ARKANSAS DEPARTMENT OF ENERGY AND ENVIRONMENT

DIVISION OF ENVIRONMENTAL QUALITY

PROPERTY DEVELOPMENT DECISION DOCUMENT (PDDD)

Woodruff Electric Co-op Corporation Property
3901 North Washington Street
Forrest City, St. Francis County, Arkansas
Arkansas Facility Identification Number: 68-00085

March 2021

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WOODRUFF ELECTRICAL COOPERATIVE CORPORATION

PROPERTY DEVELOPMENT DECISION DOCUMENT

1.0 INTRODUCTION

On April 17, 2020, Speedway, LLC (Speedway) sent a Letter of Intent to the Arkansas Department of Energy and Environment, Division of Environmental Quality (DEQ) – Office of Land Resources to participate in the Arkansas Brownfield Program and purchase the property located at 3901 North Washington Street, Forrest City, St. Francis County, Arkansas. The Property was accepted into the Arkansas Brownfield Program on June 3, 2020.

This Property Development Decision Document (PDDD) will be incorporated as part of the final Implementing Agreement (IA) executed between Speedway and DEQ. The PDDD outlines the remedy for the Property based upon Speedway's proposed future use of the property.

In this PDDD, DEQ describes the remedy for the Property and provides the reasoning for this selection. In addition, this PDDD includes a summary of a No Action Alternative evaluated for this Property.

1.1 Location and Property Description

The Property is located at 3901 North Washington Street, Forrest City, St. Francis County, Arkansas. The subject Property consists of approximately 3.76 acres of land, in an area characterized by undeveloped land and commercial land use.

The Property was developed with an approximately 3,800 square foot (ft^2) maintenance shop, an approximately 2,100 ft^2 equipment storage building, an approximately 100 ft^2 shed, and multiple metal canopies. The structures were constructed on slab-on-grade foundations. All other previously developed buildings have been demolished. Multiple aboveground storage tanks (ASTs) were located within structures on-site. A former underground storage tank (UST) was located within the maintenance shop. The rest of the site is covered by former transformer storage pads, a pole yard, undeveloped greenspace, and some landscaped areas.

The legal description of the Property is as follows:

> Property description of part of the Woodruff Electric Cooperative Corporation property as described in Book 156 Page 288, Book 160 Page 356 and Book 202 Page 61 in the South Half of the Southeast Quarter of Section 16, Township 5 North, Range 3 East in Forrest City, St. Francis County, Arkansas:
>
> Commencing at the recognized and accepted ¼ Corner common to Sections 16 and 21, Township 5 North, Range 3 East; thence North 779.19 feet to a point; thence East 50.79 feet to an iron pin found at the intersection of the east line of North Washington Street (Arkansas Highway 1B) (right-of-way varies) with the north line of Holiday Drive (100 foot right-of-way per deeds); thence North 03 degrees 50 minutes 50 seconds West with the east line of North Washington Street a distance of 309.76 feet to a pk nail found at a point on a curve; thence northwestwardly along a curve to the left having a radius of

2939.80 feet with the east line of North Washington Street a distance of 12.32 feet (chord = North 15 degrees 07 minutes 29 seconds West 12.32 feet, delta = 00 degrees 14 minutes 24 seconds) to a nail found in the south line of the Barton GST Trust FRB Frank G. Barton, III property as described in Book 867 Page 483; thence North 89 degrees 43 minutes 56 seconds East with the said south line a distance of 176.07 feet to a pk nail found in a west line of said property; thence North 89 degrees 56 minutes 39 seconds East with said south line a distance of 237.58 feet to a point (found iron pin 0.7 foot north); thence South 02 degrees 55 minutes 43 seconds East a distance of 252.98 feet to an iron pin set in the north line of Holiday Drive; thence South 87 degrees 18 minutes 10 seconds West with the north line of Holiday Drive a distance of 620.45 feet to the point of beginning and containing 169.769 square feet or 3.897 acres.

1.2 Past Use of the Property

The Property has been commercially developed since approximately 1957. Prior to initial commercial development, it appears the Property may have been undeveloped land. The Property is currently unoccupied, but was previously owned and operated by Woodruff Electric Cooperative Corporation.

1.3 Intended Use of the Property

Speedway plans to redevelop the Property into a fueling station and convenience store.

1.4 Contaminants and Waste Types of Concern

Historically, the Property was occupied by a former electrical company with utility pole and transformer storage and a maintenance shop with multiple ASTs and a UST. Sampling was conducted to evaluate potential impacts to the Property associated with previous site uses.

Eighteen (18) surface soil samples, eighteen (18) subsurface soil samples, and ten (10) groundwater samples were collected during the Limited Phase II Environmental Site Assessment (ESA) and Comprehensive Site Assessment (CSA).

Surface soil samples were analyzed for volatile organic compounds (VOCs), Resource Conservation and Recovery Act (RCRA) metals, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). Subsurface soil samples were analyzed for VOCs, RCRA metals, PAHs, and PCBs. Groundwater samples were analyzed for VOCs, PAHs, and RCRA metals.

Section 4.0, Summary of Site Risks, contains further discussion of these contaminants and associated risks.

1.5 Remedy Selection

An institutional control in the form of a deed restriction will serve as the administrative legal instrument for the selected remedy of the Property. The institutional control must include the following deed restrictions:

- Groundwater on the Property shall not be used for residential, agricultural, recreational, industrial, or commercial purposes and contact with groundwater shall not be permitted without the prior express written authorization of DEQ or its successor as authorized by Arkansas law.

- The Property may only be used for commercial and/or industrial purposes, without the prior express written authorization of DEQ or its duly authorized successors.

- The Property shall not be used or redeveloped in a manner that is inconsistent with the intended use (industrial) without the prior express written authorization of DEQ or its duly authorized successors.

- All persons performing work involving excavation or disturbance of soil on the Property shall meet all applicable health and safety requirements, including the use of proper personal protective equipment.

- DEQ and its contractors, agents, or assigns shall be granted access, with or without notice, to the property as defined under Arkansas law to perform necessary inspections or site visits.

1.6 Proposed Completion Date

Speedway intends to begin construction of the site March 2021. The anticipated completion date is September 2021.

2.0 OWNERSHIP HISTORY

The Property has been commercially developed since approximately 1957. Prior to initial commercial development, it appears the Property may have been undeveloped land. The Property is currently unoccupied, but was previously owned and operated by Woodruff Electric Cooperative Corporation, until it was purchased by Speedway in 2020.

3.0 SITE BACKGROUND AND PREVIOUS INVESTIGATIONS

3.1 Site Background

On April 17, 2020, Speedway sent a Letter of Intent to DEQ to participate in the Arkansas Brownfield Program and purchase the property located at 3901 North Washington Street, Forrest City, St. Francis County, Arkansas. The Property was accepted into the Arkansas Brownfield Program on June 3, 2020. ATC Group Services, LLC (ATC) conducted a Phase I ESA in January of 2020, which identified four (4) recognized environmental conditions (RECs). ATC then conducted a Limited Phase II ESA and CSA in February and October of 2020, respectively. Each of these was initiated by Speedway and was later submitted to DEQ.

In a letter dated November 18, 2020, DEQ approved the Limited Phase II ESA and CSA reports and determined that a baseline was established for the existing contamination and sufficient information was provided to meet the Arkansas Brownfield Program. The Property Development Plan (PDP) was submitted to DEQ on January 21, 2021.

3.2 Geology/Hydrogeology

The Property is located in the Mississippi River Alluvial Plain within the Gulf Coastal Plain Physiographic Province in eastern Arkansas, near the western flank of Crowley's Ridge. Crowley's Ridge is a relatively narrow, north-south trending hill region rising up to 550 feet above the surrounding alluvial plain. The unconsolidated soils along Crowley's Ridge are comprised of eolian loess and Pleistocene alluvial terrace deposits. The Mississippi River Alluvial Plain consists of Quaternary alluvium and terrace deposits containing discontinuous sequences of clays, silts, sand and gravel. These unconsolidated materials average approximately 150 feet in thickness and are underlain by Tertiary age alluvial deposits composed of discontinuous lenticular deposits of unconsolidated gravels, sandy gravels, sands, silty sands, silts, clayey silts, and clay. The lower contact is unconformable and the thickness varies.

According to the *Arkansas Natural Resources Commission (ANRC) Arkansas Water Plan Update 2014*, the Property is located within the Mississippi Alluvial Plain and groundwater in the region of the Property is obtained from the Cockfield Aquifer. The aquifer has a median specific capacity of 0.76 gallons per minute per foot with the potentiometric surface being near or above land surface in some areas. Additionally, the Property is indicated to be within a critical groundwater designation as of 2009.

3.2.1 Site-Specific Geology/Hydrogeology

During the February 2020 Limited Phase II ESA and the October 2020 CSA, saturated conditions in the Property soils were generally encountered between one (1) to ten (10) feet-below ground surface (ft-bgs) throughout the Property. Groundwater elevation data was collected from all six (6) monitoring wells at the Property on September 15, 2020, using an electronic resistivity phase probe. Groundwater in the six (6) wells stabilized between 1.51 ft-bgs to 8.82 ft-bgs. Groundwater flow direction across the Property is from east to west.

No groundwater production wells were observed on the Property. However, Forrest City Waterworks has Well Field No. 4 located 2,300 feet west of the property along Sanyo Road. Municipal wells are screened approximately 145 to 183 ft-bgs and the number in operation varies.

3.3 Phase I Environmental Site Assessment Information

Previous investigations of the Property include a Phase I ESA completed by ATC in January of 2020. The Phase I ESA determined that the Property has been developed with an approximately 3,800 ft^2 maintenance shop, an approximately 2,100 ft^2 equipment storage building, an approximately 100 ft^2 shed, and multiple metal canopies. All other previously developed buildings had been demolished. Multiple ASTs were located within structures on-site. A former UST was located within the maintenance shop. The rest of the site is covered by former transformer storage pads, a pole yard, undeveloped greenspace, and some landscaped areas. Potential for soil and groundwater contamination from historical on-site operations involving the use of hazardous chemicals in multiple storage tanks without containment was identified as a REC. Previous transformer spills in storage areas without containment were also identified as a REC. Utility pole storage areas were identified as a REC for the potential leaching of creosote to soil and groundwater.

3.4 Comprehensive Site Assessment Information

Field activities at the Property were completed to address the RECs identified in the Phase I ESA.

Surface Soils:

Surface soil samples were analyzed for VOCs, RCRA metals, PAHs, and PCBs. Concentrations in surface soil samples were compared to their respective United States Environmental Protection Agency (U.S. EPA) Regional Screening Levels (RSLs) for Residential Soils. Additionally, metals were compared to their respective naturally occurring background concentrations (United States Geological Survey (USGS) background concentrations for St. Francis County, Arkansas).

Arsenic was the only metal detected above its respective U.S. EPA RSL for Residential Soil, but these concentrations are within its respective background concentration. Three PAHs were detected above their respective U.S. EPA RSLs for Residential Soil.

Subsurface Soils:

Subsurface soil samples were analyzed for VOCs, RCRA metals, PAHs, and PCBs. Concentrations in subsurface soil samples were compared to their respective U.S. EPA RSL for Industrial Soils to assess potential human health risks in regards to direct contact with subsurface soils. Additionally, metals were compared to their respective naturally occurring background concentrations (USGS background concentrations for St. Francis County, Arkansas).

Arsenic was the only metal detected above its respective U.S. EPA RSL for Industrial Soil, but these concentrations are within its respective background concentration.

Groundwater:

Groundwater samples were analyzed for VOCs, PAHs, and RCRA metals. Concentrations in groundwater were compared to the U.S. EPA Maximum Contaminant Levels (MCLs). If a U.S. EPA MCL was not established, the U.S. EPA Tapwater RSL was used in the groundwater comparison.

Several PAHs and RCRA metals were detected above their respective groundwater screening levels.

4.0 SUMMARY OF SITE RISKS

4.1 Contaminants and Waste Types of Concern and Site Risks

The Limited Phase II ESA and CSA Reports were performed to evaluate potential historical impacts to the site. A screening level risk assessment (SLRA) was performed to identify contaminants of potential concern (COPCs) in surface soils, subsurface soils, and groundwater. COPCs were identified by comparing the maximum concentration of each contaminant to its respective screening level. Additionally, metals were compared to their respective naturally occurring background concentrations (USGS background concentrations for St. Francis County,

Arkansas). If COPCs were identified for the site, remedial action levels (RALs) were developed and/or institutional controls were required to ensure the protection of human health and the environment.

Speedway plans to redevelop the Property into a fueling station and convenience store. Therefore, the Property was conservatively evaluated based on future residential use. Surface soil and groundwater COPCs were identified by the SLRA indicating potential human health risks for future on-site residents. Therefore, the following mitigation activities must be established. An institutional control restricting the use of on-site groundwater should be implemented. Additionally, the institutional control should contain a provision restricting the site's usage to industrial activities only.

Neither an ecological checklist nor an ecological SLRA were conducted for the site. Land use in the surrounding areas is heavily commercial and unlikely to support a habitat capable of supporting ecological receptors.

4.2 Human Health Exposure

4.2.1 Surface Soils

Surface Soil Screening Level Risk Assessment

The majority of existing surface soils will be excavated during reconstruction activities; however, any surface soils that will remain in place were sampled and analyzed for VOCs, RCRA metals, PAHs, and PCBs. The SLRA compared maximum contaminant concentrations detected in soils to their respective U.S. EPA RSLs for Residential Soils. Additionally, metals were compared to their respective naturally occurring background concentrations (USGS background concentrations for St. Francis County, Arkansas). Naturally occurring metal concentrations refer to levels of naturally occurring substances that are unaffected by any current or past site-related activities. Naturally occurring background concentrations for metals may be eliminated from further consideration as COPCs, provided that on-site maximum concentrations of potentially site-related constituents are comparable to (equal to or less than) background levels. Contaminants exceeding their respective soil screening levels and naturally occurring background concentrations (metals only) were retained as soil COPCs.

Arsenic was the only metal detected above its respective U.S. EPA RSL for Residential Soil, but these concentrations are within its respective background concentration. Therefore, arsenic was not retained as a COPC. Three PAHs were detected above their respective U.S. EPA RSLs for Residential Soil. The SLRA indicates potential human health risks are present via direct contact with surface soils for residential receptors. An institutional control restricting the site to industrial use only should be implemented. Surface soil COPCs are summarized below in Table 1 – Surface Soil Contaminants of Potential Concern (COPCs).

Table 1 - Surface Soil Contaminants of Potential Concern (COPCs)

Contaminant	Maximum Concentration (mg/kg)(1)	Soil Screening Level (mg/kg)(2)	Arkansas Naturally Occurring Background (mg/kg)(3)
Arsenic	10.1	0.68	11.99
Benzo(a)pyrene	0.588	0.11	N/A
Benzo(b)fluoranthene	1.97	1.1	N/A
Dibenz(a,h)anthracene	0.204	0.11	N/A

(1) - CSA Report (October 2020)
(2) - U.S. EPA Regional Screening Levels – Residential Soil (May 2020, TCR=1E 06, THQ=0.1)
(3) - USGS background levels for St. Francis County, Arkansas

4.2.2 Subsurface Soils

Subsurface Soil Screening Level Risk Assessment

Subsurface soil samples were analyzed for VOCs, RCRA metals, PAHs, and PCBs. The SLRA compared maximum contaminant concentrations detected in subsurface soils to their respective U.S. EPA RSL for Industrial Soils to assess potential human health risks in regards to direct contact with subsurface soils. Additionally, metals were compared to their respective naturally occurring background concentrations (USGS background concentrations for St. Francis County, Arkansas). Contaminants exceeding their respective soil screening levels and naturally occurring background concentrations (metals only) were retained as soil COPCs.

Arsenic was the only metal detected above its respective U.S. EPA RSL for Industrial Soil, but these concentrations are within its respective background concentration. Therefore, arsenic was not retained as a COPC. Based on this data, potential human health risks are not anticipated via exposure to subsurface soils. Soil COPCs are summarized below in Table 2 – Subsurface Soil Contaminants of Potential Concern (COPCs).

Table 2 - Subsurface Soil Contaminants of Potential Concern (COPCs)

Contaminant	Maximum Concentration (mg/kg)(1)	Soil Screening Level (mg/kg)(2)	Arkansas Naturally Occurring Background (mg/kg)(3)
Arsenic	10.1	3.0	11.99

(1) - CSA Report (October 2020)
(2) - U.S. EPA Regional Screening Levels – Industrial Soil (May 2020, TCR=1E 06, THQ=0.1)
(3) - USGS background levels for St. Francis County, Arkansas

4.2.3 Subsurface Soil Protection of Groundwater

Soil Protection of Groundwater Screening Level Risk Assessment

Protection of groundwater via subsurface soils was not evaluated based on background levels and the availability of groundwater data.

4.2.4 Groundwater

Groundwater Screening Level Risk Assessment

Groundwater samples were analyzed for VOCs, PAHs, and RCRA metals. The SLRA compared maximum contaminant concentrations detected in groundwater to their respective U.S. EPA MCLs. If a U.S. EPA MCL was unavailable for a contaminant, then the U.S. EPA Tapwater Screening Level was used in the comparison.

Several PAHs and RCRA metals were detected above their respective groundwater screening levels and were retained as COPCs. The SLRA indicates potential human health risks are present via direct contact with groundwater. An institutional control restricting the use of on-site groundwater should be implemented. Groundwater COPCs are summarized below in Table 3 – Groundwater Contaminants of Potential Concern (COPCs).

Table 3 – Groundwater Contaminants of Potential Concern (COPCs)

COPC	Maximum Concentration (ug/L) (1)	Screening Level (ug/L)	Screening Level Reference
Arsenic	957	10	U.S. EPA MCL(2)
Barium	19,900	5	U.S. EPA MCL(2)
Benzo(a)anthracene	0.137	0.03	U.S. EPA Tapwater(3)
Cadmium	29.8	5	U.S. EPA MCL(2)
Chromium	2,150	100	U.S. EPA MCL(2)
Dibenz(a,h)athracene	0.0354	0.025	U.S. EPA Tapwater(3)
Lead	1,370	15	U.S. EPA MCL(2)
Naphthalene	0.477	0.17	U.S. EPA Tapwater(3)

(1) - CSA Report (October 2020)
(2) - U.S. EPA Maximum Contaminant Level (May 2020)
(3) - U.S. EPA Regional Screening Level for Tapwater (May 2020, TCR=1E-06, THQ=0.1)

4.3 Ecological Exposure

The property is located in a highly developed commercial area. There were no significant environmental features or ecological habitats near the site. Neither an ecological checklist nor ecological SLRAs were conducted for the site.

4.4 Threatened and Endangered Species / Protected Waterways

Due to the absence of significant ecological habitats or environmental features near the site, and the generally developed nature of the immediate area, no threatened or endangered species are believed to occur in the vicinity of the site.

4.5 Remedial Action Levels

No remedial action levels are required provided a deed restriction is implemented prohibiting the use of groundwater at the site and limiting the site to industrial use only.

5.0 SUMMARY OF ALTERNATIVES CONSIDERED

The following remedial action alternatives were considered to address soil and groundwater concerns for the Property.

Alternative 1: No Action

The No Action Alternative is considered as a baseline for cost comparison of other technologies**.**

Alternative 2: Deed Restriction

A deed restriction that administratively prohibits the use of groundwater on the Property and residential, agricultural, or recreational development on the Property.

Table 4 - Summary of Alternatives

Remedy Alternative	Protection of Human Health and the Environment	Short Term Effectiveness	Long Term Effectiveness	Implementation	Cost
Alternative 1: No Action	Acceptable	Effective	Not Effective	Implementable	$0
Alternative 2: Deed restriction notice	Acceptable	Effective	Effective	Implementable	$300

6.0 SELECTION AND RATIONALE FOR THE PREFERRED REMEDIAL ACTION

The current property structures are vacant. The intended reuse of the Property includes the demolition of current property structures and construction of a fueling station and convenience store. The selected remedy of a deed restriction notice is determined to be a preferred remedial action. The deed restriction should prohibit use of groundwater for residential, agricultural, recreational, or commercial purposes. The Property may only be used for commercial and/or industrial purposes. Should the future use of the Property change, contaminant concentrations will need to be reevaluated to ensure protection of human health and environmental health.

7.0 INTERIM MEASURES

No interim measures are required for the Property.

8.0 REDEVELOPMENT AND/OR CONSTRUCTION PLANS

The planned land use of the Property will be a fueling station and convenience store, including eight (8) gasoline dispensers and seven (7) diesel dispensers.

9.0 PROJECT SCHEDULE

Once the proposed deed restrictions are in place and the required notices are filed on the deed for the Property, a Certificate of Completion will be issued by DEQ. Speedway intends to use the Property for a fueling station and convenience store. Speedway intends to begin development in March 2021. The opening of the development is anticipated to be September 2021.

10.0 OPERATIONS AND MAINTENANCE AND LONG-TERM OVERSIGHT PLANS

The Applicant will be responsible for developing and maintaining the Property as a fueling station and convenience store.

11.0 COORDINATION WITH OTHER OFFICES/AGENCIES

Table 5 below lists the offices within DEQ which were provided a copy of this PDDD. Table 6 below lists other state and federal agencies which were provided a copy of this PDDD.

Table 5 - Internal Coordination

DEQ Offices	Consulted/ Informed	Sent Notice of Decision
Office of Water Quality	No	Yes
Office of Air Quality	No	Yes
Office of Land Resources	Yes	Yes
Office of Operations and Outreach	No	No
Office of Law and Policy	No	No

Table 6 - External Coordination

Other State and Federal Agencies	Consulted/Informed	Sent Notice of Decision
U.S. EPA, Region 6	No	Yes
AR Office of Emergency Services	No	No
AR Department of Health	Yes	Yes
AR State Clearinghouse	No	No
AR State Historic Preservation	No	No
AR Natural Heritage Commission	No	No
AR Game & Fish Commission	No	No
U.S. Army Corps of Engineers	No	No

The PDDD has been sent to all applicable offices of DEQ and to all relevant divisions and agencies listed above.

----- End of PDDD -----