



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
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PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

**NOTIFICATION OF LARGE SCALE MINE PERMIT APPLICATION
POWERTECH (USA) INC.**

Pursuant to ARSD 74:29:01:05, the Department of Environment and Natural Resources (DENR) is notifying you that Powertech (USA), Inc., P.O. Box 812, Edgemont, South Dakota 57735, has submitted a large scale mine permit application for the Dewey-Burdock Project, an uranium in situ recovery (ISR) mining operation.

The legal location of the proposed operation is as follows:

E1/2 NE1/4, E1/2 SE1/4, SW1/4 SE1/4, S1/2 NW1/4 SE1/4, SE1/4SW1/4, and S1/2 NE1/4 SW1/4 Section 20; W1/2, W1/2 W1/2 NE1/4, and W1/2 NW1/4 SE1/4 Section 21; S1/2 Section 27; N1/2 NW1/4, SW1/4 NW1/4, and SW1/4 Section 28; Section 29; Section 30; E1/2 Section 31; Section 32; NW1/4, SW1/4, SE1/4, and S1/2 NE1/4 Section 33; Section 34; and Section 35; T6S-R1E, Custer County

Section 1; Section 2; Section 3; W1/2 W1/2 Section 4, Section 5; Section 10; Section 11; Section 12; NW1/4, W1/2 NE1/4, and NE1/4 NE1/4 Section 14; and N1/2 Section 15; T7S-R1E, Fall River County

General Location: Approximately 13 miles northwest of Edgemont, South Dakota.

For the Dewey-Burdock Project, Powertech will use injection wells to pump groundwater fortified with oxygen and carbon dioxide water into the ore deposits to dissolve uranium. Production wells will be used to pump the uranium-laden fluids to the surface for recovery. The fluids from the production wells will be processed at two separate facilities at the mine site to extract and concentrate the uranium. Powertech may also recover vanadium in the future which will require additional processing equipment. After uranium has been removed from a well field, the groundwater will be restored to meet water quality standards. Wastewater generated by the operation will be treated and disposed by injection in Class V injection wells permitted through the EPA Underground Injection Control Program, or disposed by land application permitted by a DENR Groundwater Discharge Permit. The proposed post-mining land uses are rangeland and agricultural or horticultural crops.

The total acreage within the proposed permit boundary is about 10,580 acres, mostly on private land. About 240 acres of BLM land are included in the permit boundary. Powertech proposes to affect 2,528 to 3,792 acres depending upon whether deep well injection or the land application is used for wastewater disposal. Estimated production is one million pounds of uranium oxide (U_3O_8) per year. Estimated duration of the operation is 20 years.

The application is currently being reviewed for completeness. The department will notify Powertech by October 31, 2012 as to whether the application is complete.

Copies of the application are available for public inspection at the Minerals and Mining Program, 523 East Capitol Avenue, Pierre, South Dakota, on the Minerals and Mining web page at <http://denr.sd.gov/des/mm/powertechminepermitapp.aspx>, the Custer County Register of Deeds in Custer, South Dakota, or the Fall River County Register of Deeds in Hot Springs, South Dakota.

October 11, 2012