

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

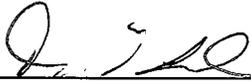
PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **102016-004** Project Number: 2016-05-022
Installation Number: 071-0003
Parent Company: Ameren Corporation
Parent Company Address: P.O. Box 66149, MC 602, St. Louis, MO 63166-6149
Installation Name: Ameren Missouri Labadie Energy Center
Installation Address: 226 Labadie Power Plant Rd., Labadie, MO 63055
Location Information: Franklin County, S17, T42N & T44N, R2E

Application for Authority to Construct was made for:
Ash handling systems, dry CCR landfill. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

-
- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.


Prepared by
David Little, PE
Environmental Engineer III
New Source Review Unit


Director or Designee
Department of Natural Resources

OCT 20 2016

Effective Date

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Enforcement and Compliance Section of the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
<http://dnr.mo.gov/regions/>

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

**Ameren Missouri Labadie Energy Center
Franklin County, S17, T42N & T44N, R2E**

1. **CCR Landfill Waste**
 - A. Ameren Missouri Labadie Energy Center shall not dispose of any offsite generated waste in the landfill.
 - B. Ameren Missouri Labadie Energy Center shall maintain monthly records onsite of all landfilled waste types and their origin.
2. **Paved Haul Roads**
 - A. Ameren Missouri Labadie Energy Center shall pave all surfaces as indicated in Attachment A with materials such as asphalt, concrete, or other materials subject to approval by the Air Pollution Control Program.
 - B. Ameren Missouri Labadie Energy Center shall conduct maintenance and/or repair of the road surface as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating. Records of all maintenance and repair activities shall be kept onsite indicating the specific activity, road location, and date.
 - C. Ameren Missouri Labadie Energy Center shall establish and follow a paved haul roads cleaning, watering, vacuum-sweeping standard operating procedure (SOP). A copy of the SOP report shall be submitted to the Air Pollution Control Program's Compliance/Enforcement Section within 60 days of the submittal of the initial test report in Special Condition 10.F. The report shall include but is not limited to the following information, haul road segment/location, cleaning method/water application rate, and schedule. Trackout from unpaved areas and spills shall be removed as soon as practical.
3. **Submerged Flight Conveyors**
 - A. Ameren Missouri Labadie Energy Center shall route all boiler 1, 2, and 3 economizer ash and bottom ash through submerged flight conveyors before depositing the ash into bunkers.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- B. The initial portion of the submerged flight conveyors shall be submerged in water during operation.
4. Capture Device
- A. Ameren Missouri Labadie Energy Center shall completely enclose the units as indicated in Table 1.

Table 1: Units with Total Enclosure

Emission Unit	Description	Capture Device	Notes
P9a	Pneumatic conveying from transfer tanks to silo 1	Total enclosure	This is an enclosed pneumatic transfer. There is not an extra enclosure around the pneumatic system.
P9c	Silo 1 filling	Total enclosure silo	The silo is its own enclosure. Openings are routed to control devices.
P9e	Silo 1 wet mixer	Total enclosure	The mixer is its own enclosure.
P9b	Pneumatic conveying from transfer tanks to silo 2	Total enclosure	This is an enclosed pneumatic transfer. There is not an extra enclosure around the pneumatic system.
P9d	Silo 2 filling	Total enclosure silo	The silo is its own enclosure. Openings are routed to control devices.
P9f	Silo 2 wet mixer	Total enclosure	The mixer is its own enclosure.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- B. Ameren Missouri Labadie Energy Center shall load unconditioned fly ash from silo 1 and silo 2 only to enclosed trucks.
 - 1) Unconditioned fly ash is ash that does not meet the definition of conditioned in 40 CFR 257.80(b)(2), but that also does not have free liquids, e.g. unconditioned means dry ash.
 - 2) The unconditioned fly ash shall be loaded using a telescoping spout that maintains contact with the truck opening. A vapor tight seal is not required.
 - 3) The trucks shall be enclosed to the extent that the only truck opening is the opening through which ash passes from the spout to the truck. The difference between the truck opening cross sectional area and spout cross sectional area shall be minimal, e.g. open top trucks are not permitted.

5. Control Device - Filters

- A. Ameren Missouri Labadie Energy Center shall control emissions from the units indicated in Table 2 using filters.

Table 2: Emission Units with Filters

Emission Point	Location/Description
P9a	Pneumatic conveying from transfer tanks to silo 1
P9c	Silo 1 filling
	Silo 1 dry loadout
P9e	Silo 1 wet mixer
P9b	Pneumatic conveying from transfer tanks to silo 1
P9d	Silo 2 filling
	Silo 2 dry loadout
P9f	Silo 2 wet mixer

- B. The filters shall be operated and maintained in accordance with the manufacturer's specifications which shall be kept on site.
- C. Filters P9a and P9b shall be equipped with a leak detection system, which shall be operated and maintained in accordance with manufacturer's specifications, which shall be kept on site.
- D. Filters P9c, P9d, P9e, and P9f shall emit zero visible emissions (not 0% opacity). Ameren Missouri Labadie Energy Center shall demonstrate compliance by monitoring and recording visible emissions from each filter

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

at least once every 24 hours. Method 22 shall be used.

- E. Replacement filters shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur when handling CCR. The replacement filter material type and weight shall meet or exceed the specifications of the existing filter. The air to cloth ratio or air to filter ratio shall not be increased when filter replacement is performed.
 - F. Ameren Missouri Labadie Energy Center shall maintain a copy of the pneumatic system manufacturer's design specifications and filter manufacturer's performance warranties onsite.
 - G. Ameren Missouri Labadie Energy Center shall maintain an operating and maintenance log for the filters which shall include the following:
 - 1) Maintenance activities, with inspection schedule, repair actions, and replacements, etc. and
 - 2) Dates of all above schedules, incidents, activities, and actions.
 - H. Ameren Missouri Labadie Energy Center shall maintain a malfunction log for the filters which shall include but not be limited to the following, incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions.
6. Landfill Visible Emissions
- A. Active landfill cell areas shall emit zero visible emissions (not 0% opacity) during periods when waste is not being loaded to or pushed/graded/compacted/etc in the landfill cell.
 - B. Ameren Missouri Labadie Energy Center shall demonstrate compliance by monitoring and recording visible emissions according to the following schedule, during periods when waste is not being loaded to or pushed/graded/compacted in the cell. Method 22 shall be used. Monitoring shall be representative of bottom/economizer ash and fly ash.
 - 1) Initial monitoring shall be conducted at least once every 24 hours for a period of 30 consecutive days. Should monitoring result in no exceedance of the limitation during this period, then,
 - 2) Monitoring shall be conducted at least once monthly. Monitoring shall be conducted when visible emissions are likely to be present. Monitoring shall not be conducted when winds are calm or during a precipitation event.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- 3) If at any time an exceedance is shown, then Ameren Missouri Labadie Energy Center shall implement corrective actions, and monitoring shall revert to 6.B.1).
7. Landfill Grading Hours
 - A. Combined grader/scrapper/dozer/compactor operation while pushing/grading/compacting/etc waste inside the landfill shall not exceed 2,600 hours per any consecutive 12 month period.
 - B. Ameren Missouri Labadie Energy Center shall demonstrate compliance by continuously monitoring and recording the hours of operation of each individual equipment, then sum monthly, and sum every consecutive 12 month period.
 8. Control Device – Wet Mixers
 - A. Ameren Missouri Labadie Energy Center shall condition all fly ash from silo 1 and silo 2 that isn't dry loaded to trucks by using a wet mixer (P9e or P9f, respectively).
 - B. Ameren Missouri Labadie Energy Center shall condition the mixer ash to a minimum 4.8% weight moisture, prior to loading into trucks.
 - C. Compliance shall be demonstrated through conducting testing as indicated in Special Condition 9 and following a written/electronic SOP report. At a minimum the SOP report shall indicate the following target criteria at each mixer necessary to indicate compliance with the 4.8% weight moisture limit. The actual values present shall be recorded for each batch loaded. A batch is defined as the amount a mixer can mix at once, and more than one batch may be needed to fill a truck. Periods of no operation shall be indicated.
 - 1) Date, time
 - 2) Indication of silo 1 mixer or silo 2 mixer
 - 3) Water rate e.g. gal/hr, gal/batch
 - 4) Ash rate e.g. ton/hr, ton/batch
 - 5) Batch mix time
 - 6) Number of batches
 - 7) A comparison of actual values to target values
 9. Moisture Testing
 - A. Ameren Missouri Labadie Energy Center shall test fly ash exiting from silo 1 mixer and silo 2 mixer (P9e and P9f) for moisture content.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- B. Testing shall be conducted using a moisture probe. The probe shall be calibrated, operated, and maintained in accordance with manufacturer's specifications which shall be kept on site.
 - C. Testing shall be conducted in a manner to represent an entire batch, e.g. at more than one elevation and location in the conditioned ash pile within the truck. Testing shall be representative of normal operation. Ameren Missouri Labadie Energy Center shall develop and follow a written/electronic sampling protocol.
 - D. Testing shall be conducted at least once on every 2,400 tons of conditioned ash throughput, per mixer.
 - E. Ameren Missouri Labadie Energy Center shall record onsite the following data from each test:
 - 1) Date, time
 - 2) Indication of silo 1 mixer or silo 2 mixer
 - 3) Number of probings per batch
 - 4) Moisture content of each probing
 - 5) Average moisture content of the batch
 - F. The average moisture content of the batch shall be used to demonstrate compliance with the 4.8% limit. Average moisture content below the 4.8% limit will be considered a deviation and corrective actions shall be implemented within 48 hours. A deviation does not necessarily indicate a violation of the 4.8% limit.
 - G. When there are three or more consecutive deviations at a respective mixer and corrective actions fail to return the moisture to a level above the 4.8% limit, then the permittee shall submit a complete Application for Authority to Construct to the Air Pollution Control Program Permits Section within 90 days of the last deviation. The application shall account for the emission increase due to reduced moisture content.
10. Paved Haul Road Testing
- A. Silt loading shall not exceed 3.0 grams per square meter (g/m^2) on any paved haul road individual sample.
 - B. Compliance with the silt loading limitation shall be demonstrated by conducting silt loading sampling (as defined in Appendix C.1 and C.2 of *AP-42 Compilation of Air Pollution Emission Factors*, Fifth Edition).
 - 1) Silt loading sampling shall be conducted using a vacuum equipped with HEPA filtration.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- 2) Each sample area shall be large enough to obtain 100 grams of material.
 - 3) The sampling locations shall be representative (as defined in Appendix C of AP-42), however at least 3 samples shall be obtained consisting of:
 - a) In the paved area between the bottom/economizer storage bunkers and fly ash silos 1,2.
 - b) In the paved area between fly ash silos 1,2 and the intersection of Labadie Bottom Road (just west of the landfill).
 - c) In the paved area between fly ash silos 1,2 and the landfill overpass along the landfill disposal route.
- C. Sampling shall be conducted at either the midpoint of the watering/cleaning cycle, or immediately after a watering/cleaning cycle and immediately before. If the after/before option is chosen, then the results are averaged for comparison to the silt loading limit.
- 1) The watering/cleaning method and frequency shall be conducted at the same method and frequency in the SOP report from Special Condition 2 that corresponds to a compliant test, or more often.
 - 2) Watering/cleaning may be temporarily suspended during adequate precipitation or inclement weather (i.e. rain exceeding 0.25 inches per day being sufficient to maintain no visible emissions, or roads covered in snow or ice). If rain exceeding 0.25 inches per day occurs, then sampling shall be conducted at the midpoint of the next cleaning cycle.
 - 3) Watering may be suspended when the ground is frozen or during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, however vacuum-sweeping may still be necessary.
 - 4) Watering/cleaning may be suspended when there will be no traffic on the roads.
 - 5) Record of the watering/cleaning schedule, actual watering/cleaning conducted, and daily precipitation shall be kept on site.
- D. Analysis of samples shall be conducted in accordance with ASTM C 136 method. The silt calculation shall add all mass retained in the vacuum bag to the mass passing the #200 sieve.
- E. Testing shall be conducted according to the following schedule:
- 1) Initial testing of each respective location in 10.B.3) shall be conducted within 180 days after initial start-up of the associated process.
 - a) Initial start-up of the bunkers begins the time period for 10.B.3)a).
 - b) Initial start-up of fly ash silos 1,2 begins the time period for 10.B.3)b).

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- c) Initial start-up of landfill disposal begins the time period for 10.B.3)c).
 - Should the testing yield no deviation of the limit during this period then,
 - 2) Testing shall be conducted once a quarter for four consecutive quarters. Should the testing yield no deviation of the limit during this period then,
 - 3) Testing shall be conducted once annually.
 - 4) If at any time a deviation is shown, then testing shall revert to 10.E.2).
 - F. Two copies (one hardcopy, one electronic) of the full test report and results shall be submitted to the Air Pollution Control Program Compliance/Enforcement Section within 60 days of completion of the initial testing. At a minimum, the report shall include sample road segment locations, recent weather conditions, HEPA vacuum bag model number, cleaning method and schedule, sampling date/time, tons of material shipped on the sampling day compared to the permitted capacity, legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required EPA Method for at least one sample run. Subsequent test results/reports shall be kept on site.
 - G. If the results show that the silt loading exceeds the 3.0 g/m^2 limit on two consecutive tests (i.e. if one or more of the three required samples per test shows a deviation, then the entire test shows a deviation, but two consecutive tests are needed to show an exceedance of the limit), then Ameren Missouri Labadie Energy Center shall evaluate what effects the exceedance would have had on the permit applicability of this project. Ameren Missouri Labadie Energy Center shall submit the results of any such evaluation, in a complete Application for Authority to Construct to the Permits Section within 90 days of completing the silt loading test results report required in Special Condition 10.F. of this permit.
11. Record Keeping and Reporting Requirements
- A. Ameren Missouri Labadie Energy Center shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
 - B. Ameren Missouri Labadie Energy Center shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 30 days following the end of the calendar quarter during which any record required by this permit shows an exceedance of a limitation imposed by this permit.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

12. Operating Permit

Ameren Missouri Labadie Energy Center shall submit an update to the operating permit to include the provisions of this permit, within one year of the last emission unit commencing operation. Commencing construction and operation of the project emission units may be conducted in phases over several months.

Ameren Missouri Labadie Energy Center shall notify the Compliance/Enforcement Section in writing within 15 days after the commencement of operation of each phase.

13. Ash Generation Rate

Ameren Missouri Labadie Energy Center shall submit calculations sufficient to justify the bottom ash, economizer ash, fly ash, and wastewater sediment MHDRs stated in the permit application. The calculations shall be submitted to the Air Pollution Control Program Permits Section within 30 days of this permit's issuance. Calculations shall include all data, assumptions, and reference documents used to determine the MHDRs, including but not limited to maximum rated heat input of the boilers, historic and potential coal ash content, percent of coal ash as fly/bottom/economizer ash, activated carbon injection and other additive rates, and each ESP PM filterable control efficiency.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2016-05-022

Installation ID Number: 071-0003

Permit Number: 102016-004

Installation Address:

Ameren Missouri Labadie Energy Center
226 Labadie Power Plant Rd.
Labadie, MO 63055

Parent Company:

Ameren Corporation
P.O. Box 66149, MC 602
St. Louis, MO 63166-6149

Franklin County, S17, T42N & T44N, R2E

REVIEW SUMMARY

- Ameren Missouri Labadie Energy Center has applied for authority to construct ash handling systems and a CCR landfill.
- The application was deemed complete on September 13, 2016.
- HAP emissions are expected from the proposed equipment. HAPs will be emitted from handling coal ash but in amounts below the respective SMAL and below major levels.
- None of the NSPS under 40 CFR 60 apply to the project emission units. Subpart WWW and XXX, *Standards of Performance for Municipal Solid Waste Landfills*, do not apply because the landfill will not accept municipal solid waste.
- None of the NESHAPs under 40 CFR 61 apply to the project emission units.
- None of the MACTs under 40 CFR 63 apply to the project emission units.
- Water carryover will be used to control emissions from economizer ash, bottom ash, and wastewater sediment. Enclosures, filters, water, and water carryover will be used to control emissions from fly ash. Watering/cleaning will be used to control emissions from paved haul road segments.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels, but above the insignificant emission exemption levels in 10 CSR 10-6.061.
- This installation is located in Franklin County, a nonattainment area for the 8-hour ozone standard and the PM_{2.5} standard and an attainment area for all other criteria pollutants. Franklin County is unclassifiable for SO₂.

- This installation is on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation is classified as item number 26. Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input. The installation's major source level is 100 tons per year and fugitive emissions are counted toward major source applicability.
- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels.
- Moisture testing is required at the mixers. Silt loading testing is required at certain paved haul road segments.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Ameren Missouri Labadie Energy Center is a baseload electric generating station primarily fired by subbituminous coal. The installation consists of four tangentially fired boilers with oil backup, coal and ash handling, haul roads, storage piles, emergency equipment, fuel and lube oil storage tanks, and parts washers. Ash is currently ponded onsite or sold offsite. The installation is a major source of PM, PM₁₀, PM_{2.5}, SO₂, NO_x, VOC, CO, GHG, and HAPs for construction and operating permits. The following New Source Review permits have been issued to Ameren Missouri Labadie Energy Center from the Air Pollution Control Program.

Table 3: NSR Permit History

Permit Number	Description
0792-006	Economizer and fly ash transfer tanks, silos, sluicing
0992-016	SO ₃ injection
0992-016A	SO ₃ injection revised special conditions
122009-009	Temporary permit to test a SO ₃ replacement
0992-016B	New ESPs
112012-011	Temporary permit to test compliance options for MACT UUUUU at boiler 3
092013-006	Temporary permit to test coal additives at boilers 3 and 4
092013-015	Temporary permit to test activated carbon at boiler 3
Former MRT ash systems, now one installation with Ameren Labadie	
1294-015	Fly ash silos, truck loading system
0699-001	Fly ash railcar loading (equipment replaced by permit 012005-016)
012005-016	Fly ash silos, railcar loading
012005-016A	Amendment to 012005-016
pending	Amendment to permit 1294-015 to true-up PTE

PROJECT DESCRIPTION

Ameren Missouri Labadie Energy Center proposes changes to the bottom and economizer ash handling systems, fly ash handling systems, a new CCR landfill, and a new wastewater treatment basin. The application does not include flue gas desulfurization materials as the installation is not equipped with that control device. Construction of the landfill commenced before permit issuance.

Currently, fly ash is collected from boilers 1-4 by the ESPs, routed to existing dry transfer tanks (P7), then either routed to the dry MRT truck/rail loading systems (construction permits 1294-015 and 012005-016A) or routed to sluicing silos (P7-1) and pumped to the fly ash pond. The installation proposes to end operation of the sluicing silos and fly ash pond. The existing MRT dry ash rail system is proposed to remain, and the truck system is proposed to remain as backup to the new truck system in case of malfunction. MRT is used in this permit as a distinction between the proposed and existing loadout systems. Ameren owns these existing rail/truck loading systems as of April 2015. Ameren and the former MRT facilities are one installation.

Two new fly ash silos will be installed downstream of the existing transfer tanks (P7). Ash will be pneumatically conveyed to the new silos where it can be dry loaded to trucks for shipment offsite, or conditioned with water and loaded into trucks for placement in the onsite CCR landfill. Each silo will be equipped with an exhaust filter for the pneumatic conveying. Each silo will be equipped with a bin vent filter for the displaced air from silo filling. Dry fly ash will be loaded from the silos into enclosed trucks using a telescoping spout controlled by the bin vent filter. Alternatively, fly ash will be loaded into a batch mixer, wetted to approximately 8-12% moisture (4.8% minimum), and then loaded to open trucks through a different telescoping spout. The mixer will be controlled by a dedicated exhaust filter.

Currently, bottom and economizer ash for boilers 1-3 are sluiced to the bottom/economizer ash pond. These bottom ash handling systems will change to a submerged flight conveyor, leading to a dry flight conveyor, and into a short term storage bunker before being loaded into trucks travelling offsite or to the CCR landfill. Economizer ash handling will be converted to an enclosed dry conveyor which will lead to the respective submerged flight conveyors. Bottom and economizer ash will be combined at the submerged flight conveyors. Individual systems will be of similar design for boilers 1-3. Currently boiler 4's economizer ash is sluiced to a previously evaluated project's (project 2011-03-038) bottom ash submerged flight conveyor. The economizer ash will be converted to an enclosed dry conveyor then added to the bottom ash at the submerged flight conveyor, similar to the proposed systems for boiler 1-3.

Wastewater will be separated from solids in a settling basin. Sediment will be loaded onto a pad using a front end loader, then loaded into trucks for shipment to the onsite landfill.

The permit application states the maximum design rate for combined bottom/economizer ash is 6 tph and 14.5 tph for collected fly ash, per boiler. The

wastewater solids are stated at 1.18 tph total. Permit 012005-016 claimed the fly ash rate is 96 tph, but Ameren claims that is the capacity of the conveying equipment, not what the boilers produce. This permit contains a special condition to verify these rates.

All haul roads and front end loader vehicular activity areas will be paved, except for activity inside the landfill cells.

Usage of the existing MRT fly ash truck loading system in permit 1294-015 is expected to reduce. Ameren took ownership of the MRT systems in April 2015. The PTE of the truck loading system is being recalculated in project 2016-09-005, as Ameren believes the original calculation method over predicted potential emissions. The fly and bottom ash ponds will be closed as a compliance option with solid waste CCR regulations.

Table 4 contains all of the new project emission units. Construction and operation may occur in phases over several months.

Table 4: Emission Unit Summary

Emission Unit	Emission Point	Description	Capture Device	Control Device
Economizer ash and bottom ash				
M10	P10a	Unit 1 dry flight conveyor drop into bunker 1	N/A	Water carryover
	P10b	Unit 2 dry flight conveyor drop into bunker 2	N/A	Water carryover
	P10c	Unit 3 dry flight conveyor drop into bunker 3	N/A	Water carryover
	P10d	Bunker 1 wind erosion	N/A	Water carryover
	P10e	Bunker 2 wind erosion	N/A	Water carryover
	P10f	Bunker 3 wind erosion	N/A	Water carryover
	P10g	Loadout from bunker 1 to trucks using front end loader	N/A	Water carryover
	P10h	Loadout from bunker 2 to trucks using front end loader	N/A	Water carryover
	P10i	Loadout from bunker 3 to trucks using front end loader	N/A	Water carryover
Fly ash				
M9	P9a	Pneumatic conveying from transfer tanks to silo 1	Total enclosure	Silo 1 filter collector
	P9c	Silo 1 filling vent	Total enclosure silo	Silo 1 bin vent filter
		Silo 1 dry loadout	Telescoping spout	
	P9e	Silo 1 mixer	Total enclosure	Water and Silo 1 conditioner filter
	P9g	Silo 1 mixer loadout	N/A	Water carryover
P9j	Silo 1 dry loadout	N/A	N/A	

		fugitives		
	P9b	Pneumatic conveying from transfer tanks to silo 2	Total enclosure	Silo 2 filter collector
	P9d	Silo 2 filling vent	Total enclosure silo	Silo 2 bin vent filter
		Silo 2 dry loadout	Telescoping spout	
	P9f	Silo 2 mixer	Total enclosure	Water and Silo 2 conditioner filter
	P9h	Silo 2 mixer loadout	N/A	Water carryover
	P9k	Silo 2 dry loadout fugitives	N/A	N/A
Wastewater sediment				
M11	P11a	Transfer from basin to dewatering pad using front end loader	N/A	Water carryover
	P11b	Loadout from pad to truck using front end loader	N/A	Water carryover
Landfill				
M12	P10j	Loadout bottom/economizer ash from trucks to landfill	N/A	Water carryover
	P9i	Loadout fly ash from trucks to landfill	N/A	Water carryover
	P11c	Loadout wastewater sediment from trucks to landfill	N/A	Water carryover
	P12	CCR and wastewater solids grading with scraper/dozer	N/A	N/A
	P13	Bottom/economizer ash wind erosion	N/A	Water carryover
CCR and wastewater sediment haul road / vehicular activity routes, to landfill				
HR-A	Fugitive	Boilers 1,2,3,4 ash and wastewater solids, paved and unpaved roads	Cleaning/washing (paved only)	
	Fugitive	Boilers 1,2,3,4 bottom/economizer ash and wastewater solids front end loader, paved surface	Cleaning/washing	
CCR haul road / vehicular activity routes, to offsite				
HR-A	Fugitive	Boilers 1,2,3 bottom/economizer ash, paved roads	Cleaning/washing	
	Fugitive	Boilers 1,2,3 bottom/economizer ash front end loader, paved surface	Cleaning/washing	
	Fugitive	Boilers 1,2,3,4 fly ash, paved roads	Cleaning/washing	

N/A = Not applicable, N/D = Not determined

The bunker three-sided enclosures may provide emission control, however no value was relied upon in the emission calculations or special conditions.

The haul roads were segmented in order to calculate emissions. Travel occurs over a contiguous road network.

Several individual emission units are labeled as M9, M10, M11, M12. Processes within each emission unit grouping are separate, individual emission units. They were grouped for ease of identification.

EMISSIONS/CONTROLS EVALUATION

Bottom and economizer ash

The drop from the submerged flight conveyors to the dry flight conveyors was not considered an emission unit as the ash was submerged immediately prior to the drop. Potential emissions from the dry flight conveyors dropping material into bunkers were calculated using the EPA document, *AP-42, Chapter 13.2.4 Aggregate Handling and Storage Piles*, November 2006. Mean wind speed of 9.4 mph was obtained from 30-year data recorded at Lambert Airport. Moisture content of 4.8% was selected as this is the highest value that can be used to maintain the quality rating of the emission calculation method. Actual moisture content may be higher. However, usage of a lower 4.8% is conservative and still results in very low potential emissions. The equation was developed to represent emissions from aggregate handling, but has been used in other industries. Ameren submitted mixed ash silt contents of 4.1% and 3.0%.

Conservatively, this review chose 5.0%, which by doing so avoids future testing. The value is within the ranges of other materials listed in the AP-42 chapter. Silt content is not a variable in the emission equation.

Potential emissions from bunker wind erosion were calculated using the alternative method in the *WRAP Handbook*, Chapter 9.3, September 2006. The method references an EPA published method. The conservative silt content of 5.0% used. The percent of time unobstructed wind speed exceeds 12 mph was selected at 11%. Lower values (10%) have been used in other permits, but 11% was provided by the applicant and results in conservatively higher emissions. The number of days per year with greater than 0.01 inch of precipitation was conservatively set at zero since a control efficiency was assumed for the material being wet at each bunker. Using zero days avoids double-counting control. The PM, PM₁₀, and PM_{2.5} control efficiencies of 90%, 90%, and 74%, respectively were used for the material being wet, as obtained from a combination of AP-42 Table B.2-3 AIRS code 061 and the *WRAP Handbook* pages 2 and 3.

Potential emissions from loading the material into trucks were calculated using the same method as the dry flight conveyors. Moisture content testing is not required because the ash was submerged and 4.8% moisture results in conservatively high potential emissions.

Fly ash

Potential emissions from pneumatic conveying from the transfer tanks to the ash silos were calculated using SCC 30501117 for controlled pneumatic cement supplement unloading. Fly ash is cement supplement. The SCC does not include an emission factor for PM_{2.5}. Controlled PM_{2.5} emissions were conservatively considered equal to PM₁₀.

When fly ash enters the silos air will be displaced and travel through bin vent filters, one per silo. Potential emissions were calculated using SCC 30501104 for uncontrolled aggregate transfer to bins. Fly ash has a higher silt content than aggregate, so the emission factor was multiplied by the ratio of fly ash to aggregate silt content (80 / 1.6). The factor is based upon 10 mph wind. There will be almost no effect from outside wind upon the activities inside the silos, therefore the factors were reduced by 90%. The SCC does not include a PM_{2.5} factor. An uncontrolled PM_{2.5} factor was developed by multiplying the PM factor by 10%, which is the approximate 2.5 micron weight percent of fly ash according to a document published by the American Society of Civil Engineers. The control efficiencies of 99.5%, 99.5%, and 99% for PM, PM₁₀, and PM_{2.5} respectively, were added for the bin vent filters. These values are defaults used by the Permits Section.

Ash will exit the silos by being fluidized with air blowers. Ash will drop through either dry loadout spouts to enclosed trucks, or drop to batch wet mixers/conditioners then to open trucks. Ash will be fluidized to exit the silos, but the transfer from the silos to the trucks and to the mixers then trucks is through gravity, not pneumatic transfer. Potential emissions from the silo exit and mixer operation were calculated using the controlled emission factors for SCC 30501117. Potential emissions from loading conditioned ash from the mixers into trucks were calculated using AP-42 Chapter 13.2.4. The loadout passes through a telescoping spout which may have some capture from the mixer exhaust ventilation. However, conservatively no controls were considered in the calculation, and therefore were not required by special condition. The full wind speed of 9.4 mph was conservatively used. Moisture content of 4.8% was used. Moisture content testing is required as the water has to be added and properly mixed. The moisture isn't inherent. Special Conditions 8 and 9 ensure initial and continuous compliance with the moisture limit through testing and parametric monitoring.

Potential emissions from the dry ash transfer from the silos to trucks were calculated using the same method as the silo filling air displacement. Captured emissions will be routed back to the silos. Capture efficiency was assumed 95% by using a telescoping spout, enclosed truck, and having an air draw from the spout.

Wastewater sediment

Potential emissions from wastewater sediment handling were calculated using AP-42 Chapter 13.2.4. The full wind speed of 9.4 mph was selected. Moisture content of 4.8% was conservatively selected. The sediment may have a higher moisture content. All wastewater sediment will be landfilled on site.

CCR Landfill

Potential emissions from unloading bottom, economizer, conditioned fly ash, and wastewater sediment to the landfill were calculated using AP-42 Chapter 13.2.4. An elevated wind speed was selected due to the height of the landfill cells. Emissions were reduced using the EPRI ratio described below.

Potential emissions from grading the placed materials were calculated using AP-42 Chapter 11.9, *Western Surface Coal Mining*, October 1998 and the grading emission equation. Speed of 5 mph was selected. According to an EPRI study, AP-42 over predicts emissions from dropping and grading CCR material at landfills. The study developed a ratio of measured to AP-42 predicted emissions. The mean ratio for PM and PM₁₀ is 53/260, and the mean ratio of PM_{2.5} is 19/29. The AP-42 emissions were multiplied by these ratios. Grading activities will occur for a maximum of 2,600 hours per 12 month period.

Potential emissions from bottom and economizer ash landfill wind erosion were calculated using the same method as bunker wind erosion. The active portion is 5 acres, which includes fly ash, so 5 acres is a conservative value for bottom and economizer ash wind erosion. Due to landfill height, the percent of time unobstructed wind speed exceeds 12 mph was assumed to be 20%. Typical permitted values are near 10%.

Conditioned fly ash wind erosion emissions were considered negligible. The materials are damp when placed, and according to the applicant the fly ash will undergo a cementitious reaction within 1 to 2 hours of being wetted. The permit contains a special condition to monitor for visible emissions from wind erosion.

HAP Emissions

Economizer, fly, and bottom ash contain particulate HAPs. Potential HAP emissions were calculated using the highest HAP concentrations among five references. The concentrations were multiplied by the economizer, fly, and bottom ash handling, and landfill PM potential emissions. The references don't indicate whether the HAP concentrations are the compound mass or just the metal portion. Conservatively the full concentration was assumed to be the metal portion for comparison to the SMAL. The compound mass emission rates are therefore slightly higher, but much less than 10/25 tpy.

CCR and wastewater sediment haul roads

Potential emissions from paved haul roads were calculated using AP-42 Chapter 13.2.1, *Paved Roads*, January 2011. Silt loading of 3.0 grams/square meter was provided by the applicant. This permit requires haul road cleaning or watering. Silt loading testing is required.

Potential emissions from unpaved haul roads within the landfill were calculated using AP-42 Chapter 13.2.2, *Unpaved Roads*, November 2006. 8.5% silt was used, matching scraper routes at construction sites.

Baseline actual emissions (BAE)

BAE were calculated for the haul road activities associated with shipping bottom/economizer ash from the pond and relocating ponded fly ash within the pond. BAE were not used for the MRT silos, Ameren fly ash sluicing silos, or ash drop points within the ponds. These units are separate emission units than the proposed project emission units. In order to use their BAE a netting analysis would be required. BAE haul roads were used without netting as existing and proposed travel will be on some of the same segments, and the roads were considered the same emission unit. Emissions were calculated using throughputs obtained from the applicant. Baseline haul road calculations used a higher silt loading than the new PTE, as previously cleaning/watering has not been required.

PTE scenario

The dry and wet systems, shipment offsite or to the landfill, and associated haul roads cannot simultaneously be operated at their full potential on an annual basis. Ash handling is bottlenecked by boiler capacity. Therefore the project PTE only includes the scenario with the higher potential emissions, the conditioned/wet system and landfill placement. PTE scenarios and BAE are summarized in Table 5, with HAPs summarized in Table 6. For this review HAP BAE were not used/needed.

Table 5: PTE Scenarios

Pollutant	Regulatory <i>De Minimis</i> Levels	PTE for 100% Offsite Shipment	PTE for 100% Landfill Placement	PTE Maximum	BAE	PTE - BAE
PM	25.0	49.73	88.91	88.91	65.82	23.09
PM ₁₀	15.0	11.08	24.49	24.49	14.34	10.15
PM _{2.5}	10.0	3.60	6.01	6.01	2.86	3.15

Table 6 provides an emissions summary for this project. Existing potential emissions were obtained from the most recent operating permit. The operating permit reports other pollutants that are not emitted as part of this project. Existing actual emissions were obtained from the installation's 2015 EIQ and EPA's 2014 facility level information on greenhouse gases tool. Potential emissions of the project represent the PTE – BAE.

Table 6: Emissions Summary (tpy)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2015 EIQ)	Potential Emissions of the Project	New Installation Conditioned Potential
PM	25.0	N/D	N/D	23.09	Major
PM ₁₀	15.0	4,318.26	2,220.92	10.15	Major
PM _{2.5}	10.0	2,094.35	1,460.03	3.15	Major
SO ₂	40.0	77,869.63	34,420.88	N/A	Major

NOx	40.0	11,625.77	7,080.32	N/A	Major
VOC	40.0	369.59	278.15	N/A	Major
CO	100.0	3,933.18	2,318.90	N/A	Major
GHG (CO ₂ e)	N/A	25,415,815.32	Major	N/A	Major
GHG (mass)	N/A	N/D	Major	N/A	Major
Combined HAPs	25.0	381.71	123.31	0.02	Major
Antimony	¹ 5.0	N/D	4.75E-02	1.1E-04	N/D
Arsenic	¹ 0.005	N/D	1.00E-01	4.0E-03	N/D
Beryllium	¹ 0.008	N/D	7.50E-03	2.0E-04	N/D
Cadmium	¹ 0.01	N/D	2.45E-02	2.7E-04	N/D
Chromium	¹ 5	N/D	2.66E-01	3.1E-03	N/D
Cobalt	¹ 0.1	N/D	6.30E-02	5.2E-04	N/D
Hydrogen Chloride	10	18.27	29.66	N/A	Major
Hydrogen Fluoride	0.1	313.70	93.41	N/A	Major
Lead	¹ 0.01	N/D	0.16	1.8E-03	N/D
Manganese	¹ 0.8	N/D	3.27E-01	6.0E-03	N/D
Mercury	¹ 0.01	N/D	2.40E-01	1.2E-05	N/D
Nickel	¹ 1	N/D	2.56E-01	2.1E-03	N/D
Selenium	¹ 0.1	7.99	1.25	1.6E-03	N/D

N/A = Not Applicable; N/D = Not Determined

¹ = SMAL

Existing actual HAPs from Boilers 1-4 in the EIQ, no other emission units reported HAPs.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels.

APPLICABLE REQUIREMENTS

Ameren Missouri Labadie Energy Center shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Operating Permits*, 10 CSR 10-6.065
- *Start-Up, Shutdown, and Malfunction Conditions*, 10 CSR 10-6.050
- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400 does not apply. All emission units will either emit less than 0.5 lb/hr of PM, emit fugitive emissions, or are subject to a federally enforceable requirement to install, operate, and maintain a particulate matter control device system that controls at least ninety percent (90%) of particulate matter emissions.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

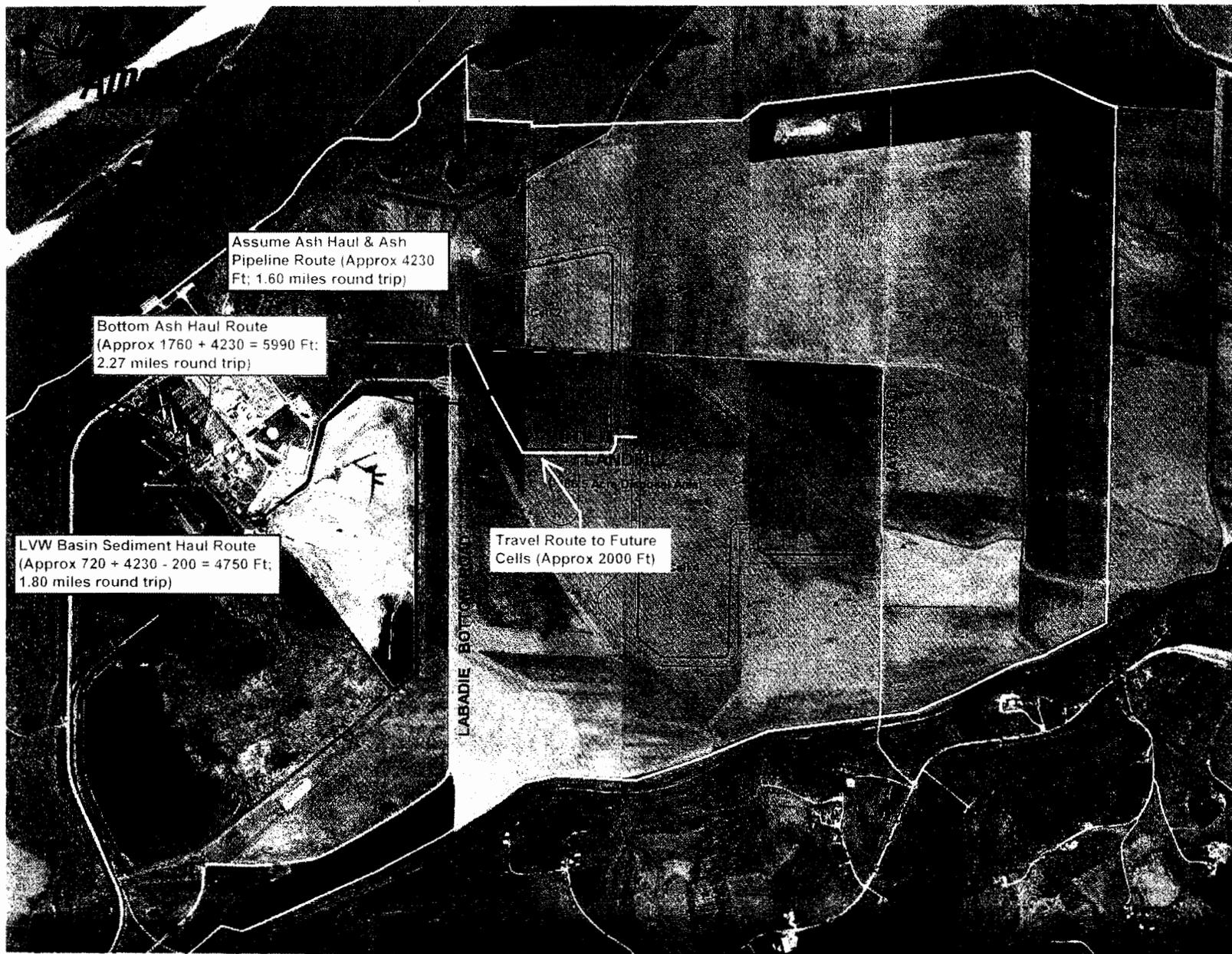
- The Application for Authority to Construct form, dated May 2, 2016, received May 6, 2016, designating Ameren Corporation as the owner and operator of the installation.
- *Ash Handling Mods Project Revised Emission Estimates*, received July 29, 2016.
- *Labadie Response to Questions on Ash Handling Modification Application*, received July 29, 2016.

- *Ash Handling Mods Project Revised Emissions Estimates Updated*, received September 9, 2016.
- *Labadie Ash Conversion Project HAP Estimates*, received September 13, 2016.
- *Labadie Marketing Terminal Haul Routes*, received September 13, 2016.
- Email communication between Michael Hutcheson and David Little. May 31, 2016 to September 30, 2016.

The following documents are permit references:

- *Characterization of Coal Combustion Residues from Electric Utilities – Leaching and Characterization Data*. EPA. December 2009. EPA-600/R-09/151.
- *Reuse Options for Coal Fired Power Plant Bottom Ash and Fly Ash*. Jayaranjan, Hullebusch, Annachatre. *Reviews in Environmental Science and Biotechnology*. April 1, 2014.
- *Chemical Constituents in Coal Combustion Product Leachate: Beryllium*. EPRI. November 2006.
- *Coal Ash: Characteristics, Management and Environmental Issues*. EPRI. September 2009.
- *Technical Memorandum, Technical Briefing Paper on Selenium*. Exponent. July 2010.
- *Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1*. EPA.
- *WRAP Fugitive Dust Handbook*. Countess Environmental. September 7, 2006.
- *Geotechnical Properties of Fly and Bottom Ash Mixtures for Use in Highway Embankments*, *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE 2005.
- *Fugitive Emissions from a Dry Coal Fly Ash Storage Pile*. EPRI, TVA. 2012.
- *Missouri Emissions Inventory System (MoEIS)*. Missouri Department of Natural Resources, 2015. <https://www.dnr.mo.gov/moeis/main/login>
- *Facility Level Information of Greenhouse Gases Tool (flight)*. EPA, 2014. <https://ghgdata.epa.gov/ghgp/main.do>
- *Global Climate Station Summaries*. NOAA. <http://gis.ncdc.noaa.gov/map/viewer/#app=cdo&cfg=isdsummaries&theme=isdsummaries>

Attachment A: Project Haul Roads



Attachment A: Project Haul Roads

Caveats to map:

Route labeled "Travel Route to Future Cells (Approx 2000 Ft)" is paved.

Labadie Bottom Road is part of the project haul roads, approximately 1.4 miles one-way from southwest of plant to just west of landfill cells 1,2. Labadie Bottom Road is paved.

BAE include travel inside the existing bottom/economizer and fly ash ponds, with those unpaved routes not indicated on the map.

Routes inside landfill cells 1,2,3,4 can be unpaved.

APPENDIX A

Abbreviations and Acronyms

%	percent	m/s	meters per second
°F	degrees Fahrenheit	Mgal	1,000 gallons
acfm	actual cubic feet per minute	MW	megawatt
BACT	Best Available Control Technology	MHDR	maximum hourly design rate
BMPs	Best Management Practices	MMBtu ..	Million British thermal units
Btu	British thermal unit	MMCF	million cubic feet
CAM	Compliance Assurance Monitoring	MSDS	Material Safety Data Sheet
CAS	Chemical Abstracts Service	NAAQS ..	National Ambient Air Quality Standards
CEMS	Continuous Emission Monitor System	NESHAPs	National Emissions Standards for Hazardous Air Pollutants
CFR	Code of Federal Regulations	NO_x	nitrogen oxides
CO	carbon monoxide	NSPS	New Source Performance Standards
CO₂	carbon dioxide	NSR	New Source Review
CO_{2e}	carbon dioxide equivalent	PM	particulate matter
COMS	Continuous Opacity Monitoring System	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CSR	Code of State Regulations	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
dscf	dry standard cubic feet	ppm	parts per million
EIQ	Emission Inventory Questionnaire	PSD	Prevention of Significant Deterioration
EP	Emission Point	PTE	potential to emit
EPA	Environmental Protection Agency	RACT	Reasonable Available Control Technology
EU	Emission Unit	RAL	Risk Assessment Level
fps	feet per second	SCC	Source Classification Code
ft	feet	scfm	standard cubic feet per minute
GACT	Generally Available Control Technology	SDS	Safety Data Sheet
GHG	Greenhouse Gas	SIC	Standard Industrial Classification
gpm	gallons per minute	SIP	State Implementation Plan
gr	grains	SMAL	Screening Model Action Levels
GWP	Global Warming Potential	SO_x	sulfur oxides
HAP	Hazardous Air Pollutant	SO₂	sulfur dioxide
hr	hour	tph	tons per hour
hp	horsepower	tpy	tons per year
lb	pound	VMT	vehicle miles traveled
lbs/hr	pounds per hour	VOC	Volatile Organic Compound
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		



Jeremiah W. (Jay) Nixon, Governor • Harry D. Bozoian, Director

DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

Mr. Michael Hutcheson
Consulting Environmental Engineer
Ameren Corporation
P.O. Box 66149, MC 602
St. Louis, MO 63166-6149

RE: New Source Review Permit - Project Number: 2016-05-022

Dear Mr. Hutcheson:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information

Mr. Michael Hutcheson
Page Two

is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.ao.mo.gov/ahc.

If you have any questions regarding this permit, please do not hesitate to contact David Little, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Susan Heckenkamp
New Source Review Unit Chief

SH:hjj

Enclosures

c: St. Louis Regional Office
PAMS File: 2016-05-022

Permit Number: 102016 - 004