

CASE STUDY

Cottonwood Creek Site Bates County, Missouri

August 2010

**Prepared by
The Interstate Technology & Regulatory Council
Mining Waste Team**

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ITRC (Interstate Technology & Regulatory Council). 2010. *Cottonwood Creek Site, Bates County, Missouri*. Mining Waste Treatment Technology Selection Web. Washington, D.C.: Interstate Technology & Regulatory Council, Mining Waste Team. www.itrcweb.org.

Acknowledgements

The Mining Waste Team would like to acknowledge Missouri Department of Natural Resources Project Manager Mike Larsen, who completed the April 2008 Mine Waste Case Study Survey, from which the information in this case study is taken.

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COTTONWOOD CREEK SITE, BATES COUNTY, MISSOURI

1. SITE INFORMATION

1.1 Contacts

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1.2 Name, Location, and Description

The Cottonwood Creek Mine Site, located in Butler, Missouri, is a 500-acre active, open-pit surface coal mine. There are 10 acres of open pit at any one time. Acidity is the only primary contaminant of concern, with affected media including soil, surface water and sediment, and groundwater.

2. REMEDIAL ACTION AND TECHNOLOGIES

Reclamation of the site is regulated under the Surface Mining Control and Reclamation Act. Mitigation of human health and ecologic risk are driving the cleanup goals. The site is currently 95% reclaimed. Since 2003, backfilling and capping/covers and grading are the treatment technologies being used at the site. Upon coal extraction, the open pit is backfilled immediately. Grading and soil cover are accomplished with top- and subsoils.

3. PERFORMANCE

Water geochemistry is evaluated with field parameters to ensure the effectiveness of the backfilling and covering. The overall goal of the reclamation is to reestablish the soil productivity while preventing any negative impacts to surface or groundwater as a result of the surface coal mining.

4. COSTS

Cost of backfilling and covering is reported at \$2,500 per acre, with operation and maintenance also costing \$2,500 per acre.

5. REGULATORY CHALLENGES

None reported.

6. STAKEHOLDER CHALLENGES

None reported.

7. OTHER CHALLENGES AND LESSONS LEARNED

None reported.

8. REFERENCES

No information available.