



April 30, 2009

Hand Delivered

Valois Shea Environmental Scientist U.S. EPA Region 8 (Mail Code 8P-W-GW) 1596 Wynkoop Street Denver, Colorado 80202-1129

RE: Request for Class V Underground Injection Control (UIC) Permit Centennial Uranium Project, Weld County, Colorado

Dear Ms. Shea:

Please find enclosed the completed EPA Class V UIC Permit Application for the reinjection of water produced during an aquifer pumping test. Per your email to Michael Beshore dated April 16, 2009, Powertech has completed the first page of the permit application, and provided you with the additional information listed below in response to the EPA UIC Fact Sheet for Class V Wells seeking approval by rule or permit.

Item A: Property owner of injection site including address, phone, and fax numbers.

Howard Diehl 13502 NE Frontage Road Carr, Colorado 80612-9702 Phone: (970) 568-3334

Item B: Responsible party for the operation, maintenance, and closure of the injection well including address, phone, and fax numbers.

Powertech (USA) Incorporated 5575 DTC Parkway, Suite 140 Greenwood Village, Colorado 80111 Phone: (303) 790-7528 Fax: (303) 790-3885

Item C: Name, address, and phone number for contact at any State or Local agency overseeing the project.

State of Colorado-Division of Reclamation Mining and Safety Mr. Allen Sorenson-Reclamation Specialist 1313 Sherman Street, Room 215 Denver, Colorado 80203 Phone: (303) 866-3567

State of Colorado-Division of Water Resources 1313 Sherman Street, Room 821 Denver, Colorado 80203 Phone: (303) 866-3581

State of Colorado-Office of the State Engineer 1313 Sherman Street, Room 818 Denver, Colorado 80203 Phone: (303) 866-3581

Item D: Map of the site showing injection well location and any proposed or existing monitoring wells and public or private drinking water wells completed within the injection zone formation and in any overlying aquifers.

Please refer to Attachment A.

Item E: Hydrogeologic description, location, depth, and current water use (if any) of the injection zone formation.

The proposed groundwater injection well is located in section 33 of township 10 north and range 67 west in northwestern Weld County (refer to Attachment A). The proposed injection well will be screened throughout the A-Sand of the Upper Fox Hills Formation, which is separated from the overlying Laramie Formation and the underlying B-Sand of the Lower Fox Hills Formation by continuous confining layers. The A-Sand of the Upper Fox Hills Formation consists of moderately well-sorted, brown, fine-grained sandstone with inter-bedded zones of fissile shale. The depth of the screened interval of the proposed injection well will be approximately 500 to 550 feet below the ground surface.

The current usage of groundwater within the one-half mile radius injection zone at the site consists of livestock watering. There are only two such wells which are located at least one-quarter mile from the proposed injection well, and are up- or cross-hydrogeologic gradient. The nearest domestic water well completed in the Fox Hills Formation is located to the west (up-gradient) of the injection site approximately one mile away. This well is much deeper than the zone of injection (620 feet), and is likely screened in the B-Sand of the Lower Fox Hills.

Item F: Geologic cross section showing the injection zone aquifer and any overlying aquifers.

Please refer to Attachment B.

Item G: Construction diagram of the injection well, demonstrating how well integrity will isolate any overlying aquifers from the injection zone.

Please refer to Attachment C.

Item H: Will the injection well be in existence during the aquifer test so that the aquifer test can be used to demonstrate that the well does not provide any connections between the injection zone and overlying aquifers?

The proposed injection well will be in existence during the aquifer pumping test, and will serve as the pump well. The groundwater pumping/proposed injection well is displayed on Attachment A as IN08-33-PW1. During the aquifer pumping test and proposed injection, there will be four observation wells completed in the overlying aquifer (Laramie Formation). One of the observation wells completed in the Laramie Formation (IN08-33-MO1) is located immediately adjacent to the groundwater pumping / proposed injection well and one (IS-003Ta) is located about 500 feet south. During the pump test and proposed injection activities, pressure transducers will be installed in the adjacent monitoring wells completed in the overlying Laramie Formation aquifer to ensure that no hydrologic communication exists between the pumping zone and the overlying aquifer. All pumping, observation, and the proposed injection well will be completed in full compliance with the Colorado State Engineer's Office (SEO) rules and regulations pertaining to water well construction, *2 CCR 402-2 Rules and Regulations for Water Well Construction, Pump Installation, Cistern Installation, and Monitoring and Observation Hole/Well Construction.* In addition, a mechanical integrity test (MIT) will be conducted on all groundwater wells installed.

Item I: Purpose of the aquifer test.

The purpose of the Powertech Centennial aquifer test consists of the following objectives.

- Develop site specific information on geology and groundwater conditions in section 33 and for the regional hydrogeological characterization.
- Assess the hydrologic characteristics and their lateral continuity within the mineralized production zone.
- Evaluate hydrologic communication in the mineralized zone between the pumping well and surrounding production zone monitoring wells.
- Assess the presence of hydrologic boundaries, if any, within the production zone.
- Evaluate the degree of hydrologic communication, if any, between the production zone and the overlying and underlying aquifers in the test area.

Item J: Chemical analysis of the injectate.

Please refer to Attachment D for a chemical analysis representative of the injectate. The water quality analysis displayed in Attachment D was obtained from an existing well (IS-003T from Attachment A) located about 500 feet south of the pump test/proposed injection well, and completed in the same formation and interval. This water quality analysis is representative of the groundwater that Powertech proposes to re-inject into the same formation and well that the injectate is produced from during the aquifer pumping test. Upon completion of the pump test/proposed injection well, Powertech will provide the EPA with a groundwater quality analysis of the injectate.

Item K: If already available, chemical analysis of water in overlying aquifers.

Please refer to Attachment E for a chemical analysis representative of groundwater in the overlying aquifer. The water quality analysis displayed in Attachment E was obtained from an existing well

(IS-003Ta from Attachment A) located about 500 feet south of the proposed pump test/injection well. This water quality analysis is from the Laramie Formation, which is the aquifer located immediately above the proposed injection zone. Upon completion of the observation well completed in the overlying Laramie Formation aquifer located immediately adjacent to the proposed injection well, Powertech will collect a sample and submit for analysis, and will provide the EPA with the results of the groundwater analysis as soon as available.

Item L: Estimation of time frame for when injection activities will begin and end.

Injection activities of the produced aquifer pump test water will begin following issuance by the EPA of a Class V UIC permit, but not before completion of the pumping test which is anticipated to be late June 2009. Depending on aquifer characteristics, which will be determined during the aquifer pumping test, the re-injection of the pump test water will likely take about 45 days.

Item M: Plugging and abandonment plan for the injection well.

Powertech currently completes groundwater wells in accordance with Colorado Division of Water Resources rules and regulations using an approved bentonite-cement grout, positively displaced from the top of the screened interval to ground surface. This technique ensures that no aquifer communication will exist between the screened production zone and adjacent aquifers. Following Powertech's use of groundwater wells, full abandonment will commence in accordance with the Colorado Division of Water Resources rules and regulations, using an approved abandonment fluid displaced from total depth to 13 feet below the ground surface. The interval from 13 feet to 3 feet below the ground surface will be backfilled with cement. The groundwater well casing will be cut off at 3 feet below the ground surface and backfilled with topsoil.

Item N: Have financial resources been set aside with any State or Federal agencies to cover the closure costs for the injection well?

Financial resources have been set aside with the Colorado Division of Reclamation Mining and Safety which will cover full abandonment and reclamation of the groundwater well. In addition, a 20 percent contingency factor was added to the reclamation bond set aside with the Colorado Division of Reclamation Mining and Safety.

The following quote was taken from the Fact Sheet for Class V Wells that was provided by EPA(emphasis added), "Shallow wells or disposal systems that discharge fluids into the subsurface are known as Class V wells and can be authorized to inject by rule or permit. Class V wells that have the potential for ground water contamination or degradation are usually permitted. Those that do not have a potential to contribute to contamination or degradation of ground water are usually rule authorized, once EPA has been provided with information according to the requirements of 40 CFR 144.26 and 144.31. EPA will evaluate the information in the list below in order to determine if the injection of groundwater produced by aquifer testing back into the same formation from which the groundwater originated has the potential to endanger USDWs." Powertech strongly suggests that its proposed action of reinjecting water that will be produced from the Upper Fox Hills aquifer be authorized by rule as there will not be any potential for groundwater contamination or degradation. The water will be pumped to steam-cleaned tanks and returned directly to the aquifer from which it came. Nothing will be added to the produced water during removal or storage.

If you have any questions or require additional information, please feel free to contact myself at (303)790-7528 or Michael Beshore at (970)556-5988.

Sincerely yours,

Rhd EBhly

Richard E. Blubaugh Vice President-Environmental Health & Safety Resources

Enclosures

cc: Allen Sorenson, DRMS Edgar Ethington, CDPHE David Bauer, Weld County Terry Walsh, Project Manager John Mays, VP Engineering Mike Beshore, Sr. Env. Coor.