

Coal Refuse Fire Extinguished in Beulah, North Dakota

On January 9, 2002, Fire Chief Doug Neuberger of Beulah, North Dakota, telephoned the North Dakota Public Service Commission to report a coal fire. Beulah (population 3363) is located in Mercer County approximately 80 miles northwest of Bismarck. Apparently, a small grass fire had ignited some coal screenings near the former location of a power plant and coal tipple about two blocks east of Main Street in Beulah. The fire department had been unsuccessful in attempts to extinguish the fire with water.

Bruce Beechie and Bill Dodd from the Abandoned Mine Lands (AML) Division of the North Dakota Public Service Commission traveled to Beulah the next day. They inspected the site with Fire Chief Neuberger and found two cells of burning coal fines, within a half-acre area. The volume of burning materials was estimated to be 300-400 cubic yards.

This coal refuse fire was a serious hazard to the public. The burning coal fines were overlain with a layer of gray ash, up to four feet thick. In low wind conditions, the ash was not easily distinguished from ordinary soil. An unsuspecting person could have stepped into the ash and been seriously burned by the coal fire underneath. Unusually dry conditions also increased the possibility that the burning coal fines could ignite a grass fire that could have spread to nearby homes.

In a letter dated January 11th, the Mercer County Office of Emergency Services made an "urgent request for the Public Service Commission to utilize emergency mine reclamation funds to extinguish this burning coal and reclaim the involved area as soon as possible." The AML Division mailed photographs, an emergency investigation report, and other documents to the OSM Casper Field Office. With concurrence from OSM, the site was declared an emergency under the state's approved emergency program.

On Friday, January 11th, the AML Division telephoned seven contractors from Beulah and surrounding areas and arranged for a site meeting the following Monday, January 14. Three contractors attended and two offered bids to extinguish the fire and reclaim the site. The low bidder was Perreault Construction of Beulah. The City of Beulah cooperated by obtaining rights of entry from affected property owners.

Perreault began work the following day, January 15th, by excavating trenches with a bulldozer and backhoe. The burning materials were then placed in the trenches and extinguished by mixing them with soil materials removed from the trenches. The Beulah Fire Department helped by providing a fire truck and spraying water on the burning materials in place and in the trenches. By the afternoon of January 15, all burning materials had been placed in the trenches and the area was allowed to cool overnight. By the next morning, Tuesday, January 16, steam had stopped rising and the area was fairly cool to the touch. The trenches containing the extinguished materials were capped and the area was regraded.

The project was completed within a week after initial notification and the total contract cost was \$1527.50. The landowner and City of Beulah personnel will help monitor the area for subsequent coal refuse fires.

Bill Dodd and Bruce Beechie, Environmental Scientists
North Dakota Public Service Commission
Abandoned Mine Lands Division

Photo Captions

Photo 1- January 10, 2002

This photo shows one of the cells of burning coal refuse overlain with gray ash. When not flaming or smoking, this ash is not easily distinguished from ordinary soil. An unsuspecting person could step into the ash and be seriously burned.

Photo 2- January 15, 2002

This photo shows a backhoe removing burning coal refuse and placing it in a burial pit. This coal fire was burning within the city limits of Beulah, North Dakota. Note the nearby houses in the background.