Department of Energy
Washington, DC 20585

April 29, 2016

To: Distribution

Subject: May 2016 Environmental Sampling at the Durango, Colorado, Processing and Disposal Sites

The purpose of this letter is to inform you of the upcoming sampling event at the Durango, Colorado, processing and disposal sites. Enclosed are the maps and tables specifying sample locations and analytes for monitoring at the Durango sites. Water quality data will be collected from monitoring wells and surface locations at these sites as part of the routine environmental sampling currently scheduled to begin the week of May 23, 2016. We will notify you of the exact date and time the week before the scheduled sampling.

The following lists show the monitoring wells (with zone of completion) and surface locations scheduled to be sampled during this event.

MONITORING WELLS

DUR01 Mill Site

612 Al/Km 630 Al/Km 631 Al/Km 633 Km 634 Km 635 Km 863 Al
617 Al

DUR02 Raffinate Pond

594 Mf 598 Mf/Pl 607 Al 879 Mf 884 Al

DUR03 Bodo Canyon

605 Cf 607 Cf 608 Al 612 Km 618 Al 621 Cf 623 Al

SURFACE LOCATIONS

DUR01 Mill Site

584 586 652 691

DUR02 Raffinate Pond

588 654 678

All samples will be collected as directed in the *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites*. Access agreements are being reviewed and are expected to be complete by the beginning of fieldwork. All analytes and locations were based on the site *Groundwater Compliance Action Plan for the Durango, Colorado UMTRA Project Site, February 2008* and the *Long-Term Surveillance and Maintenance Plan for the Durango, Colorado, Disposal Site, April 2015*.

Please contact me at (970) 248-6016 if you have any questions. Please send any correspondence to:

U.S. Department of Energy
Office of Legacy Management
2597 Legacy Way
Grand Junction, CO 81503

Sincerely,

Jalena Dayvault
Site Manager

Enclosures

Distribution:
D. Orlando, NRC
M. Cosby, CDPHE
W. Naugle, CDPHE
G. Brand, SJBHD

cc w/o enclosures:
D. Miller, Navarro (e)
File: DUD 400.02 (rc grand junction)
DUP 400.02 (rc grand junction)

Sampling Frequencies for Locations at Durango, Colorado

Location ID	Quarterly	Semiannually	Annually	Biennially	Not Sampled	Notes
Monitoring Wells						
DUR01 Mill Tailings						
612			X			
617			X			
630			X			
631			X			Download datalogger
633			X			Download datalogger
634			X			
635			X			
859					X	Download datalogger
863			X			Download datalogger
DUR02 Raffinate Pond						
594			X			Se and U ONLY
596					X	Download datalogger
598			X			Se and U ONLY
607			X			Se and U ONLY
879			X			Se and U ONLY
884			X			Se and U ONLY
888					X	Download datalogger
889					X	Download datalogger
890					X	Download datalogger
DUR03 Bodo Canyon						
605			X			
607			X			POC WELL
608			X			"
612			X			"
618			X			"; supplements 608
621			X			"
623			X			BACKGROUND
MW-1					X	Download datalogger
NVP					X	Download datalogger
P7					X	Download datalogger
Surface Locations						
DUR01 Mill Tailings						
584			X			
586			X			
652			X			RIVER
691			X			RIVER
DUR02 Raffinate Pond						
588			X			
654			X			RIVER
678			X			RIVER;new location;replaces 0656

Sampling conducted annually in June.

Constituent Sampling Breakdown

Site	Durango				
Analyte	Groundwater	Surface Water	Required Detection Limit (mg/L)	Analytical Method	Line Item Code
Approx. No. Samples/yr	20	7			
Field Measurements					
Alkalinity	X	X			
Dissolved Oxygen					
Redox Potential	X	X			
pH	X	X			
Specific Conductance	X	X			
Turbidity	X				
Temperature	X	X			
Laboratory Measurements					
Aluminum					
Ammonia as N (NH3-N)					
Cadmium	0612 & 0863 only	X	0.001	SW-846 6020	LMM-02
Calcium	DUR03 only		5	SW-846 6010	LMM-01
Chloride	DUR03 only		0.5	SW-846 9056	MIS-A-039
Chromium					
Gross Alpha					
Gross Beta					
Iron	DUR03 only		0.1	SW-846 6020	LMM-01
Lead					
Magnesium	DUR03 only		5	SW-846 6010	LMM-01
Manganese	All Mill Tailings Areas and Bodo Canyon locations		0.005	SW-846 6010	LMM-01
Molybdenum	All Mill Tailings Areas and Bodo Canyon locations	X	0.003	SW-846 6020	LMM-02
Nickel					
Nickel-63					
Nitrate + Nitrite as N (NO3+NO2)-N					
Potassium	DUR03 only		1	SW-846 6010	LMM-01
Radium-226					
Radium-228					
Selenium	X	X	0.0001	SW-846 6020	LMM-02
Silica					
Sodium	DUR03 only		1	SW-846 6010	LMM-01
Strontium					
Sulfate	All Mill Tailings Areas and Bodo Canyon locations		0.5	SW-846 9056	MIS-A-044
Sulfide					
Total Dissolved Solids	DUR03 only		10	SM2540 C	WCH-A-033
Uranium	X	X	0.0001	SW-846 6020	LMM-02
Vanadium					
Zinc					
Total No. of Analytes	13	4			

Note: All private well samples are to be unfiltered. The total number of analytes does not include field parameters.

LEGEND

- Groundwater Monitoring Well
- Surface Water Monitoring Location
- Site Boundary

N

0 600 1,200 Feet

U.S. DEPARTMENT OF ENERGY OFFICE OF LEGACY MANAGEMENT	Work Performed by Navarro Research & Engineering, Inc. Under DOE Contract Number DE-LM0000421

Planned Sample Locations
Durango, CO, Processing Sites
May 2016

DATE PREPARED:	FILE NAME:
April 13, 2016	S1288900

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