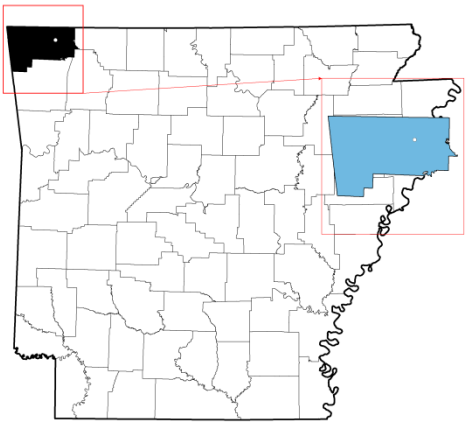
ENVIRONMENTAL QUALITY

Updated: September 21, 2020

STATE PRIORITY LIST SITE SUMMARY

Arkansas Department of Energy & Environment, Division of Environmental Quality
5301 Northshore Drive, North Little Rock, AR 72118

Facility Name:	Fulton Class 3C Landfill
Facility Location:	Rogers, Arkansas
EPA RCRA ID No:	N/A
EPA CERCLA ID No:	N/A
AFIN:	04-00165
County:	Benton
Arkansas Senate District:	8
Arkansas House District:	96
US Congressional District:	3



CURRENT STATUS

Fulton Sanitation Services began a trench fill operation at this location prior to implementation of RCRA "Subtitle D" requirements. The Fulton Class 3C Landfill was permitted on November 17, 1978 and stopped accepting waste on March 28, 1997. The closure construction started April 1997 and was completed in January 1999. However, the landfill closure has not been certified by the Solid Waste Management Division (SWMD) due to deficiencies. Inspection reports note severe erosion and other deficiencies resulting in an unsatisfactory inspection score. A Class 1 Solid Waste Landfill located approximately 1.3 miles south of this site, also operated as a pre-subtitle D trench fill landfill. It was permitted as a Class 1 landfill on July 22, 1977. The Class 1 landfill was certified closed under the Solid Waste Regulations on May 5, 1995.

A 1992 hydrogeologic study found groundwater flow is influenced by preferential pathways, solution channels, highly variable water levels and independent groundwater flow characteristics within isolated features typical of a karst geological setting. The study documented leachate may move directly out of the landfill into secondary pathways; leachate does not appear to be properly encapsulated by the landfill liner or by natural geologic materials beneath the site; thus groundwater contamination is thought to be directly impacting area springs.

The Fulton Class 3C Landfill site is ineligible for the Post Closure Trust Fund because the landfill is not certified closed by ADEQ. Bankruptcy proceedings in 2007 resulted in approximately $60,000 being turned over to ADEQ. This money should be available for future remediation activities. Given that the Post Closure Trust Fund is not available for the site, SWMD is not able to spend money for investigation or, if necessary, corrective action on this facility. Because Post Closure Trust Fund money cannot be utilized to investigate the site further and hazardous constituents have been detected in area springs, the Hazardous Waste Division (HWD) has agreed to list this site on the State Priority List in order to conduct an investigation and possible remediation of potential hazardous media. It was also known that landfill cap repair was needed in order to qualify the landfill for closure. Upon completion of the cap repair, the site will revert back to the Solid Waste Management Division for any necessary post closure activities and the Solid Waste Post-Closure Trust Fund will become accessible for the site. In October 2012, ADEQ secured a contractor to mow and remove trees from the landfill cap. In addition, a Remedial Alternatives Memorandum (RAM) was compiled for the landfill illustrating the remedies needed at the site. RAM was approved and the Construction Plan for the proposed improvements was submitted to Arkansas Building Authority (ABA) for approval. ABA approved the plan.

The activities for the repair of the landfill was initiated in September 2014 and ended in November 2015. The remediation of the site was conducted by SEMS Incorporated and the work for the repair was supervised by FTN Associates, LTD (FTN). During this period, the three damaged letdown structures were repaired. Three concrete letdown structures were built to divert the stormwater during rain events. In addition, berms were built to divert stormwater to the letdown structures. All the eroded surface areas of the landfill were also repaired. The substantial completion inspection was conducted on December 17, 2014 and the final inspection was conducted on November 19, 2015. The last steps for the closure of the landfill are being carried out at this time.

STATE PRIORITY LIST HISTORY

The site was listed in Arkansas Pollution Control and Ecology Commission, Regulation #30 (Arkansas Remedial Action Trust Fund Hazardous Substance Site Priority List) under the investigation and remediation category on August 12, 2012.

SITE DESCRIPTION

Location: The site is located northeast of Rogers, Benton County, Arkansas (36°23'12.76031" 94°04'49.45010") (SW ¼, Sec. 21; NE ¼, & SE ¼, Sec. 20; T-20N; R-29-W). The site is located just off U.S. Highway 62 and east of the Old Wire Road. Street address: End of Quail Road.

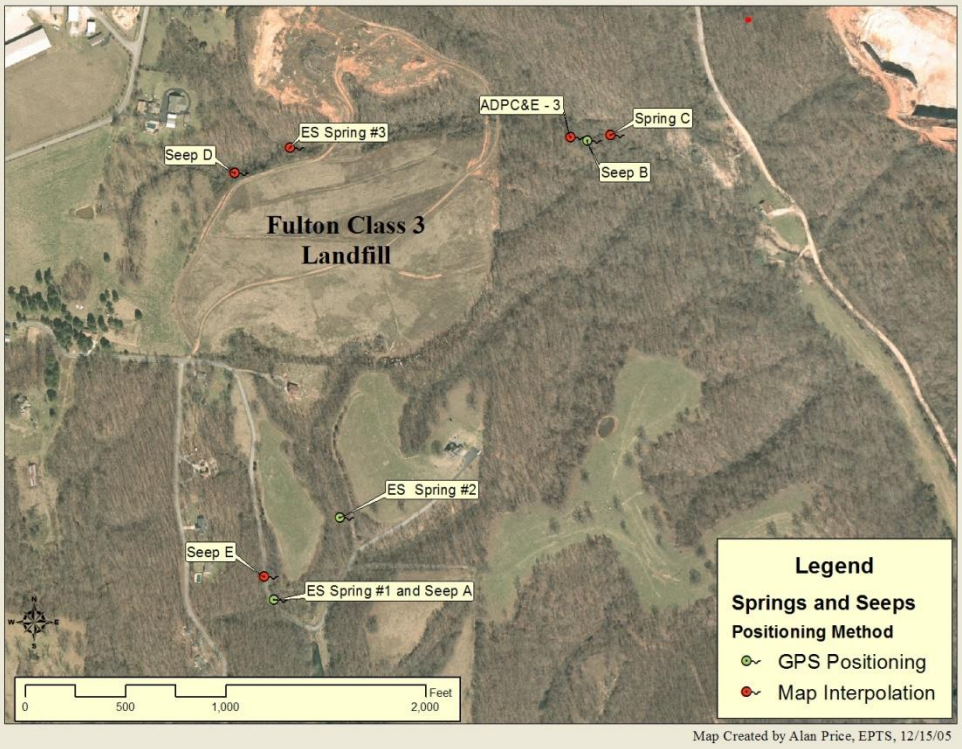
Population: The Fulton Class 3C landfill is located near the city of Rogers, in the northwest corner of the state. Based on 2010 census, 55,964 residents live in the City of Rogers.

Setting: The landfill is located northeast of Rogers, Arkansas and within the southeastern section of Benton County, Arkansas. The Class 3C landfill is located within the Ozark Highlands physiographic province in Northern Arkansas. The area is underlain by a deeply dissected geologic structure known as the Springfield Plateau. This plateau lies with the White River drainage basin which, and along with its tributaries, drains a large percentage of the area. The Boone formation of Mississippian Age is the predominant rock outcrop in Benton County, and underlies the landfill site.

Hydrology: The landfill is located in cherty clay residuum material derived from weathering processes of the Boone formation. The Boone formation consists of limestone interbedded with chert. The Boone formation generally produces water from the residual cherty rubble weathered from cherty limestone of the unit and within the secondary features of the limestone itself. Groundwater flow associated with the Boone formation is often difficult to characterize due to the sporadic nature and locations of underlying fracture patterns and weathered hydraulic conduits. The water levels within the Boone formation intersect the land surface in many valleys and give rise to springs and perennial streams. Groundwater flow in and around this site may be moving radially away from the site. Groundwater is used without treatment for domestic supplies throughout most of the Springfield Plateau.

Aerial Photo: The site is located northeast of Rogers, Benton County, Arkansas.

Site Diagram:



Site Photos: Pictured below: Erosion along the east side of the landfill

Pictured above: ES Spring 2 approximately 825' South of LF

WASTE AND VOLUMES

The Fulton Class 3C landfill is situated on approximately 70 acres of which approximately 34 acres were used for waste disposal. The landfill was originally permitted on November 17, 1978, by the Solid Waste Division, Permit Number S-0147. The permit was modified at various times, the latest of which was dated November 14, 1991. The landfill was originally permitted as a Class IV landfill in 1978 but was changed to a Class III landfill in 1986. Later the Class III nomenclature changed to Class 3C. In 1991, the Class 3C landfill was permitted to accept masonry debris, roofing debris, stumps, rocks, appliances, auto bodies, pallets, tires (shredded or chipped), commercial solid waste and industrial process solid waste (non-toxic and non-hazardous). Closure of the nearby Class 1 landfill may have led to the improper disposal of hazardous constituents in this Class 3 landfill. Because this landfill was not permitted to accept this type of waste, the potential volume is not known. However, based on previous leachate testing from the Class 3 Landfill and the Class 1 Landfill and the increase in the contaminant level of area springs, it is believed that hazardous constituents were disposed of in the Fulton Class 3C landfill.

HEALTH CONSIDERSATIONS

A 1992 hydrogeologic study found groundwater flow is influenced by preferential pathways, solution channels, highly variable water levels and independent groundwater flow characteristics within isolated features typical of a karst geological setting. The study documented leachate may move directly out of the landfill into secondary pathways; leachate is apparently not properly encapsulated by the landfill liner or by natural geologic materials beneath the site; thus groundwater contamination may potentially be directly impacting area springs. The landfill is located approximately one mile from Beaver Lake and due to the rural nature of the immediate setting, nearby residence may be using well water.

Historical water quality test data from springs around the site have shown elevated levels of organic and inorganic contaminants relative to EPA Regional Screening Levels (RSLs) for tap water. During the most recent sampling event in 2005, most of the springs had obvious visual indications of impact due to iron oxide precipitate. The sample concentrations were high in both iron and manganese which is potentially caused by landfill impact. In addition, several volatile organic compounds were present. The parameters that exceeded the EPA RSLs for tap water during the 2005 sampling event included: iron; manganese; 1,1-dichloroethane; 1,4-dichlorobenzene; vinyl chloride; and trichloroethene.

DEQ RESPONSE ACTIONS

The site has been inspected quarterly by ADEQ-Solid Waste Management Division inspectors. In addition, the site has been inspected periodically by the ADEQ-SWMD engineers and geologists.

ADEQ-SWMD sampled springs around the site in June 1990, August 1990, and October 1990. A Notice of Violation 91-103 was issued in May 1991 and amended in 1992. In 1997, ADEQ issued a Notice of Violation 97-001.

A lawsuit was filed in 2002 against Fulton landfills Case No. CV2002-406-4. Bankruptcy proceedings from 2002 to 2007 resulted in approximately $60,000 being turned over to ADEQ.

Since the facility stopped accepting waste in 1997, the ADEQ-SWMD sampled some of the area springs and seeps in 2003 and 2005.

Due to the presence of hazardous waste constituents in the area springs, HWD listed the site on the SPL List for further investigation. Remedial Alternative Memorandum compiled for the site identified the remedies needed for the site. Upon approval of the RAM by ADEQ and ABA, the activities for the repair of landfill were conducted from September 2014 to December 2015.

DEQ ANTICIPATED FUTURE ACTIVITIES

ADEQ HWD retained FTN Associates, Ltd (FTN) to evaluate alternative remedy for the site. FTN conducted assessment of the site and submitted a Remedial Plan. Arkansas Building Authority and ADEQ approved the plan. Ultimately, repair of the landfill cap and the letdown structures were conducted from September 2014 to December 2015. Three concrete letdowns in addition to stormwater swales were built and surface erosions were repaired. The substantial Completion inspection was conducted by ADEQ at the site and the final inspection of the landfill was conducted on November 19, 2015. During the inspection, it was noted that the eroded areas at the landfill were repaired and established vegetation over ninety percent (90%). ADEQ has now completed the review for the closure of the landfill. A deed restriction for the landfill has yet to be filed.

SITE CONTACTS

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