

July 12, 2012

TO: Internal File

THRU: Dana Dean, Associate Director

FROM: Priscilla Burton, Environmental Scientist III/Soils.

RE: OSM's 35 Anniversary Exhibit on School House Canyon Reclamation, Plateau Mining Corporation, Willow Creek Mine, C/007/0038.

SUMMARY:

In May 2012, Plateau Mining Corporation requested bond release for the School House Canyon Refuse site and associated Preparation Plant, along with reclaimed surface facilities and two shafts in Crandall Canyon and reclaimed conveyor and slopes in Willow Creek Canyon. The sprawling site was situated at the junction of the Price River and Willow Creek, along U.S. Route 6 and U.S. Route 191 (the only two roads leading into Carbon County from the north). The site is highly visible to millions of travelers each year.

A disastrous explosion led to final closure of the Willow Creek mine in July 2000. (For a detailed account refer to <http://www.usmra.com/saxsewell/willowcreek.htm>) Provisions of SMCRA allowed a post-mining land use change to preserve the nearly new shop/bathhouse/warehouse facility and substation in Willow Creek Canyon for use by the College of Eastern Utah's mine training program (now under the auspices of Utah State University) and for the transfer of a pumphouse and water treatment plant in Price Canyon to the Price River Water Improvement District. The remaining 95.4 acres were reclaimed in 2004 and 2005. The acreage is as follows:

- 18.35 acres of land previously used for the overland conveyor corridor, topsoil storage, fuel storage, and cutslopes in Willow Creek and Price Canyons.
- 44.09 acres in the Preparation Plant, Gravel Canyon Topsoil Storage and Schoolhouse Canyon Refuse Storage areas
- 32.96 acres in Crandall Canyon facilities and shafts.

Earthwork (including seeding) at the Willow Creek site was completed in the fall of 2004. The reclamation of the site is notable for the logistics of moving, 210,000 cubic yards of fill, 228,109 cubic yards of topsoil across busy highways and; re-grading 172, 318 tons of mine waste to create a more natural looking channel and side slopes within the steep canyon walls of School House Canyon.

The reclamation design for School House Canyon created a drainage channel down the center of the canyon to the culvert leading to the Price River. Cuts were from 20 to 40 feet deep in the existing surface of the refuse, exposing buried coal mine waste. Because the refuse was known to have unsuitable boron and SAR values, the regraded refuse was monitored prior to placement of the cover soil. Cover depth over the refuse in Schoolhouse Canyon was increased from twenty seven inches to thirty six inches for this pre-law site.

The reclamation is also remarkable for the determination and persistence required by all parties in reclaiming two horizontal, concrete-lined shafts in Crandall Canyon. The Crandall Canyon intake shaft was 26 ft diameter X 1,450 ft and the exhaust shaft was 20 ft. diameter X 1,400 ft. in depth. Closure was complicated by water running in the intercepted mine tunnel below and by methane gas. In 2003 both shafts were backfilled to their full depths with spoil, rock, concrete fragments and bentonite and overfilled to allow for settlement. Both shafts subsided and required additional fill. In 2006, the exhaust shaft subsided considerably, and filled with water which required pumping prior to refilling the shaft in 2007 with 95 tons of cement mixed with rock, 4,000 cubic yards of fill and 1,160 cubic yards of bentonite.

Castle Gate Preparation Plant and School House Refuse Pile in 2003.



SCHOOL HOUSE CANYON REFUSE SITE



SCHOOL HOUSE CANYON REFUSE SITE IN 2005 and 2012



CRANDALL CANYON EXHAUST SHAFT



CRANDALL CANYON EXHAUST SHAFT



June 2012

CRANDALL CANYON in 2012 shafts are not visible in this photo.



GRAVEL CANYON TOPSOIL STORAGE AREA in 2012



Former Coal Stockpile yard of the Preparation Plant as seen from Gravel Canyon in 2012

