




Fugitive Dust Control Plan Water Recycle Ponds

**Entergy Arkansas, Inc.
White Bluff Plant
Redfield, Jefferson County, Arkansas**

October 2018

*Prepared For
Entergy Arkansas, Inc.*





R. Kent Nilsson, P.E.
Senior Engineer

10/9/18



Jason House
Project Manager

*TRC Environmental Corporation | Entergy Arkansas, Inc.
Fugitive Dust Control Plan for Water Recycle Ponds
Entergy White Bluff Plant,
Redfield, Jefferson County, Arkansas*

Table of Contents

1.	Introduction.....	1
1.1	Background	1
1.2	Site Information	1
2.	Fugitive Dust Control Activities.....	3
2.1	Purpose	3
2.2	Fugitive Dust Control Contact	3
2.3	Fugitive Dust Control Measures	3
2.4	Implementation of Control Measures	3
2.5	Citizen Complaints	4
2.6	Plan Assessment	4
2.7	Annual CCR Fugitive Dust Control Report	5
2.8	Notifications.....	5
2.9	Amendment of the Fugitive Dust Plan	5
3.	Certification	6

List of Figures

Figure 1	Site Location Map.....	2
----------	------------------------	---

Section 1

Introduction

Entergy Arkansas, Inc. (Entergy) operates the White Bluff Steam Electric Station (Plant), located at 1100 White Bluff Road, Redfield, AR 72132. This Plant operates two Water Recycle Ponds: A and B (Ponds), as part of its process water system for bottom ash transport. Pursuant to United States Environmental Protection Agency (USEPA) Disposal of Coal Combustion Residuals (CCR) From Electric Utilities Final Rule (CCR Rule) Section 40 Code of Federal Regulations (CFR) § 257.80, this Fugitive Dust Control Plan (Plan) describes the measures that will effectively minimize CCR from becoming airborne at the Plant, including CCR fugitive dust originating from the Ponds, roads, and other CCR management and material handling activities.

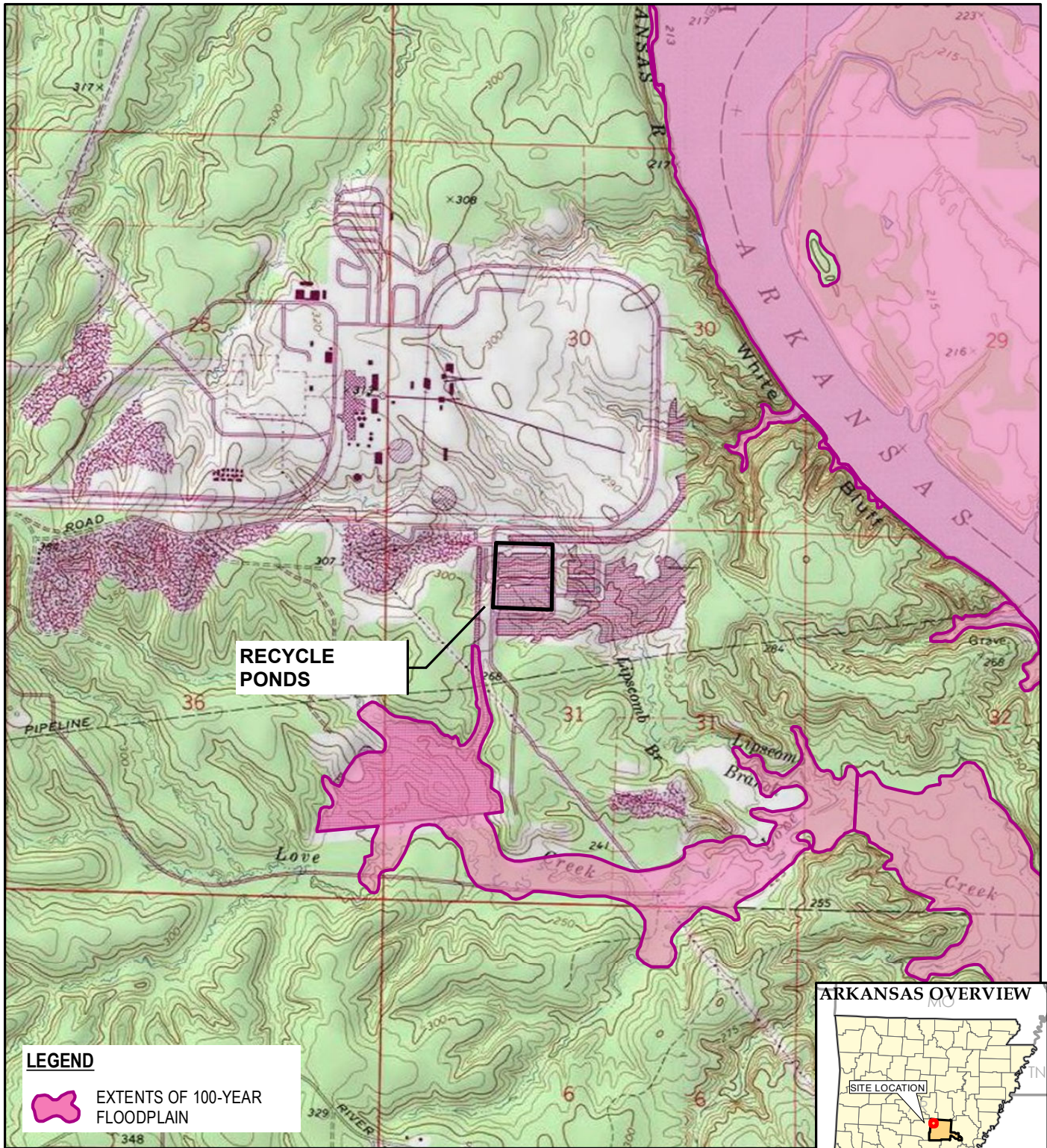
1.1 Background

During operations, the bottom ash from the boilers is removed from the hopper by a sluicing process and transported to four dewatering bins. After the water is drained from the bins, the ash is unloaded into trucks and taken to the on-site landfill for disposal or sold as a product for beneficial reuse. The water drained from the dewatering bins is routed to the recycle ponds for intermediate storage prior to being returned to the bottom ash transport system for reuse in the sluicing operations.

The Ponds will be closed in accordance with 40 CFR § 257.102(c) through the removal of CCR such that no residual materials remain visible plus over-excavation of approximately 6-inches of subsoils. Certification of the closure will be provided by a registered professional engineer and registered professional geologist. This Plan will be in effect throughout the active service life of the Ponds and until the final removal of CCR is complete.

1.2 Site Information

The Plant is located near Redfield, Jefferson County, Arkansas (Figure 1). The Plant is located at approximate latitude 34°25'11.4" N, longitude 92°9'20.60" W (front gate). The area surrounding the Ponds is approximately 19 acres.



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.



Two United Plaza
8550 United Plaza Blvd., Suite 502
Baton Rouge, LA
Phone: 734.971.7080

TRC - GIS

PROJECT:

**ENTERGY WHITE BLUFF PLANT
RECYCLE PONDS
REDFIELD, JEFFERSON COUNTY, ARKANSAS**

TITLE:

**INITIAL INFLOW DESIGN
FLOOD CONTROL SYSTEM PLAN
SITE LOCATION MAP**

DRAWN BY:

A. REIS

CHECKED BY:

N. ADDISON

APPROVED BY:

J. HOUSE

DATE:

AUGUST 2018

PROJ. NO.:

302967

FILE:

302967-001slm.mxd

FIGURE 1

Section 2

Fugitive Dust Control Activities

2.1 Purpose

Pursuant to the CCR Rule (40 CFR § 257.80), the owner or operator of a CCR surface impoundment must prepare and operate in accordance with a CCR fugitive dust control plan as per paragraphs (b)(1) through (7) of 40 CFR § 257.80. The owner or operator is required to identify and describe the CCR fugitive dust control measures that will be used to minimize CCR from becoming airborne at the Plant. In addition to the CCR Rule, the Plant must also follow any applicable standards under the Occupational Safety and Health Act.

2.2 Fugitive Dust Control Contact

Below is the fugitive dust control contact information for Entergy White Bluff Plant:

Name: Jennifer Halpain
Title: Environmental Analyst III
Entergy Arkansas Incorporated
1100 White Bluff Road
Redfield, AR 72132
Phone: 501-688-7270
Email: jhalpai@entergy.com

2.3 Fugitive Dust Control Measures

The USEPA describes fugitive dust as being generated from open sources and is not discharged to the atmosphere in a confined flow stream. Mechanical disturbances can generate significant atmospheric dust and common sources include unpaved roads, agricultural tilling operations, aggregated storage piles, and heavy construction operations. The potential drift distance of particles, as noted per the USEPA, is governed by the initial injection height of the particle, the terminal settling velocity of the particle, and the degree of atmospheric turbulence. There are several techniques and control measures used in reducing fugitive dust. These include water spray, wind barriers, compaction, vegetative cover, reducing vehicle speeds, paving roads, etc.

2.4 Implementation of Control Measures

Entergy's White Bluff Plant will implement the Plan during operational activities of the Ponds to reduce the potential for fugitive dust generation. The CCR is fully contained within sluice

water and is transported via gravity flow through a network of contained piping and equipment to the Ponds in a closed loop system. The Ponds retain water at all times other than during maintenance cleaning or other maintenance activities. Potential fugitive dust can be created during removal of CCR from the Ponds when excavating, hauling, or placing CCR at the on-site Coal Ash Disposal Landfill (CADL). The CCR will be transported in a moist condition via open-top trucks on established Plant haul roads to the CADL. If not in a moist condition, the open-top trucks will travel under a spray bar to hydrate the top layer of exposed CCR before traveling to the on-site landfill. Haul roads will be wetted using water trucks, as needed, to prevent visible emissions from causing a nuisance on or beyond the Plant boundary. In addition to water trucks, properly posted speed limits will be enforced to reduce vehicular fugitive dust on haul roads. The truck unloading process and material handling at the CADL will be conducted in a manner to minimize fugitive dust generation.

Fugitive emission from vehicular traffic within the CADL occur from the tanker trucks delivering fly ash, dump trucks delivering bottom ash, economizer ash, and as from the Ponds, and from trackhoe loaders and bulldozers that move material. Fugitive dust in the landfill area will be controlled with a watering truck on an as-needed basis to prevent visible emissions from causing a nuisance beyond the Plant boundary due to vehicular traffic from trucks and other CCR moving equipment. In addition, fugitive dust generated from vehicular traffic within the landfill boundary will be minimized by enforcing a speed limit of 5 miles per hour (mph). Vehicular traffic and equipment movement not associated with ash management activities will be minimized.

2.5 Citizen Complaints

Entergy's White Bluff Plant utilizes a publicly accessible CCR Rule Compliance Data and Information website available for citizens to post a comment or complaint. A submittal form located on the site can be used to file a comment or complaint concerning visible dust emissions. All complaints and comments will be addressed and remedied as necessary.

2.6 Plan Assessment

Pond cleaning and landfill activities are monitored by qualified personnel to ensure fugitive dust does not cause a nuisance off-site. The Plan may be amended as necessary when signs of fugitive dust are encountered, or new control measures are implemented. To stay current with new improvements, old control measures will be reviewed on effectiveness and amended as needed.

2.7 Annual CCR Fugitive Dust Control Report

An annual CCR Fugitive Dust Control Report must be prepared as per 40 CFR § 257.80(c) that includes a description of the actions taken by the owner or operator to control CCR fugitive dust, a record of citizen complaints, and a summary of any corrective measures taken. The requirement for completing the annual CCR Fugitive Dust Control Report is satisfied when the report has been placed into Plant's operating record per 40 CFR § 257.105(g)(2).

2.8 Notifications

In accordance with 40 CFR § 257.105(g), Entergy will post to the Plant's Facility Operating Record (FOR) the Plan and any amendments. In addition, the Director of the Arkansas Department of Environmental Quality (ADEQ) will be notified when documents are placed into the Plant's FOR per 40 CFR § 257.106(g)(1).

2.9 Amendment of the Fugitive Dust Plan

In accordance with 40 CFR § 257.80(b)(6), Entergy may amend this Plan at any time. Specifically, Entergy will amend the written Plan whenever there is a change in conditions that would substantially affect the written Plan in effect. Recordkeeping, Notification and Posting requirements of 40 CFR § 257.105, 257.106 and 257.107 will be followed.

Section 3 Certification

I, the undersigned Arkansas Professional Engineer, hereby certify that I am familiar with the technical requirements of 40 CFR § 257.80. I also certify that it is my professional opinion that, to the best of my knowledge, information, and belief, that the activities outlined in this fugitive dust plan are in accordance with current good and accepted engineering practice(s) and standard(s) appropriate to the nature of the project and the technical requirements of 40 CFR § 257.80(b).

For the purpose of this document, "certify" and "certification" shall be interpreted and construed to be a "statement of professional opinion". The certification is understood and intended to be an expression of my professional opinion as an Arkansas Licensed Professional Engineer, based upon knowledge, information, and belief. The statement(s) of professional opinion are not and shall not be interpreted or construed to be a guarantee or a warranty of the post-closure activities.



R. Kent Nilsson

Printed Name of Professional Engineer

A handwritten signature in black ink, appearing to read "R. Kent Nilsson", written over a horizontal line.

Signature of Professional Engineer

9136

State of Arkansas License Number

10/9/18

Date