

**ENVIRONMENTAL ASSESSMENT FOR MINOR REVISION
COAL AND URANIUM PROGRAM
MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

COMPANY NAME: Spring Creek Coal

DATE: 7/01/09

OPERATING PERMIT#: 79012

MR#: 09-12-14

LOCATION: Spring Creek Mine, Decker, MT

Type and Purpose of Action: Minor Revision 09-12-14 modifies SMP 79012 to include installation of a new domestic water supply well, a 400 square foot water treatment building, underground electrical line from the scale house to the water treatment building, and 2,400 feet of three inch diameter water distribution line. Currently drinking water is transported to the mine from the Sheridan, WY, public supply. Water for other domestic purposes (e.g. showers, toilets) is supplied by nearby coalbed methane (CBM) production, treated and stored in large bladders. Spring Creek Mine has been informed by DEQ Public Water Supply Bureau that all domestic uses must meet drinking water standards and current storage methods are not adequate to meet necessary quality standards.

Potential Impacts and Mitigation Measures: Potential impacts to 1) Soil and 2) Groundwater:

1) Topsoil would be removed from the footprint of the water treatment building and stockpiled. Scoria would be placed at the building site as a base for the facilities building. The scoria would be removed and soil replaced upon removal of the building at the end of mine life. Soil would be windrowed prior to trenching for underground facilities and replaced subsequent to installation.

2) Anticipated total depth of the well is 800 feet to reach the target zone of Paleocene Fort Union Formation sandstone, although deeper strata may be needed to reach a suitable water supply. The design maximum daily flow is approximately 3 gpm for the domestic water system. Based on similar wells previously drilled at SCM, it is estimated that the well would produce 13 gpm. Due to its depth and low production rate, use of the sandstone aquifer or deeper aquifers for domestic supply to the mine would not be anticipated to cause significant, additional impacts to hydrologic balance changes attributable to mining. Production of water from the well would not interfere with other water users near the mine.

Alternative Actions: Alternative actions would include 1) not installing the well, increasing the amount of water currently hauled from Sheridan, WY and upgrading existing water containment facilities for all domestic uses; 2) finding another suitable location for the well on existing disturbance within the mine boundary. (The proposed site was chosen because the well would be near existing mine facilities, would not be in the pathway of future mining, and would have adequate separation from potential

sources of contamination), 3) using surface water (i.e. CBM), treating and sampling daily to ensure quality and submitting daily analytical results to DEQ.