenths (0.3) of an inch and if erosion channels (rills, gullies, etc.) are less than one (1) inch in depth and at intervals greater than ten (10) feet.

If this standard is not met by the end of the second growing season, two alternatives exist depending on the severity of the erosion:

a. If erosion is greater than two (2) times the allowable amount, correctional action would have to be taken by the responsible company at that time.

b. If erosion is less than or equal to two (2) times the allowable amount, and it is determined the erosion occurred during vegetative establishment and the site may become stable, no correctional action would be required at that time. Another check (and measurement) would be performed a year later to determine if stability standards had been met. If the original measurements have not increased by more than the allowed standard, the standard would be considered met. However, if the increase is greater than the allowed standard, corrective action would be required.

- 'subsurface stability' (mass wasting event) is of concern if disturbance has included excavation over four (4) feet in depth and greater than 10,000 square feet in area on slopes thirty five (35) percent and greater, or on any erosion-prone slope (Danforth Hills, Vermillion Bluffs and badland areas). When these conditions occur, length of liability for reclamation and final abandonment will continue for ten (10) years following recontouring to original contour or for such time that climatic patterns provide two (2) consecutive years in which measurable precipitation totals at least 120 percent of average from October 1 through September 30, as measured by data averaged from nearby regional weather stations.

This stipulation, or portions of it, may be waived by the AO. Such waiver will be documented and justified when not applicable or objectives are accomplished through another method.

ROW Monitoring Fee Category Determination Decision
For FLPMA and MLA Rights-of-Way

Application Serial Number: COC73142
Applicant: Department of Energy
Address: 2597 B ¾ Road
Grand Junction, CO 81503
Application For: Right-of-Way application for an access road
Location: T.7., R.94W., Section19, T.7., R.95W.,section 24, 6th P.M., Moffat County, Colorado

Pre-Application Meeting Held: _X_ No ____ Yes

Land Use Plan Conformance? ____ No _X_ Yes

Estimated Processing Requirements:

Type of ROW: _X_ FLPMA _____ MLA

NEPA Action Required: _____ EIS _____ EA _____ DNA _X_ CE/CX

Personnel Needed for Processing	Estimated Processing Hours
Realty Specialist/Land Law Examiner	7
Cultural/Paleontological Resources	
T&E Species	
Wildlife/Fisheries	
Air/Water/Soils	
Recreation/Visual	
Range	
Fluids/Minerals	
Administration/Contracting	
Manager	
Other	
Other	
TOTAL HOURS	7

The appropriate Processing Category for this application is Category 1. The Processing fee for this Category is $107.00. Processing fees for Categories 1-4 are non-refundable. See enclosed table for Category definitions and fee schedule.

Prepared By: Tamara McMann — Realty Specialist — August 18, 2008 — Date

Approved By: Chris D. Shutt — Authorized Officer — 8.27.08 — Date

1

Form 1842-1
(September 2006)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS

DO NOT APPEAL UNLESS
1. This decision is adverse to you,
AND
2. You believe it is incorrect

IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

1. NOTICE OF APPEAL	A person who wishes to appeal to the Interior Board of Land Appeals must file in the office of the officer who made the decision (not the Interior Board of Land Appeals) a notice that he wishes to appeal. A person served with the decision being appealed must transmit the *Notice of Appeal* in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the FEDERAL REGISTER, a person not served with the decision must transmit a *Notice of Appeal* in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).
2. WHERE TO FILE NOTICE OF APPEAL	Bureau of Land Management 455 Emerson Street Craig, Colorado 81625
WITH COPY TO SOLICITOR	Rocky Mountain Regional Solicitor 755 Parfet Street, Suite 151 Lakewood, Colorado 80215
3. STATEMENT OF REASONS	Within 30 days after filing the *Notice of Appeal*, file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. If you fully stated your reasons for appealing when filing the *Notice of Appeal*, no additional statement is necessary (43 CFR 4.412 and 4.413).
WITH COPY TO SOLICITOR	Rocky Mountain Regional Solicitor 755 Parfet Street, Suite 151 Lakewood, Colorado 80215
4. ADVERSE PARTIES	Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the *Notice of Appeal*, (b) the Statement of Reasons, and (c) any other documents filed (43 CFR 4.413).
5. PROOF OF SERVICE	Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (43 CFR 4.401(c)).
6. REQUEST FOR STAY	Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with a *Notice of Appeal* (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your *Notice of Appeal* (43 CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the *Notice of Appeal* and Petition for a Stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted. **Standards for Obtaining a Stay.** Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.

Unless these procedures are followed, your appeal will be subject to dismissal (43 CFR 4.402). Be certain that all communications are identified by serial number of the case being appealed.

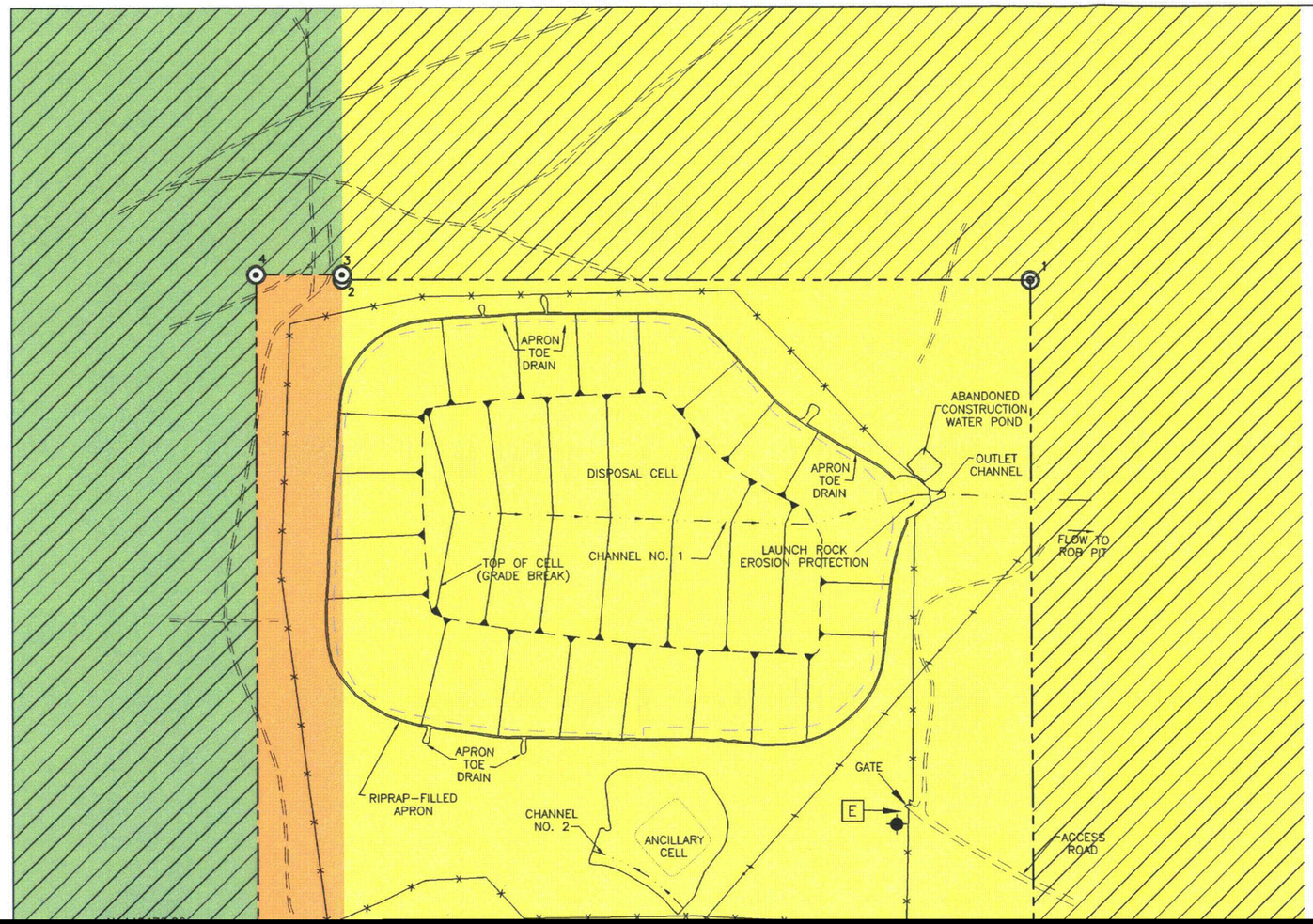
NOTE: A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, Subpart B for general rules relating to procedures and practice involving appeals.

(Continued on page 2)

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Pre-Transition Land Ownership and Use Map

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N

SCALE IN FEET

500 250 0 500 1000

LEGEND

- E — ENTRANCE SIGN
- BOUNDARY MONUMENT W/ SURVEY COORDINATES
- SITE MARKER
- PROPERTY BOUNDARY
- SECTION LINE
- WIRE FENCE
- POWER LINE
- DIRT ROAD
- CHANGE IN SLOPE
- FLOW LINE AND FLOW DIRECTION

LAND OWNERSHIP AND USE

- UMETCO FEE LAND – WITH 18% MINERALS
- McINTYRE PROPERTY
- BLM SURFACE/SUBSURFACE
- McINTYRE GRAZING RIGHTS

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Appendix B

Agreement State Site Custodianship Refusal Letter

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UMB Barcode # 3076

STATE OF COLORADO

EXECUTIVE CHAMBERS
136 State Capitol
Denver, Colorado 80203-1792
Phone (303) 866-2471

RECEIVED
APR - 5 1996

Roy Romer
Governor

April 2, 1996

Joseph E. Virgona
Project Manager
Grand Junction Projects Office
U. S. Department of Energy
P.O. Box 2567
Grand Junction, CO 81502-2567

Dear Mr. Virgona:

I am writing in response to your letter of October 4, 1995, regarding Colorado's interest in becoming the long-term custodian of the Uranium Mill Tailings Radiation Control Act (UMTRCA) Title II sites within the state.

Four sites within Colorado fall under Title II. These include the Durita Site, the Maybell Title II Site, the Uravan Site and the Canon City Site. It is anticipated that reclamation at two of these sites, Durita and Maybell, will be completed in the period 1996 to 1998. Reclamation at the remaining two sites will be completed some time after 2005. At this time, none of our site operators have requested license termination. The timing of custodianship of any site will of course depend on the license holder's request for license termination.

Colorado declines its option to be custodian of the Durita and Maybell Sites. However, since the Uravan and Canon City sites will not be eligible for closure until after 2000, it is premature to discuss the state's position on these sites.

The Radiation Control Division at the Colorado Department of Public Health and Environment has committed to work with the U.S. Nuclear Regulatory Commission, the U.S. Department of Energy and our licensees to assure a smooth transition of custodianship at the Durita and Maybell Sites. We will keep DOE informed when our licensees establish a firm timetable for termination of their licenses. If you have any questions, please contact Robert Quillin, director of the Radiation Control Division, at (303) 692-3038.

Sincerely,

Roy Romer
Governor

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Appendix C

Sample Field Photograph Log

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Field Photograph Log

Site: Purpose of Visit:

Date of Visit: Photo Type: (film and/or digital)

File Name	Film Frame No.	Azimuth	Field Inspection Photo No.	Trip Report PL No.	Post on Web (Y/N)	Photo Caption
MAW07_001		90	1	4	Y	Retention pond, filled with water, and outflow channel
MAW07_002		85	2		N	Successful spoils pile revegetation, north-facing slope

Lead Inspector: Assistant Inspector:
Remarks:
Electronic File Location:

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Appendix D

Initial Site Inspection Checklist

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Inspection Checklist: Maybell West

Date of This Revision: _____
Last Annual Inspection: _____
Inspectors: _____ and _____

Next Annual Inspection (Planned): _____

No.	Item	Issue	Action
1	Access	Access is from the Maybell Title I site on a gravel road that crosses BLM property.	None.
2	Specific site surveillance features	See attached list.	Inspect. Identify maintenance requirements.
3	Vegetation	A vegetative cover was not used at this site.	Note any changes in site vegetation. Encroachment of deep-rooted vegetation will require an evaluation. Noxious weeds will be controlled.
4	Riprap—Heap Leach Repository and Ancillary Cell, diversion channels	Most of the critical disposal site features have been armored with riprap for erosion protection.	Inspect riprap, note evidence of rock displacement or rock degradation, cracking, sloughing, or erosion.
5	Erosion—Launch Rock Basin	Note condition of outlet channel; any headward erosion is designed to be controlled by the launch rock.	Headward erosion noted will be documented (photographs and description) and repaired, as needed.
6	Adjacent Land Use—Site Perimeter	Visually inspect for 0.25 mile beyond site boundary for changes and developments in area surrounding the site, especially the watershed basin.	Inspect. Identify changes and developments.

Checklist of Site Specific Surveillance Features: Maybell West

Feature	Comment
Access Road	Gravel road. Verify road is passable.
Entrance Gate	
Entrance and Perimeter/Warning Signs	Total: 10
Perimeter Fence	Barbed-wire stock fence
Boundary Monuments	Total: 8
Site Marker	Near entrance gate
Monitor Wells	There are no monitor wells at this disposal site.

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NRC Acceptance Documentation

This documentation was added following acceptance of this Long-Term Surveillance Plan by the U.S. Nuclear Regulatory Commission

(to be inserted upon receipt)

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