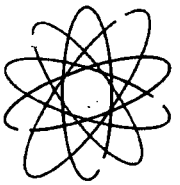

POWERTECH (USA) INC.

RICHARD E. BLUBAUGH
Vice President – Environmental
Health & Safety Resources

August 1, 2012

Ms. Valois Shea
U.S. EPA Region 8
Mail Code: 8P-W-UIC
1595 Wynkoop Street
Denver, CO 80202-1129

Re: Dewey-Burdock Project
Revised Class III UIC Application

Dear Ms. Shea:

By this letter, Powertech (USA) Inc. submits this revised Class III UIC permit application to the U.S. Environmental Protection Agency for the Dewey-Burdock Project, a proposed uranium *in situ* recovery (ISR) project to be located in Custer and Fall River counties, South Dakota. Based on our July 13, 2012 discussion, the revised application is provided as a replacement to the original application submitted in December 2008.

Enclosed please find the following:

- Two signed copies of the permit application form
- Two bound copies of the revised report accompanying the permit application
- Two CDs containing electronic copies of the permit application form and accompanying report

The Class III UIC permit application has been revised as requested by EPA Region 8 staff. The primary purpose of the revisions is to address updated information contained in the response to the U.S. Nuclear Regulatory Commission request for additional information (RAI) regarding the NRC source and byproduct material license application for the Dewey-Burdock Project[1]. Table 1 (included with this letter) indicates where the information from each RAI response is addressed in the revised Class III UIC permit application report. The specific RAI responses addressed in the revised application were requested by EPA Region 8 staff during an October 14, 2011 conference call.

In addition to incorporating updated information from the RAI responses, Section 17 (Attachment S) of the enclosed report requests an aquifer exemption boundary (AEB) that is significantly smaller

[1] Dewey-Burdock Project Technical Report RAI Responses, June 2011, available from NRC ADAMS document server: http://pbadupws.nrc.gov/docs/ML1120/ML112071064.html.

than the previously requested AEB. Based on meetings between Powertech and EPA Region 8 staff, it was agreed that the AEB request should include some distance beyond the monitor well ring and that a scientific approach would be used similar to that recently approved for the Lost Creek ISR Project in Wyoming.

The application also has been revised to address 40 CFR Part 147 Subpart QQ well construction requirements specific to South Dakota, including §147.2104(b) and (d) regulations for PVC well casing and protection of USDWs.

Powertech (USA) Inc. appreciates the opportunity to submit this revised permit application and looks forward to working with EPA Region 8 staff in the near future. If you have any questions, please do not hesitate to contact us at your convenience. Thank you for your time and consideration in this matter.

Respectfully submitted,

Richard Blubaugh
Vice President - Environmental Health & Safety Resources

cc: Mark Hollenbeck, Project Manager, Powertech (USA) Inc., P.O. Box 812, Edgemont, SD 57735
John Mays, Vice President - Engineering, Powertech (USA) Inc.
Ronald Burrows, U.S. NRC Office of Federal and State Materials and Environmental Management Programs, Washington, DC 20555-0001
Marian Atkins, BLM Eastern Montana/Dakotas District, 310 Roundup St., Belle Fourche, SD 57717
Jack Fritz, WWC Engineering, 1849 Terra Ave, Sheridan, WY 82801
Mike Cepak, Minerals & Mining Program, SD DENR

Table 1. Cross Reference List for June 2011 RAI Responses

RAI Response	Description	Revised UIC Application Report Section(s)
P&R-1	Revised geologic cross sections	6.2.2, Plates 6.12-21
P&R-2	Characterization of historical mine workings	3.2
P&R-2	ISR operations with respect to historical mine workings	10.6
P&R-3	Seismic evaluation	6.3
P&R-4	Morrison Formation characterization	6.2.2, Plate 6.22, App. G
P&R-5	Hydraulic connection between Fall River and ground surface	10.5
P&R-6	Fuson Shale confining capacity	6.2.2
P&R-8	Detailed discussion on revised geologic cross sections	6.2.2
P&R-9	Plugging and abandonment of exploration holes	4.4
P&R-10	Well inventory	4.1, App. A, B
P&R-10	Plugging and abandonment procedures	15.1
P&R-11	Revised 2008 pumping test report	App. J
P&R-12(a)	Clarification of breccia pipes	6.2.3, App. E
P&R-12(b)	Potentiometric surface maps	5.2.2
P&R-13	Proposed infrastructure inside license boundary	1.1
P&R-14(c)	Water balance	7.1
P&R-14(f)	Radium settling ponds	10.1
MI-3	Potential power outages	13.5.4
MI-4(a)	Financial assurance mechanism	16.0
MI-4(b)	Financial assurance estimate	16.0
MI-4(d)	Flare factor and restoration pore volumes	10.4.1
MI-4(e)	Financial assurance adjustment	16.0
MI-5	Stormwater control and mitigation	10.9
2.6-1	Clarification of Newcastle Sandstone within permit area	5.2.1.3
2.6-2	Clarification of Minnewaste Limestone within permit area	5.2.1.2
2.6-3	Ore zone mineralogy and geochemistry	17.6.2
2.6-4	Well inventory	4.1, App. A, B
2.7-5	Potentiometric surface maps	5.2.2
2.7-6	Groundwater level measurement	5.2.2
2.7-7	Morrison Formation structure contour map	Plate 6.2
2.7-8	Potentiometric surface maps	5.2.2
2.7-9	Potential interaction between bedrock aquifers and alluvium	4.3.1
2.7-10	Potential groundwater/surface water interaction	4.3.1
2.7-11	Authority to remove wells from private use	4.4.1
2.7-12	Mitigation of potential impacts to existing wells	4.4.1
2.7-13, 14	Well inventory	4.1, App. A, B
2.7-15	Water quality data presentation	17.7.2
2.7-16	Monitoring Unkpapa Sandstone	14.2.1.2
2.7-17	Groundwater quality comparison with EPA MCLs	17.7.3
2.7-19	Relationships between dissolved, suspended and total water quality constituent concentrations	17.7.2

Table 1. Cross Reference List for June 2011 RAI Responses (Continued)

RAI Response	Description	Revised UIC Application Report Section(s)
2.7-21,22,23	Updated groundwater quality results	17.7.2, App. N, O
3.1-1	Monitoring and automatic shutdown procedures	13.2.2
	Flow and pressure monitoring	14.1
3.1-2	ISR operations with respect to partially saturated conditions	10.5
3.1-3	Project schedule	10.10
3.1-4	Hydraulic well field control	10.4
3.1-5	Definition of lixiviant	Glossary
3.1-6	Well inventory map	Plate 3.1
5.7.8-4	ISR operations with respect to open mine pits	10.6
5.7.8-5	Production zone baseline monitor well spacing	14.4.1
5.7.8-6	Baseline sampling	14.2.2, 14.4.1
5.7.8-7(a)-(d)	Excursion indicators	14.2.2
5.7.8-8	Establishing UCLs	14.2.2
5.7.8-9	Perimeter monitor well screened interval	14.2.1.1
5.7.8-10	Perimeter monitor well spacing	14.2.1.1
5.7.8-11	Perimeter monitor well spacing for stacked roll fronts	14.2.1.1
5.7.8-12	Non-production zone monitor wells	14.2.1.2
5.7.8-13	Monitor well layout for overlapping well fields	14.2.1.3
5.7.8-14	Pump testing procedures	8.2.3
5.7.8-15	Excursion confirmation	14.2.4
5.7.8-16	Excursion corrective action and reporting	13.3.1
5.7.8-17	Operational groundwater monitoring	14.3
5.7.9	Quality Assurance Project Plan (QAPP)	14.7
6.1-1	Groundwater restoration criteria	10.8.1
6.1-2	Calculating target restoration goals	10.8.1
6.1-3	Baseline water quality parameters	Table 14.2
6.1-4	Groundwater restoration methods	10.8.2
6.1-5	Hydraulic well field control during groundwater restoration	10.4
6.1-6	Effectiveness of groundwater restoration techniques	10.8.2.2
6.1-7	Pore volume calculations	10.8.2.1
6.1-8	Monitoring progress of groundwater restoration	14.4.2
6.1-9	Documenting effectiveness of groundwater restoration	14.4.3
6.1-10	Stability monitoring	14.4.3
6.1-11	Restoration schedule	10.10
7.0-1	Mitigation measures for potential spills and leaks	13.5.1
7.0-2	Mitigation measures for potential chemical accidents	13.5.1
7.0-3	Mitigation measures for potential wildfires	13.5.3
7.0-4	Mitigation measures for potential natural disasters	13.5.2