

PUBLIC WORKS DEPARTMENT

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March 20, 2009

Allen Sorenson Division of Reclamation Mining & Safety 1313 Sherman St, Room 215 Denver, CO 80203

Re: Powertech Request for Modification of Notice of Intent File # P-2008-043

Dear Mr. Sorenson:

Weld County Departments of Planning, Public Works, and Health and Environment have reviewed the March 4, 2009 Request for Modification of Notice of Intent (NOI) File # P-2008-043 submitted to your office by Powertech (USA), Inc. and have the following comments.

The proposed NOI modifications previously approved by the DRMS include installation of additional groundwater monitoring wells to be used for baseline environmental data collection. The County requests that installation of these wells meet all the environmental and aquifer protection requirements of the U.S. Environmental Protection Agency and meets all the requirements of the Colorado Division of Water Resources, Office of the State Engineer.

The proposed NOI modifications also described prospecting activities that included drilling of 9 new exploration boreholes previously approved by the DRMS. The County requests that these wells be correctly abandoned following logging and sampling so as to provide complete protection to aquifers in the area and the method of disposal of the cuttings and disturbed soils meets all the environmental and aquifer protection requirements of the U.S. Environmental Protection Agency and meets all the requirements of the Colorado Division of Water Resources, Office of the State Engineer.

An additional modification to the NOI is proposed in the March 4 letter from Powertech that includes a planned aquifer testing program with pump testing of a well to determine aquifer characteristics of the uranium ore zone. Powertech proposes to dispose the pumped water at the land surface into an unlined infiltration pit from which it is presumed some water will evaporate, and some of the produced water will infiltrate to shallower aquifers (the Laramie Formation). Assuming only one test is conducted, the proposed amount of produced water to be disposed is approximately 0.5 Acre-Feet. The specific location of the proposed infiltration pond was not given, however the section-township and range for which it is proposed is bisected by a tributary to Spring Creek an ephemeral stream that extends from Wyoming to near Eaton where it joins Lone Tree Creek, a tributary to the Poudre River.

The Powertech proposal identifies elevated concentrations of uranium and radium in the water to be pumped from the uranium ore zone. The proposal also provided a prediction of the mixing of the produced water as it

mixes with water in a shallow Laramie Formation aquifer that currently has lower concentrations of uranium and radium. The Powertech proposal did not describe whether there are any downgradient wells in this shallower aquifer, or whether there are any impacts to other users of water from this shallow aquifer. The transport and fate of the produced water once it has entered the shallow Laramie Formation was also not described in the Powertech proposal.

County Concerns and Requests

Powertech has not contacted the County Departments to discuss permitting this proposed activity. The County only received their March 4 letter on March 18, 2009. The County Planning Department is considering whether this pumping well and disposal pond constitute activities that would be covered under County land use regulations and permitted via our Use by Special Review process. We respectfully request that a DRMS decision to allow these proposed activities be delayed until the County has had sufficient time to consider the proposed Powertech actions.

The County Departments believe that Powertech has not provided adequate information for DRMS approval. There seems to be several key pieces of information that are necessary to make an informed decision that is protective of public health and the environment. We hope that at a minimum the following information is gathered and considered as a part of any approval:

- A detailed map depicting the location of the disposal pond in relation to all surface water features and wells within a 1-mile radius. Specific information, ie. completion logs, should be provided of any well known to be completed in the Laramie.
- A detail of the stratigraphy of the geologic formations beneath the proposed location of the disposal pond.
- Information concerning the permeability of the different formations beneath the proposed disposal pond.
- An analysis of the fate and transport, specifically of uranium and radium, following discharge into the disposal pond.

We would encourage the DRMS to consider requiring a lined disposal pond if this proposal is to be approved by the DRMS. There is no need to surface dispose the water pumped from the uranium ore zone; an unlined infiltration pond is not protective of surface waters and is not protective of underlying uncontaminated aquifers. Construction of a lined evaporation pond or tanks would provide the necessary storage for the water pumped from the ore zone and provide protection to the underlying shallow aquifers. If a lined pond is used, upon evaporation of the water, Powertech should be directed to collect the residual salts and precipitated solids and dispose of these in an appropriate sealed environment as directed by the Colorado Department of Health, EPA, and other regulatory bodies with jurisdiction over radionuclide by-products.

We appreciate the opportunity to comment on this proposal. We request that you give consideration to our comments and concerns and will consider the public health and environment in your decision.

Thank you for your consideration. If you have any questions, please contact David Bauer at Public Works at (970)304-6496, Ext. 3739 or Trevor Jiricek at Weld County Environmental Health at (970)304-6415, Ext. 2214 or Brad Mueller at (970) 353-6100, ext 3572.

David Bauer, P.E., CFM County Engineer – Development Trevor Jiricek Weld County Environmental Health Brad Mueller Planning Services