

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 12, 2013

The Honorable Sam Kooiker Mayor of Rapid City 300 Sixth Street Rapid City, SD 57701-2724

Dear Mayor Kooiker:

Thank you for your letter dated August 12, 2013, concerning Powertech's proposed Dewey-Burdock In-Situ Uranium Recovery (ISR) operation and any other future ISRs near the Black Hills in South Dakota. Your letter requests assurance that the permitting of water rights for use in these ISR operations by the U. S. Nuclear Regulatory Commission (NRC) will not negatively impact the quality of the Madison Aquifer water utilized by Rapid City.

Part of the mission of the NRC is to license and regulate the civilian use of radioactive materials. In accordance with our mission, the NRC has issued regulations that are designed to protect public health and safety and minimize danger to life or property. The NRC's primary regulations governing ISRs can be found in Title 10 of the Code of Federal Regulations, Part 20, "Standards for Protection against Radiation"; Part 40, "Domestic Licensing of Source Material"; and Appendix A to Part 40, which provides specific criteria relating to ISR licenses. The NRC will not grant a materials license to be used in connection with an ISR project unless the applicant demonstrates that it can comply with these regulations.

As part of the NRC's licensing review, the NRC technical staff conducts a safety evaluation for each ISR license application. The staff's evaluation is documented in a Safety Evaluation Report (SER). The SER for Powertech's proposed Dewey-Burdock Project addresses safety measures relevant to protecting the health and safety of citizens who rely on water from the Madison Aquifer. The SER (Sections 1.3, 3.1.3.5, and 4.2.3.1.1) indicates that the Madison aquifer will only be used to draw clean water for Powertech's ISR operations within Inyan Kara Aquifer. Wastewater generated from the ISR operation will be treated and disposed of not in the Madison Aquifer but in the Minnelusa and Deadwood Aquifers through Class V non-hazardous injection wells permitted by the U. S. Environmental Protection Agency's (EPA) Underground Injection Control (UIC) Program. The SER is available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS) (http://www.nrc.gov/reading-rm/adams.html) at Accession No. ML13052A182.

Please be aware that ISR operations are only allowed within portions of an aquifer exempted by the EPA and that the ISR operator must use ground water monitoring wells to detect potential excursions (i.e., the outward migration of chemicals used during operations). Also, please note that the NRC is not the sole agency with regulatory authority over ISR operations. The U.S. Environmental Protection Agency and the South Dakota Department of Environment and Natural Resources are among the agencies that regulate certain aspects of ISR operations in South Dakota. For example, these agencies have authority over UIC permits, Aquifer Exemption approvals, Large Scale Mine permits, Water Appropriation permits, Uranium permits, Exploration permits, and National Pollutant Discharge Elimination System permits. These and

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the regulatory oversight exercised by these other agencies, are also relevant to protecting the health and safety of citizens who rely on water from the Madison Aquifer.

In your letter, you also expressed concern about future ISR projects near the Black Hills in South Dakota. Powertech's Dewey-Burdock application is currently the only application for an ISR near the Black Hills that the NRC is reviewing. The NRC's website provides information on other ISR applications the NRC is reviewing, along with applications the NRC anticipates receiving (http://www.nrc.gov/materials/uranium-recovery/license-apps/ur-projects-list-public.pdf). The NRC cannot speculate, however, on whether it might receive additional applications, or where any additional ISR projects might be proposed.

Please contact Tom Lancaster of my staff at 301-415-6563, or at Tom.Lancaster@nrc.gov, if you have additional questions or need assistance retrieving a copy of the SER. In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

Sincerely,

Larry W. Camper, Director

Division of Waste Management and Environmental Protection

Office of Federal and State Materials

and Environmental Management Programs

Docket No.: 40-9075

cc: Richard E. Blubaugh, Powertech

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