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LOST CREEK ISR, LLC

June 30, 2017

Brian Wood
State of Wyoming
Department of Environmental Quality - Land Quality Division
510 Meadowview Drive
Lander, WY 82520

**RE: Submittal of Non-Significant Revision #15 to Permit to Mine
Lost Creek Project PT788**

Dear Mr. Wood,

Enclosed with this cover letter is Non-Significant Revision (NSR) #15 to the Permit to Mine for the Lost Creek ISR Project PT788 as detailed on the index sheet. The primary purpose of the revision is to incorporate the topsoil policy language from the WDEQ-LQD letter dated March 2, 2017 into the Operations Plan to allow operations to be conducted in accordance with the new policy as optioned. Additionally, the revision incorporates supplemental subsoil analysis data into the Permit.

If you have any questions regarding this submittal please feel free to contact me at the Casper Office.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Michael D. Gaither', is written over a horizontal line.

Michael D. Gaither
Manager EHS and Regulatory Affairs
Ur-Energy USA, Inc.

Attachments: NSR #15 Index Sheet and Permit replacement/additional pages

Cc: Nancy Williams, WDEQ-LQD (electronic copy)
Mark Newman, BLM Rawlins Office
John Saxton, NRC Project Manager (electronic copy)
Ms. Theresa Horne, Ur-Energy, Littleton Office (electronic copy)

INDEX SHEET FOR MINE PERMIT AMENDMENTS OR REVISIONS

MINE COMPANY NAME: Lost Creek ISR, LLC MINE NAME: Lost Creek PERMIT NO.: PT0788

Statement: I, Michael Gaither, an authorized representative of Lost Creek ISR, LLC declare that only the items listed on this and all consecutively numbered Index Sheets are intended as revisions to the current permit document. In the event that other changes inadvertently occurred due to this revision, those unintentional alterations will not be considered approved. Please initial and date. MG 6/30/2017

NOTES: 1) Include all revision or change elements and a brief description of or reason for each revision element.
 2) List all revision or change elements in sequence by volume number; number index sheets sequentially as needed.

VOLUME NUMBER	PAGE, MAP OR OTHER PERMIT ENTRY TO BE		DESCRIPTION OF CHANGE
	REMOVED	ADDED	
Permit to Mine Volume 5: Operations Plan and Reclamation Plan	Operations Plan Section 2.5, Page OP-12 (Rev9 Sep10)	Operations Plan Section 2.5, Page OP-12 (Rev10 Mar17)	Added reference to new topsoil policy letter dated
Permit to Mine Volume 4: Appendix D Main Permit Area (D7 to D11) and Appendix D – East and West Roads	N/A	Attachment D7-3 Supplement appended to Appendix D7 Attachment D7-3	Supplemental subsoil suitability analysis data

deeper within drainages, depending on the size of the drainage (ranging from very shallow swales to ephemeral channels).

Topsoil removal will be supervised by a qualified person using the existing data and the detailed soil survey data. Based on this information and on field experience to date, the upper materials that will be salvaged can be readily distinguished from the lower materials. Topsoil stripping depths are shown on Plate OP-3.

The areas from which topsoil is to be stripped are: 'rectangular' areas, such as the deep well sites; which are relatively small (less than 10 acres) and widely separated across the Permit Area; or long, narrow corridors associated with installing new roads and pipelines or upgrading existing roads. Topsoil stripping depths in the 'rectangular' areas are based on the soil sampling results within those areas.

The corridors are generally perpendicular to drainages and may cross all three soil types within relatively short distances. As noted in WDEQ-LQD Guideline 1, if soils are similar, then soil associations can be considered over relatively small acreages (e.g., five acres or less). Therefore, topsoil stripping depths along the corridors will be based on the soil sampling results, field observations during the soil surveys, and field observations during the road or pipeline installation or upgrade - in particular, the location relative to drainages. In general, the topsoil stripping depth between drainages is 16 inches and may be up to 24 inches within drainages. As a field check along roadways and pipelines, LC ISR, LLC will dig pits at intervals where changes in stripping depths to help ensure the most productive portion of the soil profile is salvaged.

Field observations during upgrade of existing roads will be of particular importance to avoid stripping material of indeterminate origin. As with installation of new roads, attention will be given to drainages in which deeper topsoil depths may be expected. The width of topsoil removal from existing road corridors will depend on the width of existing disturbance.

Table OP-2 shows the total acreage of expected disturbance associated with the various facilities at the Lost Creek Project. The table also includes the disturbance acreage by vegetation type and projected topsoil salvage. As discussed below, vegetation and topsoil disturbance are not considered to be equal. The assumptions about the extent of vegetation and topsoil disturbance for each type of project facility are included in **Table OP-2**, with additional detail for the mine units on **Figures OP-6a and OP-6b**.

Short-term and long-term topsoil will be managed as described in the following sections or as provided by the Land Quality Division Noncoal In Situ Mining Topsoil Policy dated March 2, 2017. Supplemental subsoil analytical results are included in **Attachment D7-3**.

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Attachment D7-3 Supplement

Additional analysis of subsoil was conducted at the Lost Creek ISR Project site to demonstrate that there would be no negative impact to topsoil if aspects of the updated WDEQ-LQD topsoil policy were followed. The updated topsoil policy was issued by LQD in a letter dated March 2, 2017 and includes an allowance for subsoil to be temporarily (i.e. < 90 days) placed upon native topsoil without first stripping the topsoil during excavations. The sampling and analysis was conducted to characterize the subsoil to a greater depth than what was previously conducted during the initial baseline soil analysis as described in Appendix D7. The subsoil was analyzed for suitability as described in WDEQ-LQD Guideline 1.

Soil samples were collected during excavation of drill pits during drilling operations in Mine Unit 2 in May 2017. Composite samples of the subsoil were collected from a depth interval of approximately one foot to approximately 12 feet below ground surface. Previous Guideline 1 soil analysis was conducted to a depth of approximately 4 feet below ground surface. Results of the analysis (**Table 1**) show that the subsoil passes the suitability criteria with only two marginal results (2M1004 for SAR and 2M1306 for Saturation).

TABLE 1: Subsoil Suitability Data

Analyte Name	Units	2M1004 (1-12')	2M1306 (1-12')	Avg. of Previous Results
		5/5/2017	5/5/2017	2006
Neutralization Potential	t/kt	8	7	8
Acid Potential	t/kt	ND(0.01)	ND(0.01)	0
Acid/Base Potential	t/kt	9	7	8
Sulfur, Total	%	ND(0.01)	ND(0.01)	---
Sand	%	78	80	64
Very Fine Sand	wt%	4	4	---
Silt	%	15	11	19
Clay	%	7	9	18
Texture	--	LS	LS	---
Saturation	%	28.1	23.2	24.7
pH, sat. paste	s.u.	8.2	7.7	7.7
Conductivity, sat. paste	mmhos/cm	3	3.5	0.85
Calcium, sat. paste	meq/L	5.84	25.8	3.96
Magnesium, sat. paste	meq/L	1.78	8.46	1.73
Sodium, sat. paste	meq/L	24.2	8.47	2.68
Sodium Adsorption Ratio (SAR)	unitless	12.4	2	1.61
Organic Matter	%	0.2	0.3	0.64
Organic Carbon	%	0.1	0.2	---
Nitrate as N, KCL Extract	mg/kg	ND(1)	5	1.37
Arsenic	mg/kg	ND(0.02)	ND(0.02)	0.05
Molybdenum	mg/kg	ND(0.02)	ND(0.02)	---
Selenium	mg/kg	ND(0.01)	ND(0.01)	0.02
Boron	mg/kg	0.3	0.2	0.39

Overburden Suitability Criteria*		
Suitable	Marginal	Unsuitable
>-5		<-5
>-5		<-5
>-5		<-5
	c,sic,s	
25-80	<25 or >80	
5.5-8.5	5.0-5.5	<5.0
0-8	8-12	>12
0-10	10-15	>15
<10		>10
		>50
<2.0	>2.0	
<1.0	>1.0	
<0.1	>0.1	
<5.0		>5.0

*WDEQ-LQD Guideline 1