

2015 Emergency Coal Fire Reclamation In North Dakota

Two emergency coal fires were extinguished by the North Dakota AML Division in 2015. The first fire was burning on an area of about 2.3 acres near the City of Haynes in southwestern North Dakota. It was reported on April 15, 2015.

This coal fire was ignited by a wildfire that burned approximately 100 acres a couple weeks earlier. The wildfire ignited coal screenings deposited near the entry of the Stevenson Coal Mine which operated from about 1911-1936. The property owner, Adams County, and the Hettinger Fire District had been working to contain the coal refuse fire. They were concerned it could ignite another wildfire that would threaten an occupied residence and traffic along a nearby county road and state highway. The coal fire was a hazard to public safety and property. The Adams County Emergency Manager requested assistance to extinguish it as soon as possible.



Haynes Coal Fire Emergency, April 23, 2015: Personnel from the Hettinger Fire Protection District were on hand during the entire time the Haynes Coal Fire was being extinguished. This shows two firemen spraying the edges of the coal fire to keep it from spreading.

The North Dakota AML Division contracted with Earthworm Excavating of Tolna, ND, and coal fire reclamation began April 22, approximately a week after the initial report. The contractor excavated a large burial trench across the north and west sides of the fire. This trench was approximately 200 feet long, 25 feet wide and 15 feet deep. The contractor began pushing the burning coal fines into the trench with a bulldozer and mixing them with wet soil removed from the trench. As burning coal was exposed to air, it heated to temperatures over 900°F. Smoke could be seen from miles away. The Hettinger Fire Protection District was on hand during the entire project to keep the fire from spreading. After all burning materials were extinguished and buried; the entire area was graded, tilled and seeded to a native grass seed mix. This project was completed May 1, 2015, and the contract cost was \$18,020.

The second coal fire was reported May 13, 2015, by the property owner and the Williston Rural Fire District. It was burning near Williston in northwestern North Dakota. It was within a quarter-mile of an occupied residence and less than a mile from an active oil well. According to the property owner, this fire was ignited by a spark from the railroad that started a grass fire and eventually ignited exposed coal refuse near the entry of the historic Avoca Mine, which operated from 1913-1947.

Earthworm Excavating was also the contractor for this project. The contractor began by moving historical mining equipment off the site. The project was difficult because of steep unstable slopes above the coal fire and a stock pond directly below the fire. Work began June 3 and was completed June 10, 2015. The average thickness of burning coal refuse was 3-5 feet and burial trenches were excavated about 8-10 feet deep. After reclamation, topsoil was respread on the one-acre disturbed area and it was tilled and seeded to native grasses. About 1800 cubic yards of excavation was required for this project and the contract cost was \$18,110.

These two emergency projects protected landowners and the public from imminent hazards of abandoned mine lands.

Bill Dodd
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Lovejoy Avoca Coal Fire Emergency, June 3, 2015: Earthworm Excavating was uncovering burning coal fines with a Cat D-6 bulldozer and excavating a burial trench with a Cat 316 Excavator for the burning materials. Note the sinkholes in the background.

