

ENVIRONMENTAL QUALITY

# STATE PRIORITY LIST SITE SUMMARY

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

Facility Name:	Baldwin Piano and Organ Company		
Facility Location:	Fayetteville, Arkansas		
EPA RCRA ID No:	ARD006337620		
EPA CERCLA ID No:	N/A		
AFIN:	72-00676	<b></b>	
County:	Washington		
Arkansas Senate District:	4		
Arkansas House District:	85		
US Congressional District:	3		

# **CURRENT STATUS**

Remediation of the onsite burn pit was completed in September 2007 in accordance with the Remedial Action Plan proposed by Crowne Fayetteville Associates. Groundwater monitoring has continued on a semi-annual basis since 2008.

Based on information supplied in a Site Assessment Report (May 2014) and other documents, the Arkansas Department of Environmental Quality (ADEQ) developed a Remedial Action Decision Document (RADD) which details ADEQ's proposed actions for remediation of the site. The RADD was finalized on October 26, 2015. ADEQ has implemented phase I of the Remedial Action Construction Project and is currently implementing the phase II design.

# STATE PRIORITY LIST HISTORY

The former Baldwin Piano & Organ Company (Baldwin) facility located at 1101 South Beechwood Avenue in Fayetteville, Washington County, Arkansas manufactured electronic keyboard musical instruments and reportedly used a burn pit between approximately 1958 and 1971 for disposing of manufacturing debris and waste that were contaminated with chlorinated solvents. In October 2001, the Southwestern Electric Power Company (SWEPCO) purchased a 2.91 acre portion of the Baldwin site containing the former burn pit after entering into a Memorandum of Agreement (MOA) with ADEQ and Baldwin. The MOA stated that Baldwin would retain the liability and financial responsibility associated with the site and would perform corrective action to characterize and remediate the site. Following execution of the MOA on October 10, 2001, Baldwin declared bankruptcy without completing the corrective action, and the responsibility for site assessment and cleanup transferred to ADEQ. The ADEQ through the Arkansas Pollution Control and Ecology Commission (APC&EC) added the Baldwin site to the remediation category of the State Priority List (SPL) on December 6, 2003. This measure was taken in order to remediate the known hazardous substances in the site soils. Remediation of the onsite burn pit soil was completed in September 2007, and ADEQ has been monitoring surface water and groundwater at the site since 2008.

### SITE DESCRIPTION

Location:	The site is located within the city limits of Fayetteville, Arkansas on the south side of town (36.048893 north latitude, 94.185157 west longitude). Street address: 1101 South Beechwood Avenue.
Population:	The city of Fayetteville is home to 73,580 residents.
Setting:	The site is currently owned by the local power company, which purchased the southern-most approximate 3 acres of the original Baldwin property (40 acres) just prior to the Baldwin Company filing for bankruptcy. The portion of property purchased by the power company contained the old burn pit used by Baldwin to dispose of manufacturing debris and waste. A power substation is located adjacently south of the burn pit. The burn pit was located on the west side of the property next to Fawn Creek.
Hydrology:	The site is relatively flat with drainage from the central and east portions to the northeast and along a ditch to the southeast corner of the entrance road to the power substation. Drainage from the central and west portions of the site drains toward the southwest and northwest into the site drainage feature and then into Fawn Creek. The site is not located in the 100-year flood plain.

#### Aerial Photo:

Fayetteville, Arkansas (south portion of town)



#### Site Diagram:



Local Area Map from the Remedial Action Plan dated August 14, 2017

#### **Site Photos:**



Before: January 2001, View from NW corner of proposed property boundary towards SE



During: February 28, 2019, view from NW corner looking south toward injection wells and recovery well at the substantial completion site visit of Phase I.

### WASTE AND VOLUMES

The former Baldwin Piano and Organ facility used the onsite burn pit to dispose of manufacturing debris (e.g., paper, wood waste, paint, and spent solvents) from approximately 1958 until 1971. It was covered at some point by approximately five feet of soil. Chlorinated and non-chlorinated organic compounds were detected in the soil below this cover but above a shale layer from seven to fourteen feet below ground surface. The contaminants have been primarily perched on this shale. As determined by site investigation results, the burn pit impacted subsurface soils were estimated to be about eighty feet long (north to south) parallel to Fawn Creek (to the west). The area was determined to be about thirty-five feet wide (east to west) and approximately ten feet deep. However, the depth was expected to be greater in some areas (i.e., fourteen feet or more). The subsoil in the area was determined to be predominately silty clay above weathered shale with competent shale underneath. The initial remedial response included an excavation of the burn pit of the impacted soils above human health risk-based screening numbers. The actual excavation was about sixty-five (65) feet north/south by thirty (30) feet east/west and eleven (11) feet deep – roughly 800 in-place cubic yards.

### HEALTH CONSIDERSATIONS

Subsurface soils and groundwater were investigated and determined to be impacted by chlorinated and non-chlorinated organic compounds. The most prevalent compound was determined to be trichloroethene (TCE). Several other constituents were also evaluated to be contaminants of concern (COCs) because concentrations in the soils and groundwater were above USEPA Region 6, Residential Human Health Medium-Specific Screening Levels (HHMSSL) and/or Maximum Contaminant Levels (MCLs). The COCs for the contaminated soils included TCE, 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis 1,2-DCE), methylene chloride, toluene, 1,1,1-trichloroethane (TCA), and xylenes. These same compounds, plus benzene, chloroform, 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethane (1,2-DCA), 1,1,2-trichloroethane, 1,2,4-trimethylbenezene, and vinyl chloride are included on the COC list for groundwater.

# **DEQ RESPONSE ACTIONS**

#### Site Investigations

#### 2004

- An adjacent property owner south of the site conducted an investigation which found that soil and groundwater had been significantly impacted by chlorinated solvents.
- The source of these contaminants was determined to be a former burn pit used by former Baldwin operations.
- The work entailed sampling soil, groundwater, surface water, and sediments, and preparing a Corrective Action Plan.

#### 2008 to Present Groundwater Monitoring

- Groundwater at the site has been sampled semi-annually since 2008.
- Two new monitoring wells were added in 2012 to evaluate potential contamination beneath the creek.

**2013-2014** A site assessment was performed that included the following tasks and findings:

- In December 2013, five new monitoring wells were installed. Wells were placed upgradient of the burn pit, across the creek at the property boundary and at the southern property boundary to define the extent of the current contaminated groundwater plume.
- The number of surface water sample locations was increased both upstream and downstream of the site.
- Soil samples were also collected to better establish any residual contamination.
- The highest contaminant concentrations and the largest number of volatile organic compounds (VOCs) were detected in groundwater east of Fawn Creek near the former burn pit.
- VOCs were detected in the sediment of Fawn Creek adjacent to the former burn pit. Lower concentrations of VOCs were detected in sediment upstream of the site indicating there may have been a past release from former Baldwin operations.
- Elevated concentrations of VOCs were detected in surface water located at a point of entry into Fawn Creek from the site. Discharge of groundwater into the creek was believed to be the likely source of the surface water contamination.
- Two VOC contaminants had migrated beneath Fawn Creek to the western end of the property.

#### **Remedial Decision**

#### 2004

• ADEQ approved a corrective action plan (CAP) proposed by the adjacent property owner south of the site.

#### 2015

- Based on the Site Assessment Report (May 2014) and other documents, ADEQ developed a RADD which detailed ADEQ's proposed actions for remediation of the site. The RADD was finalized on October 26, 2015.
- The RADD required three performance standards to be addressed: source control, applicable statutory and regulatory requirements, and the final risk goal. The final risk

goal must ensure that no unacceptable risks to human health or the environment remain at the site at the conclusion of remedial activities.

- The remedial option selected in the RADD included:
  - Installation of a collection trench and receiving sump.
  - Installation of an on-site granular activated carbon treatment for the collected contaminated groundwater.
  - Implementation of bioremediation in the contaminated groundwater area within and adjacent to the former burn pit.
  - Implement institutional controls to prevent use of shallow groundwater on-site, to limit site use to industrial, and to prohibit digging in the trench area to protect the remedy.

#### **Remedial Actions**

#### 2007

• Remediation of the onsite burn pit was completed in September 2007 to address the known hazardous substances in the site soils. The remediation included excavation of soil and ash, offsite disposal, backfill with clean fill material, and re-vegetation.

#### 2016 to 2017

- An ADEQ on-call consultant was tasked to develop the selected remedial design.
- A decision was agreed upon by all to design and construct the remedy in two phases.
- A Remedial Action Plan for phase I design of the remedy was approved August 2017.

#### 2018 to 2019

- Phase 1 bidding process and contractor selection in August to September 2018.
- A pre-construction meeting was held in October 2018.
- The Notice to Proceed and contractor mobilization to the site occurred in November 2018.
- Installation of the collection trench and sump, injection wells, ancillary valves, piping and control wiring, building soil pad and fencing occurred November 2018 to February 2019.
- Substantial Completion occurred on February 28, 2019.
- A pump "pilot test" for the collection sump, was conducted in April 2019 to determine the flow rate requirements for the treatment system.
- Final Completion of Phase 1 was achieved July 2019.
- The scope of work for phase 2 was approved October 2019. Phase 2 will include the installation of the injection and groundwater treatment system.

#### 2020 to 2022

- The conceptual design for Phase 2 was approved in January 2020.
- The 75% design for Phase 2 was approved in January 2021.
- The 75% design has been reviewed by the property owner, SWEPCO.
- Review of the 75% design by the city of Fayetteville's public works department and waste water utility was completed by June 2021.
- The city of Fayetteville granted exemption from permit requirements for the construction and operation of the remedial treatment system in July 2021.
- A scope of work to perform additional services for phase 2 was finalized in October 2021. The additional services include obtaining a utility easement for the adjacent property, and groundwater sample collection and laboratory analyses to meet the draft city wastewater discharge permit requirements.
- Groundwater sample collection and laboratory analyses for the draft city wastewater discharge permit application was performed in November and December 2021.
- A utility easement with the adjacent property owner was finalized and easement documents were filed with the county clerk's office in March 2022.

# **DEQ ANTICIPATED FUTURE ACTIVITIES**

- The design for Phase 2 is being revised to obtain 100% completion.
- A property access agreement to construct and operate the treatment system is being drafted by the property owner and the Arkansas Department of Energy & Environment Division of Environmental Quality (ADE&E-DEQ).
- The groundwater and surface water sampling will continue until contaminant levels are below risk-based levels at this site.

# SITE CONTACTS

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# **OTHER CONTACTS**

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