
ANNUAL CCR FUGITIVE DUST CONTROL REPORT

Big Cajun II Power Plant

New Roads, Pointe Coupee Parish, Louisiana

Prepared for

Louisiana Generating, LLC
10431 Cajun II Road, Highway 981
New Roads, Louisiana 70760

Prepared by

Geosyntec Consultants, Inc.
5420 Corporate Boulevard, Suite 202
Baton Rouge, Louisiana 70808

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Figure 1: Site Plan

1. INTRODUCTION

This Annual CCR Fugitive Dust Control Report (Annual Report) was prepared for the Louisiana Generating, LLC (LaGen) Big Cajun II Power Plant (facility) pursuant to the air criteria requirements of Section (§) 257.80 of the Federal Coal Combustion Residual (CCR) Rule (the CCR Rule) contained in Title 40 Code of Federal Regulations (CFR) Part 257.

Under 40 CFR §257.80, the facility must adopt measures that will effectively minimize CCR from becoming airborne onsite, which includes CCR fugitive dust that originates from CCR units, roads, and other CCR management and material handling activities. The measures employed to minimize fugitive dust migration are identified and described within the facility's CCR Fugitive Dust Control Plan (Plan) (CB&I, 2015). The Plan was previously placed into the facility Operating Record, and LaGen personnel conduct site CCR management operations in accordance with the Plan.

In accordance with the CCR Rule, this Annual Report:

- describes the actions taken by the operator to control CCR fugitive dust;
- provides a record of all citizen complaints (if any); and
- summarizes implemented corrective measures (if any).

Geosyntec Consultants, Inc. (Geosyntec) understands that the 2016 Annual CCR Fugitive Dust Control Report (CB&I, 2016) was placed into the Operating Record on 19 December 2016, and the 2017 Annual CCR Fugitive Dust Control Report (Geosyntec, 2017) was placed into the Operating Record on 19 December 2017. The completion deadline for a subsequent annual report is one year after the completion date of the previous annual report. An annual report is considered complete once the document is placed within the Operating Record. Therefore, the Annual Report was developed to address the period between 19 December 2017 and its issuance date of 19 December 2018 and is intended to be placed in the Operating Record upon issuance.

To prepare the Annual Report for 2018, Geosyntec reviewed the facility's CCR Fugitive Dust Control Plan, the 2016 and 2017 Annual CCR Fugitive Dust Control Report (CB&I, 2016; Geosyntec, 2017), and available 2018 fugitive dust inspection logs. Geosyntec also visited the facility on 12 October 2018 to: (i) review and observe site features and CCR management procedures; (ii) inquire about any citizen complaints received or corrective actions made during the current record period; and (iii) discuss operations with the environmental coordinator who is responsible for on-going CCR fugitive dust control inspections and overall Plan implementation. The Annual Report for 2018 was reviewed by the facility's environmental coordinator to confirm the accuracy of the information presented herein.

2. FUGITIVE DUST CONTROL MEASURES

2.1 Facility Background

The LaGen Big Cajun II Power Plant is a coal and natural gas-fired, steam turbine electric power generation facility located on 1,939 acres northeast of New Roads, Louisiana. Big Cajun II is currently owned and operated by LaGen, a subsidiary of NRG Energy, Inc. (NRG), and has operated for over 30 years. A site map showing relevant facility areas associated with CCR management is presented on Figure 1, and a description of the plant processes related to CCR generation and management is provided below.

Coal is delivered to the facility via barge on the Mississippi River, to a dock located east of the plant area. The coal is unloaded onto a conveyor belt which transports the material to a storage area north of the boiler units. The facility has three boiler units and Unit 1 and Unit 3 use coal as the primary fuel source, which generate CCR material (fly ash and bottom ash). Unit 2 was previously converted to use natural gas as the primary fuel source and no longer generates CCR.

Fly ash generated by Unit 1 and Unit 3 is pneumatically transported to storage silos and is subsequently transported off-site (for beneficial reuse or disposal) or is conveyed via closed system into closed trucks for transport to the on-site Fly Ash Basin for storage/disposal. As market demand dictates, fly ash within the Fly Ash Basin is removed and sold to external vendors. Bottom ash generated by the facility is collected within hoppers at the base of the Unit 1 and Unit 3 boiler units. The bottom ash in the Unit 1 hopper is transported hydraulically (sluiced) via pipe into the on-site Bottom Ash Basin, while the bottom ash in the Unit 3 hopper is hauled in a hydrated state to the Bottom Ash Basin for storage/disposal via dump truck.

2.2 Fugitive Dust Control Measures

Control measures are required to effectively prevent airborne transfer of CCR fugitive dust that originates from CCR units, roads, and other CCR management and material handling activities at the facility. The fugitive dust control measures are detailed in the facility's CCR Fugitive Dust Control Plan (CB&I, 2015). Consistent with the Plan, the following CCR fugitive dust control measures were implemented by facility personnel at the potential CCR fugitive dust sources during the period addressed within the 2018 Annual Report.

- Fly Ash Handling Practices: The fly ash storage silos are equipped with a baghouse to capture CCR fugitive dust during transfer of fly ash from the boiler units into the Unit 1 and Unit 3 storage silos. Most of the fly ash is transported from each silo with closed pneumatic tank trucks. A delivery chute is lowered from the base of each silo to transfer dry fly ash into the fill opening of the closed

tanker truck. Fugitive dust generated during the truck filling process is captured using a fly ash unloading area blower. When open top trucks are used, (i) the trucks are not filled to full capacity (i.e., some freeboard is maintained in the truck); and (ii) the trucks are tightly covered with a tarp during transport to the Fly Ash Basin.

- Bottom Ash Handling Practices: Bottom ash from Unit 1 is transported hydraulically through a pipe and sluiced directly to the Bottom Ash Basin, which does not produce fugitive dust due to: (i) the high water content of the bottom ash, and (ii) the bottom ash travels through an enclosed pipe. Bottom ash from Unit 3 is collected in hoppers after which the damp bottom ash is hauled via dump trucks to the Bottom Ash Basin. The dump trucks are covered during transport to minimize fugitive dust emissions.
- Transport Roads: Site roads used to transport CCR materials are evaluated by facility personnel and watered using a water truck as-needed, when the observed surface dryness is susceptible to dust migration. Fugitive dust emissions are also controlled with strict observation of a 15 mile per hour maximum vehicle speed limit for all site roads. Roads and parking lots are also periodically swept during routine maintenance activities.
- Surface Impoundments: Fugitive dust from the Fly Ash and Bottom Ash Basin is minimized through placement of the material as soon as practical after delivery. The facility maintains surface water within each impoundment which further limits the potential for dust migration for submerged areas. In addition, access roads in and around the CCR surface impoundments are evaluated and watered when surface conditions indicate the potential for dust migration.

3. CITIZEN COMPLAINTS AND CORRECTIVE MEASURES

3.1 Citizen Complaints

Per the Plan (CB&I, 2015), citizen complaints that involve fugitive dust events at the facility are logged in NRG's Environmental Management Information System (EMIS) database within 24 hours of complaint receipt. The EMIS automatically forwards the complaint to the facility manager, NRG's regional environmental coordinator, and NRG's Corporate Environmental Department.

No citizen complaints were received during the period addressed by the 2018 Annual Report.

3.2 Corrective Measures

Per the Plan (CB&I, 2015), if a citizen complaint is received: (i) NRG will conduct a thorough investigation; (ii) record and enter the investigation results into the EMIS database; and (iii) communicate the investigation results to the appropriate parties. If an investigation confirms a fugitive dust emission event, NRG will conduct a root cause analysis to address the source of the excess fugitive dust and will develop a plan to mitigate future occurrences and remediate impacts, as necessary.

No corrective measures were necessary during the period addressed by the 2018 Annual Report.

4. ASSESSMENT OF PLAN EFFECTIVENESS

Per the procedures set forth in the facility's CCR Fugitive Dust Control Plan (CB&I, 2015) and consistent with 40 CFR §257.80, the Plan will be periodically reviewed by the facility's environmental coordinator and assessed to evaluate the Plan's effectiveness to provide the appropriate procedures and methods for minimizing CCR from becoming airborne at the facility. The Plan review will serve to either confirm the Plan's effectiveness or will identify sections which necessitate revision/upgrade to reflect any relevant changes in plant or CCR unit operations, or necessary improvements in CCR fugitive dust control protocols. The Plan must be amended whenever there is a change in conditions that substantially affects the Plan, such as the construction and operation of a new CCR unit.

During the period addressed within the 2018 Annual Report, significant changes were not implemented at the facility with respect to operations. No new CCR units were commissioned, no new CCR management operations or processes were implemented, nor were modifications to existing CCR management operations or processes revised that necessitated a change in the Plan. In addition, no citizen complaints were received, or corrective measures taken with regards to CCR fugitive dust control. No actions outside of the normal CCR fugitive dust control measures were required. As part of the review process before issuance of the 2018 Annual Report, the facility's environmental coordinator identified that no additional or modified CCR fugitive dust control measures are warranted at this time.

5. RECORDKEEPING, NOTIFICATION, INTERNET REQUIREMENTS

5.1 Recordkeeping Requirements

In accordance with 40 CFR §257.105(g), the CCR Fugitive Dust Control Plan (CB&I, 2015), including any subsequent amendment of the Plan), Annual CCR Fugitive Dust Control Reports, and related information will be kept in the Operating Record. The appropriate documents will be maintained in the Operating Record for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, record, or study – except that only the most recent Plan must be maintained in the Operating Record.

The facility is regularly monitored for CCR fugitive dust conditions and emissions. Should CCR fugitive dust emissions occur, the facility will log the incident in accordance with the Plan, including detailing the corrective measures taken to reduce the fugitive dust. The incident log (if any) will also be included in the next annual report. No CCR fugitive dust conditions were observed by facility personnel during the period addressed by this Annual Report.

5.2 Notification Requirements

In accordance with 40 CFR §257.106(g), the State Director of the Louisiana Department of Environmental Quality (LDEQ) will be notified once this Annual CCR Fugitive Dust Control Report is placed in the Operating Record and on the publicly accessible internet site.

5.3 Internet Requirements

In accordance with 40 CFR §257.107(g), the most recent Annual CCR Fugitive Dust Control Report will be made available on the facility's publicly accessible internet site within 30 days of it being placed in the Operating Record.

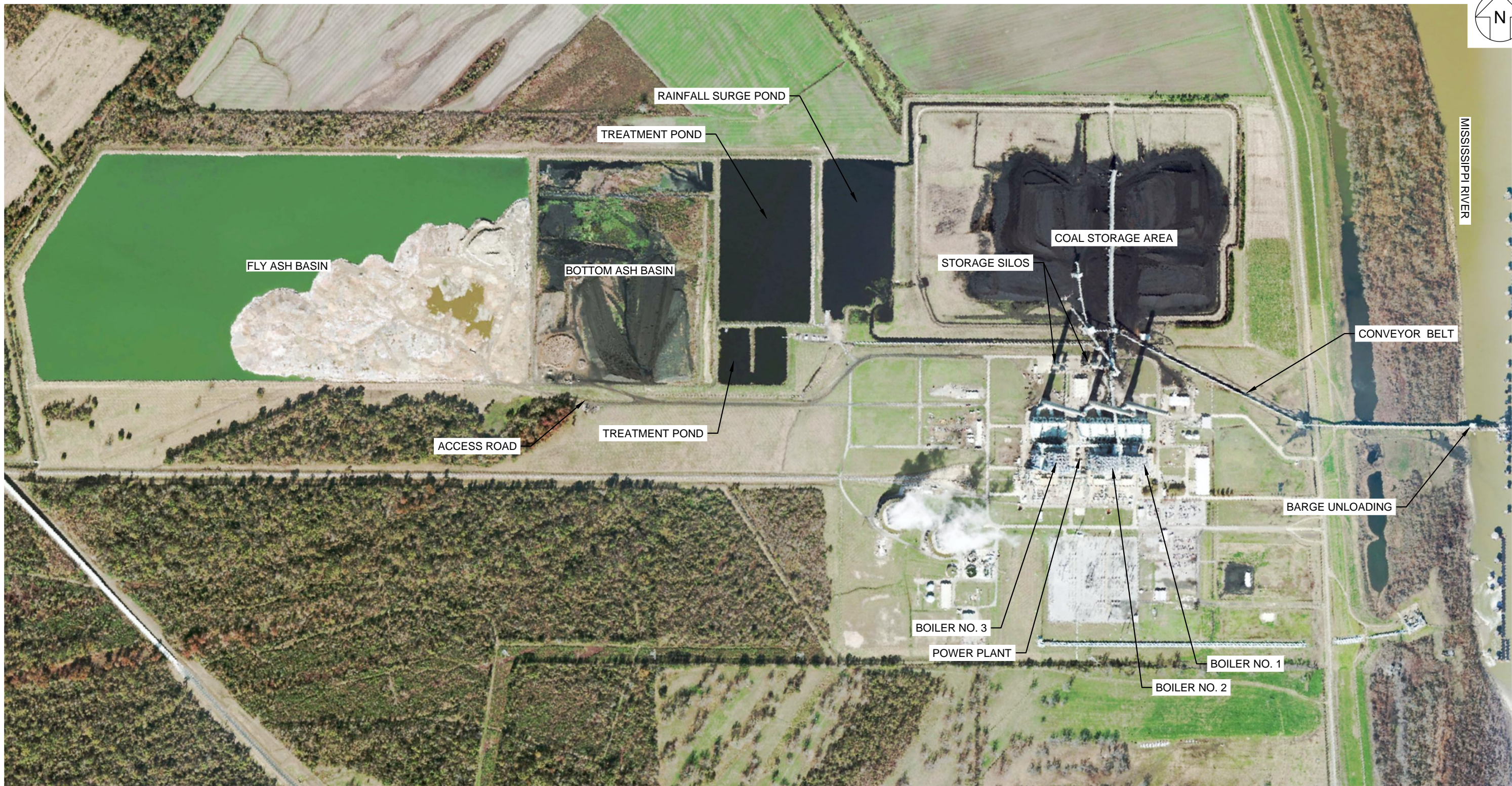
6. REFERENCES

CB&I (CB&I Environmental & Infrastructure, Inc). CCR Compliance – Fugitive Dust Control Plan. Louisiana Generating, LLC, Big Cajun II. October 2015.

CB&I. CCR Compliance – Annual Fugitive Dust Control Report. Louisiana Generating, LLC, Big Cajun II. December 2016.

Geosyntec. Annual Fugitive Dust Control Report. Louisiana Generating, LLC, Big Cajun II, December 2017.

FIGURE



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SITE PLAN BIG CAJUN II POWER PLANT 10431 CAJUN II ROAD NEW ROADS, LA 70760		FIGURE 1
	BATON ROUGE, LA DECEMBER 2018	

