BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Title V Permit for the Ameren Missouri Labadie Power Plant, Franklin County, Missouri.	Operating Permit No. OP2011-020
	Project No. 2005-02-010
Issued by the Missouri Department of Natural Resources.	Installation I.D. 071-0003

PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO THE ISSUANCE OF THE FINAL TITLE V OPERATING PERMIT FOR THE AMEREN MISSOURI LABADIE POWER PLANT

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Pursuant to § 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), on behalf of the Sierra Club, the Interdisciplinary Environmental Clinic hereby petitions the Administrator of the United States Environmental Protection Agency (EPA) to object to the final Title V Operating Permit for the Ameren Missouri Labadie Power Plant, Operating Permit No. OP2011-020, Project No. 2005-02-010, and Installation I.D. 071-0003.

On July 1, 2010, Missouri Department of Natural Resources (MDNR) issued a draft permit for public comment. Sierra Club timely submitted comments to MDNR on the draft permit on July 30, 2010. Attached hereto as Exhibit 1. In October 2010, a public hearing was held on the draft permit. On March 17, 2011 MDNR issued a proposed final permit. Attached hereto as Exhibit 2. At the same time, MDNR issued a response to comments on the draft permit. Attached hereto as Exhibit 3. Although EPA did not object during the 45-day review period provided by § 502(b)(1) of the Clean Air Act, EPA submitted comments to MDNR on the proposed final permit. Attached hereto as Exhibit 4. On May 9, 2011, MDNR issued the final Title V permit for the Labadie plant. Attached hereto as Exhibit 5. Within 60 days following the end of EPA's 45-day review period, Sierra Club files this petition urging the Administrator to object to the final permit.

Sierra Club's objections to the final permit, explained in the sections below, include the following:

- The Compliance Assurance Monitoring (CAM) plan in the final permit is inadequate.
- The final permit lacks periodic monitoring sufficient to assure compliance with the particulate matter (PM) limit for the boilers.
- The final permit contains provisions that lack practical enforceability.
- The final permit improperly limits the ability of citizens to enforce the permit's requirements by limiting public access to records.
- The final permit fails to inform the public of CO_2 emissions from the plant.
- The final permit contains inadequate periodic monitoring requirements to ensure compliance with opacity limits for emission units without a COMS.
- The final permit fails to include the plant's obligation to monitor its CO_2 emissions.
- The final permit fails to include a compliance schedule to remedy pending violations.

I. The Compliance Assurance Monitoring (CAM) Plan in the Permit is Inadequate.

A. The CAM Plan Fails to Include Condensable PM.

The CAM plan in the final permit relies on opacity as an indicator of electrostatic precipitator (ESP) performance to determine compliance with the particulate matter (PM) limit in Permit Condition (EU0001 through EU0004) – 003. This is done through the use of a PM to opacity (PM-opacity) correlation. To calculate the PM-opacity correlation for its CAM plan, Ameren relied on 2005 stack test data using EPA Method 17. However, because EPA Method 17 only measures filterable PM, the PM-opacity correlation in the CAM plan represents the correlation between filterable PM and opacity rather than total PM and opacity. Consequently, the CAM plan ignores condensable PM emissions from the boilers.

Under the clear meaning of the regulatory text, the PM limit in Missouri's SIP includes both the filterable and condensable components of PM. The SIP defines PM as follows:

> 4. Particulate matter--Any material, except uncombined water, that exists in a finely divided form as a liquid or solid and as specifically defined as follows:
>
> A. PM--any airborne, finely divided solid or liquid material with an aerodynamic diameter smaller than one hundred (100) micrometers as measured in the ambient air as specified in 10 CSR 10-6.040(4)(B); and
>
> B. PM_{10}--particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured in the ambient air as specified in 10 CSR 10-6.040(4)(J); and
>
> C. $PM_{2.5}$--particulate matter with an aerodynamic diameter less than or equal to a nominal two and one-half (2.5) micrometers including the filterable component as measured in the ambient air as specified in 10 CSR 10-6.040(4)(L).

10 CSR 10-6.020(2)(P)(4).

This definition makes no distinction between condensable and filterable PM except in its definition for $PM_{2.5}$, which contains the phrase "including the filterable component." Nowhere in this definition is PM defined as only the filterable component. The definitions in this rule "apply throughout Missouri defining terms and expressions used in *all Title 10, Division 10--Air Conservation Commission rules.*" 10 CSR 10-6.020(1) (emphasis added). While 10 CSR 10-5.030 (which prescribes the applicable PM limit) contains two definitions specific to that regulation, *see* 10 CSR 10-5.030(1)(E), it makes no attempt to define PM for purposes of that rule as limited to the filterable component. As a consequence of this plain and unambiguous language, the general definition of PM, in 10 CSR 10-6.020(2)(P)(4), applies to the PM limit, 10 CSR 10-5.030(2)(B)(3). The PM limit in Permit Condition (EU0001 through EU0004) – 003 must therefore include both the filterable and condensable components of PM.

The alternative interpretation by MDNR, that 10 CSR 10-5.030 restricts only coarse, filterable PM, is inconsistent with the definition of PM in 10 CSR 10-6.020. In its response to comments on the proposed final permit, MDNR argued that when Missouri updated the definition of PM in 2006, it did so for the purpose of "proper *ambient* monitoring for the 1998 $PM_{2.5}$ NAAQS." MDNR Response to Public Comments on the Labadie Part 70 permit at 11 (March 17, 2011). However, this interpretation of 10 CSR 10-5.030 directly contradicts the plain meaning of the language that EPA approved into the SIP. If EPA intended to limit the revised definition it could and should have said so when it approved the text of the regulation, or suggested that Missouri revise the regulatory text. But EPA gave no indication that the revised definition applied for the limited purpose of ambient monitoring. Rather, EPA approved the revised definition as a general revision to both the Missouri SIP and the Title V operating permits program in Missouri. EPA, Approval and Promulgation of Implementation Plans and Operating Permits Program; State of Missouri, Direct Final Rule, 71 Fed. Reg. 70,468 (Dec. 5. 2006). The assertions of MDNR regarding what was "intended" by this language are irrelevant in light of EPA's unconditional

approval of the unambiguous PM definition. In short, there is no indication in the SIP itself or in EPA's approval of the revised PM definition that the PM limit in 10 CSR 10-5.030 applies only to filterable PM.

MDNR also attempts to justify the current CAM plan by asserting that "[a]s the majority of particulate emission reductions due to ESP control are on the filterable coarse particles, the CAM plan was written to assure that the ESP continued to collect the filterable coarse particles at an efficiency sufficient to demonstrate compliance with the 10 CSR 10-5.030 PM emission limitation." MDNR Response to Public Comments on the Labadie Part 70 Operating Permit at 10-11 (March 17, 2011). The CAM rule requires a "reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions." 40 C.F.R. § 64.3(a)(2). The parameter of concern is PM, the subject of the emission limit, not the subset of PM emissions that ESPs effectively remove. Without accounting for fine or condensable PM, it is impossible to "demonstrate compliance with the 10 CSR 10-5.030 PM emission limitation," notwithstanding MDNR's claim.

Furthermore, although the final permit requires Ameren to conduct stack tests of both condensable and filterable PM, Ameren is only required to establish a "filterable PM to opacity correlation" based on those stack tests. As explained above, however, the omission of condensable PM from the PM-opacity correlation fails to assure compliance with the PM limit in the Missouri SIP.

The exclusion of condensable PM emissions from the CAM plan is a significant failure, particularly in light of the Labadie plant's condensable PM emissions as reported in the final permit. Condensable PM accounts for approximately one-half of the plant's PM_{10} emissions. Specifically, of the 2515.69 tons of PM_{10} that the plant emitted in 2009, 1230.99 tons were filterable and 1284.70 tons were condensable. Labadie Final Part 70 Operating Permit at 4 (May 9, 2011). That means the CAM plan ignores approximately 51% of PM_{10} emitted by the facility. Condensable PM must be measured to ensure compliance with the total PM limit. The permit must therefore include a reliable means of accounting for the Labadie plant's condensable PM emissions with a total PM-opacity correlation, and that correlation should be updated every three years in accordance with the permit's requirement that Ameren conduct repeat stack testing at that interval.

In a similar context, EPA essentially required the Wisconsin Department of Natural Resources to include condensable PM in a CAM plan's indicator range for PM emissions. *See In the Matter of WE Energy Oak Creek Power Plant*, EPA Administrator Order at 19-20 (June 12, 2009). Wisconsin's SIP provides that applicable PM limits include both filterable and condensable PM, but the permit at issue failed to account for condensable PM. *Id.* at 19. Wisconsin's SIP defines particulate matter as "any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers," and particulate matter emissions as "all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by an applicable reference method or an equivalent or alternative method specified by the department." Wis. Adm. Code § NR 400.02(118)-(119). Like the definition of PM in the Missouri SIP at 10 CSR 10-6.020(2)(P)(4), the Wisconsin definition of PM does not distinguish between filterable and condensable PM. The EPA Administrator objected to the permit on this

issue and directed the state to clarify whether condensable PM was accounted for in the CAM plan indicator range, and, if not, explain how the CAM plan was consistent with the Wisconsin SIP, which requires monitoring of both condensable and filterable PM.. *Id.* at 19-20.

As in the *Oak Creek* case, EPA should object to the issuance of the Labadie permit and direct MDNR to include condensable PM in the CAM plan. The permit should require Ameren to perform new stack testing using both Methods 17 and 202 to account for both filterable and condensable PM. This will allow a new PM-opacity correlation to be determined that encompasses both components of PM, as required by Missouri's EPA-approved SIP. EPA should direct MDNR to use this new correlation to establish a CAM indicator range that provides reasonable assurances that total PM emissions from the plant, including both filterable and condensable components, are meeting the applicable PM limit. In addition, EPA should require MDNR to direct Ameren to update the correlation between total PM and opacity every three years based on the repeat stack testing required by the final permit.

B. The Permit Allows Ameren to Use an Impermissible Test Method to Measure Condensable PM Emissions

The final permit allows Ameren to use an impermissible method to measure condensable emissions during required stack tests. As noted above, the final permit requires Ameren to measure condensable PM when it conducts stack tests. The final permit allows Ameren to use either Method 202 or OTM28 to measure condensable PM during these stack tests. The Missouri SIP, however, authorizes only the use of Method 202. It provides that "[t]he concentration of condensible particulate matter (CPM) emissions in stack gases shall be determined as specified by 40 CFR part 51, Appendix M--Test Methods, *Method 202--Determination of Condensible Particulate Emissions from Stationary Sources*." 10 CSR 10-6.030(5)(E). There is no language in the Missouri SIP granting MDNR the discretion to allow permittees to use alternative methods to determine condensable PM emissions. Ameren is therefore required to use Method 202, and not OTM28, to measure condensable PM emissions during periodic stack tests.

EPA should object to the permit and direct MDNR to remove the reference to OTM28 from the permit, as it is not an approved sampling method for condensable PM under the Missouri SIP.

C. The CAM Plan Fails to Provide an Adequate Margin of Compliance.

The CAM rule provides that in order to provide reasonable assurance that applicable emissions limits are being met, owners and operators must design monitoring criteria that "establish an appropriate range(s) or designated condition(s) for the selected indicator(s) such that operation within the ranges provides a reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions." 40 C.F.R. § 64.3(a).

In the final permit, opacity is the sole indicator used to provide a reasonable assurance of ongoing compliance with the PM limit in Permit Condition (EU0001 through EU0004) – 003. The indicator range for opacity is specified in the final permit's CAM plan: "An excursion is defined as a 1-hour average opacity greater than 24% for each boiler." The CAM plan further provides that an exceedance has occurred if the 3-hour average stack opacity exceeds 28% for

boiler 1, 32% for boiler 2, 27% for boiler 3, and 28% for boiler 4. Based on Ameren's PM-opacity correlation, this equates to a margin of compliance between the indicator range and the permit limit of 12.25% for boiler 1, 37.5% for boiler 2, 11.81% for boiler 3, and 20.84% for boiler 4. Ameren Labadie CAM correlation ("Labadie_CAM_Correlation.xlsx"). Attached hereto as Exhibit 6. Given that opacity, as measured with a continuous opacity monitoring system (COMS), is the sole indicator of ESP performance, this margin fails to provide the reasonable assurance of compliance required by 40 C.F.R. § 64.3(a)(2).

In its initial comments on Ameren's CAM plan, MDNR explained that Ameren selected the agency's least favored approach to comply with the CAM rule. MDNR identified four approaches for providing a reasonable assurance of compliance with the PM limit. The first and most favorable approach is the use of a continuous emission monitoring system (CEMS) for PM. The second approach is EPA's presumptively acceptable "Compliance Assurance Monitoring Protocol for an Electrostatic Precipitator Controlling Particulate Matter Emissions from a Coal-Fired Boiler." The third approach is the use of a COMS in addition to ESP voltage and current as performance indicators. The fourth and least favored approach is the one selected by Ameren, the use of a COMS as the sole performance indicator. This least favored approach is appropriate, according to MDNR, only when "the margin of compliance is 'significant'". Letter from Steven Feeler, MDNR, to Michael Menne, Ameren Services, Enclosure at 2-3 (March 9, 2006). Attached hereto as Exhibit 7.

A margin of 11.81% is not reasonable in the context of the plan Ameren employs. Because Ameren chose not to use EPA's presumptively acceptable CAM plan and instead relies on an approach that provides far less assurance of compliance with the PM limit, the CAM plan must include a margin of compliance significantly greater than the 10% margin of compliance specified in EPA's presumptively acceptable monitoring approach. Use of a COMS alone to ensure compliance with the CAM rule is acceptable *only if* the indicator ranges selected provide reasonable assurances that PM emissions are in compliance with the applicable emissions limit. EPA Region 7 has spoken to this exact issue in comments on the CAM plan for another coal-fired power plant in Missouri. First EPA emphasizes the benefits of PM CEMS: "The most straightforward method for accomplishing [compliance with the CAM rule] is to install and operate, under a vigorous quality assurance/quality control (QA/QC) program, a continuous emissions monitoring system (CEMS) for the pollutant of concern." In the event that the permittee opts not to use a PM CEMS or EPA's presumptively acceptable CAM plan, and instead relies solely on a COMS, EPA Region 7 states:

> We favor a more comprehensive approach, such as one that relies on a combination of opacity and secondary power values (e.g., secondary voltage and current). However, we recognize that opacity as measured with a COMS can be an effective monitoring tool for ESPs to satisfy part 64 requirements ***with proper justification*** *(e.g.,* justification for selection of opacity trigger/excursion percentage, averaging time). To justify the use of COMS alone, the margin of compliance should be significant. For example, a PM emissions to opacity level correlating to a 70 percent margin of compliance would be acceptable.

Letter from JoAnn Heiman, Chief, Air Permitting and Compliance Branch, EPA Region 7, to Steven Feeler, Enforcement Section Chief, Air Pollution Control Program, Missouri Department of Natural Resources at 2 (August 20, 2004). Attached hereto as Exhibit 8.

In any event, permitting authorities "must explain how the indicator range in the CAM plan provides a reasonable assurance of ongoing compliance with the underlying PM limits in accordance with 40 C.F.R. § 64.3(a)(2)." *In the Matter of WE Energy Oak Creek Power Plant*, EPA Administrator Order at 18 (June 12, 2009). *See also In the Matter of Public Service Company of Colorado, dba Xcel Energy, Hayden Station*, EPA Administrator Order at 7 (March 24, 2010) (finding that the permit must provide justification as to why the opacity indicator selected was adequate to give reasonable assurance that the applicable limit was being met). Neither the final permit nor MDNR's response to comments justifies how the indicator range in the CAM plan provides a reasonable assurance of compliance with the PM limit. The final permit offers no explanation at all of the indicator range. In its response to comments, MDNR merely states this unsupported conclusion:

> The CAM plan's excursion level is set with a 10% margin of compliance or better consistent with EPA's presumptively acceptable CAM plan for PM controlled by ESPs on coal-fired boilers… therefore, no change to the excursion level is necessary.

MDNR Response to Public Comments on the Labadie Part 70 Operating Permit at 10 (March 17, 2011).

MDNR's statement is erroneous. The final permit does not utilize EPA's presumptively acceptable CAM plan, but instead prescribes a plan with fewer safeguards to ensure compliance. MDNR appears to be incorrectly interpreting the cited EPA guidance to mean that a 10% margin of compliance is adequate even in the absence of secondary ESP performance indicators. MDNR has thus failed to fulfill its obligation to explain how the margin of compliance in the final permit will satisfy CAM requirements regarding the PM emissions from the boilers.

EPA should therefore object to Permit Condition (EU0001 through EU0004) – 003 and require MDNR to do one of two things. MDNR must either specify a greater margin of compliance between the excursion and exceedance levels in the permit, such as the 70% margin of compliance mentioned by EPA; or else it must require Ameren to monitor secondary parameters – in addition to opacity – to ensure compliance with CAM requirements regarding the Labadie plant's PM emissions.

II. The Permit Lacks Periodic Monitoring Sufficient to Assure Compliance with the PM Limit for the Boilers.

The Clean Air Act requires periodic monitoring sufficient to assure compliance with emission limits in Title V/Part 70 permits. 42 U.S.C. § 7661c(c); 40 C.F.R. §70.6(a)(3). See also 10 CSR 10-6.065(6)(C)1.C(I). As described by the D.C. Circuit Court of Appeals, *Sierra Club v. EPA*, 536 F.3d 673 (D.C. Cir. 2008), periodic monitoring arises in three contexts:

1. Where existing regulations or underlying permits prescribe monitoring that is appropriate to the timeframe of the emission limit and sufficient to assure compliance, the permitting authority places that monitoring requirement in the permit. 40 C.F.R. § 70.6(a)(3)(i)(A); *see* 536 F.3d at 675.

2. Where there is no previously-established monitoring requirement to correspond to an emission limit, the permitting authority must create one that is appropriate to the timeframe of the emission limit (periodic) and sufficient to assure compliance with the limit. 40 C.F.R. § 70.6(a)(3)(i)(B); *see* 536 F.3d at 675.

3. Where there exists a previously-established monitoring requirement corresponding to an emission limit, but it is not adequate to assure compliance with the limit, the permitting authority (or EPA) must augment the monitoring in the Title V permit to ensure that it is both periodic and assures compliance with the emission limit. 40 C.F.R. § 70.6(c)(1); *see* 536 F.3d at 678, 680.

Although the final permit includes a PM limit for the boilers, Permit Condition (EU0001 through EU0004) – 003, neither the permit nor the Statement of Basis explains how the permit fulfills the Clean Air Act's periodic monitoring requirements to ensure compliance with that limit. In its response to comments, MDNR offers the following discussion of periodic monitoring for the PM limit:

> The installation performed stack testing using Method 17, 10 CSR 10-5.030 does not require repeat performance testing; therefore, subsequent periodic monitoring is not required. However, due to changes in the particulate emissions profile as the boilers age, the Missouri Air Pollution Control Program is requiring repeat stack testing every three years. The installation performs continuous opacity monitoring to determine proper ESP operation and compliance with the PM emission limitation. Annual stack testing is not required by 10 CSR 10-5.030 or 40 CFR 64.
>
> The CAM rule does not require periodic monitoring in addition to continuous monitoring. Continuous emissions monitoring through the use of a continuous emissions monitoring system such as the continuous opacity monitoring system required to demonstrate compliance with 40 C.F.R. 64 and 10 CSR 10-5.030 within the permit allow the permittee to demonstrate continuous compliance with the regulations - a more stringent method of compliance than periodic monitoring; therefore, compliance with the continuous monitoring requirements demonstrates compliance with the less stringent periodic monitoring requirements.

MDNR Response to Public Comments on the Labadie Part 70 Operating Permit at 11-12 (March 17, 2011). MDNR goes on to cite the preamble to the CAM rule, which states that where continuous monitoring is required under 40 CFR 64, periodic monitoring is not required under 40 CFR 70.

Based on this response, MDNR appears to assume that the CAM plan for the PM limit satisfies periodic monitoring requirements for the PM limit. This assumption is incorrect because the failure to include condensable PM in the CAM plan prevents the accurate estimate of PM emissions from the boilers.

The use of a COMS to satisfy periodic monitoring requirements for the PM limit requires an accurate correlation between opacity and PM emissions. If the correlation is not accurate, then a COMS cannot be used to assure compliance with the PM limit. As discussed previously, the PM-opacity correlation in the final permit's CAM plan does not represent an accurate correlation between opacity and PM emissions for boilers 1 through 4 at the Ameren Labadie plant.

Permit Condition (EU0001 through EU0004) – 003 sets a PM emissions limit of 0.12 lb/mmBtu of heat input for each boiler. As explained above, this limit includes both the filterable and condensable fractions of PM. If a COMS is used in combination with a PM-opacity correlation to assure compliance with the PM limit, then the PM-opacity correlation must include both the filterable and condensable fractions of PM. Because Ameren's PM-opacity correlation fails to include condensable PM, the PM-opacity correlation in combination with the use of a COMS is insufficient to satisfy periodic monitoring requirements for the PM limit. Sierra Club urges the Administrator to object to the permit on this ground.

III. The Permit Contains Inadequate Periodic Monitoring Requirements to Ensure Compliance with Opacity Limits for Emission Units without a COMS.

Permitting authorities must ensure that a Title V Permit contains monitoring that ensures compliance with the terms and conditions of the permit. *See* 42 U.S.C. § 7661c(c) and 40 C.F.R. § 70.6(c)(1). Even when the underlying requirements include monitoring, permitting authorities must supplement this monitoring if it is inadequate to ensure compliance with the terms and conditions of the permit. *Sierra Club v. EPA*, 536 F.3d 673 (D.C. Cir. 2008). The Court explained:

> [40 C.F.R. § 70.6(c)(1)] serves as a gap-filler….In other words, § 70.6(c)(1) ensures that all Title V permits include monitoring requirements "sufficient to assure compliance with the terms and conditions of the permit," even when § 70.6(a)(3)(i)(A) and §70.6(a)(3)(i)(B) are not applicable. This reading provides precisely what we have concluded the Act requires: a permitting authority may supplement an inadequate monitoring requirement so that the requirement will "assure compliance with the permit terms and conditions."

Id. at 680.

In this case, the intermittent monitoring requirements of the permit are not sufficient to ensure compliance with the continuous opacity limits. Permit Conditions (EU0008 through EU0011) – 001 and EU0014 - 002 specify continuous opacity limits of 20%, with an exception of up to 40% opacity for a total of six minutes in any sixty minutes, in accordance with 10 CSR 10-6.220.

Initially, Ameren must use EPA Test Method 22 on a weekly basis for eight weeks, but if no violation occurs during that time Ameren may reduce the monitoring frequency to once every

two weeks. If no violation is found during the once every two week test, then Ameren may further reduce its monitoring to only once per month. This schedule fails to account for 96% of the days in a month, and fails to assure that the opacity limits are met continuously. Because the opacity limit set forth in Permit Conditions (EU0008 through EU0011) – 001 and EU0014 - 002 is an instantaneous "emission limitation," periodic monitoring must ensure compliance on a continuous – not intermittent – basis. One-time tests conducted occasionally are wholly inadequate to ensure instantaneous compliance with the opacity limit.

MDNR failed to address this deficiency, stating instead that "the schedule has been proven effective by its many years of practical implementation." MDNR Response to Public Comments on the Labadie Part 70 Operating Permit at 18 (March 17, 2011). This response is flawed because the *Sierra Club v. EPA* decision changed the legal landscape for Title V monitoring requirements, obligating permitting authorities to supplement ineffective or incomplete monitoring requirements. 536 F.3d at 680. Moreover, the "effectiveness" of the schedule in past years could just as easily be the result of inadequate monitoring failing to pick up actual violations. MDNR has no basis to opine about the "effectiveness" of previous testing because that opinion would require data from more rigorous monitoring.

In any event, MDNR's failure to justify the monitoring approach is itself a ground for objection. EPA granted a 2007 petition in a similar case, where the permitting authority "did not articulate a rationale for its conclusions that the monitoring requirements for opacity are sufficient to assure compliance emissions limitations for opacity, or are sufficient to yield reliable data from the relevant time period that is representative of compliance with the permit." *In Re: Citgo Refining and Chemicals Company* (EPA Administrator February, 2007). In *Citgo*, petitioners argued that the frequency of monitoring for visible emissions from a refinery should be more frequent than the permit stipulated (annually for stationary vents and quarterly for buildings, enclosed facilities, and other structures). Petitioners further argued that the visual emissions from the refinery should be recorded continuously in order to assure compliance under Title V. Like the instant case, the permitting authority in *Citgo* claimed the monitoring requirements in the initial permit demonstrated compliance with applicable requirements. However, the permitting authority did not include an explanation as to how the monitoring requirements for opacity were sufficient. Thus, EPA granted the petition on the basis that the permitting authority did not include a rationale for its conclusions to demonstrate compliance. *Id.*; *see also In Re: Premcor Refining Group* (EPA Administrator January 8, 2007) (rejecting monitoring requirements based on inadequate frequency and lack of rationale by the state permitting authority).

EPA should object to the final permit on the ground that the monitoring frequency for the opacity limits in Permit (EU0008 through EU0011) – 001 and EU0014 - 002 fails to assure compliance with applicable opacity limits, and direct MDNR to require more frequent monitoring in order to assure compliance with the applicable limits.

IV. The Permit Contains Numerous Provisions That Lack Practical Enforceability.

Several provisions in the final permit lack practical enforceability. The following permit conditions require Ameren to keep copies of various standards to which it must adhere, and to maintain records of its compliance on-site or to make them available to MDNR upon request:

a. Pg. 18, Permit Condition (EU0007) - 002, Recordkeeping (2-3)
b. Pg. 20-21, Permit Condition (EU0008-EU0011) - 001, Monitoring/Recordkeeping (4)(a,b)(i)(1-2), (4)(a,b)(ii)(1-2)
c. Pg. 30, Permit Condition (EU0014) - 001, Monitoring/Recordkeeping (1-2,4)

Although the permit specifies the standards with which Ameren must comply, the permit only requires Ameren to maintain copies of the applicable standards, and recordkeeping showing compliance, on-site. While these documents will be accessible to MDNR upon request, they are not available to the public. The permit should require Ameren to provide copies of the specifications and standards to MDNR so that the public is informed of these compliance obligations.

Because the above-listed permit conditions do not allow for the public to ascertain whether or not Ameren is in compliance, they lack practical unenforceability. Sierra Club urges the Administrator to object to the issuance of the final permit on this ground. MDNR should revise the permit to require Ameren to file with the agency copies of relevant manufacturers' specifications and associated recordkeeping documents.

V. The Permit Improperly Limits the Ability of Citizens to Enforce the Permit's Requirements by Limiting Access to Records.

Critical purposes of a Title V permit are to place all of a source's Clean Air Act requirements into one document, and provide for adequate monitoring, recordkeeping, and reporting. Title V permits also have the purpose of heightening a source's compliance with applicable regulations and enabling government agencies and citizens to bring enforcement actions to ensure compliance if necessary. State and federal regulations provide as follows:

> Except as provided in subparagraph (6)(C)2.B. of this rule [regarding state-only requirements], all terms and conditions in a permit issued under this section, including any voluntary provisions designed to limit an installation's potential to emit, are enforceable by the permitting authority, by the administrator, and by citizens under section 304 of the Act.

10 CSR 10-6.065(6)(C)2.A; *see also* 40 C.F.R. § 70.6(b)(1).

Federal and state regulations require permittees to submit reports of required monitoring at least every six months. 40 C.F.R. § 70.6(a)(3)(iii)(A); 10 CSR 10-6.065(6)(C)1.C(III)(a). In this permit, several conditions allow Ameren to report only deviations and exceedances rather than all monitoring results.

The following conditions in the final permit require Ameren to maintain more detailed records of its monitoring activities on site, but to report only deviations and exceedances rather than all required monitoring results:

- Permit Condition (EU0001 through EU0004) - 001: Although Ameren is required to continuously monitor sulfur dioxide emissions using a Continuous Emission Monitoring System (CEMS) and to maintain hourly records of the SO_2 emission rate,

and to keep these records available for MDNR inspection, it is only required to report to MDNR exceedances or malfunctions which could possibly cause exceedances, and deviations from emission limitations, monitoring/recordkeeping, and reporting requirements. Monitoring/Record Keeping, ¶¶ 1, 4, 5, and Reporting, ¶¶ 1, 2, 3.

- Permit Condition (EU0001 through EU0004) - 006: Although Ameren is required to maintain a log of all combusted municipal solid waste, and to keep these records available for MDNR inspection, it is only required to report to MDNR exceedances or malfunctions which could possibly cause exceedances, and deviations from emission limitations, monitoring/recordkeeping, and reporting requirements. Monitoring/Recordkeeping ¶¶ 1-2, and Reporting ¶¶ 1-2.
- Permit Condition (EU0005 through EU0007) - 001: Although Ameren is required to maintain fuel purchase receipts indicating sulfur content of the fuel oil used in the emergency diesel generators, and to keep these records available for MDNR inspection, it is only required to report to MDNR exceedances or malfunctions which could possibly cause exceedances, and deviations from emission limitations, monitoring/recordkeeping, and reporting requirements. Monitoring/Recordkeeping ¶¶ 1-2, and Reporting ¶¶ 1-2
- Permit Condition (EP-1 through EP-4 and HR-1) – 001: Although Ameren is required to maintain a maintenance/malfunction log for the bin vent filter exhaust fans, and to keep these records available for MDNR inspection, it is only required to include deviations from emission limitations, monitoring/recordkeeping, and reporting requirements in its semi-annual report to MDNR. Monitoring/Recordkeeping ¶¶ 1-2, and Reporting.
- Permit Condition (EU0008 through EU0011) - 001: Although Ameren is required to monitor and record visible emissions from Coal Handling and Storage through Test Method 22, and to keep these records available for MDNR inspection , it is only required to report to MDNR exceedances or malfunctions which could possibly cause exceedances, and deviations from emission limitations, monitoring/recordkeeping, and reporting requirements. Monitoring ¶ 1, Recordkeeping ¶¶ 1, 4, and Reporting ¶¶ 1-2
- Permit Condition (EU0012) - 001: Although Ameren is required maintain purchase records and monthly inventory records of cold cleaner solvent, and to keep these records available for MDNR inspection, it is only required to report to MDNR exceedances or malfunctions which could possibly cause exceedances, and deviations from emission limitations, monitoring/recordkeeping, and reporting requirements. Record Keeping ¶¶ 1, 2, 4, and Reporting.
- Permit Condition (EU0013) - 001: Although Ameren is required to record gasoline transfer information, and to keep these records available for MDNR inspection, it is only required to report to MDNR deviations from emission limitations, monitoring/recordkeeping, and reporting requirements. Reporting/Recordkeeping ¶¶ 1-3.
- Permit Condition (EU0014) – 002: Although Ameren is required to monitor and record visible emissions from the Dry Fly Ash System through Test Method 22, and to keep these records available for MDNR inspection, it is only required to report to MDNR exceedances or malfunctions which could possibly cause exceedances, and deviations from emission limitations, monitoring/recordkeeping, and reporting requirements. Monitoring ¶ 1, Recordkeeping ¶¶ 1, 2, 4, and Reporting ¶¶ 1-2.

These provisions preclude citizens from independently reviewing Ameren's records and determining whether additional deviations or exceedances might be occurring.

In responding to Sierra Club's comments on this issue, MDNR stated that additional reporting would be burdensome to Ameren and MDNR, and that the approach outlined in the permit "has been proven effective over the past 30 years." MDNR Response to Public Comments on the Labadie Part 70 Operating Permit at 20 (March 17, 2011).

This response fails to address the concern and ignores current law. Title V regulations provide that "all terms and conditions in a part 70 permit, are enforceable by the Administrator *and citizens* under the Act." 40 C.F.R. § 70.6(b)(1) (emphasis added). Even before Title V was enacted, the Supreme Court recognized the important role of citizen enforcement under the Clean Air Act. *Pennsylvania v. Delaware Valley Citizens' Council*, 478 U.S. 546, 560 (1986) (stating that Congress enacted Clean Air Act's attorney's fees provision "to promote citizen enforcement of important federal policies.").

MDNR further responded that citizens could request Ameren's records from MDNR under the Missouri Sunshine Law, and that MDNR would then ask Ameren for the records. MDNR Response to Public Comments on the Labadie Part 70 Operating Permit at 20 (March 17, 2011).

MDNR's response is inadequate. First, if the permit language does not require Ameren to submit records as required by state and federal regulations, then Ameren may refuse to provide the records to MDNR and may rely on the permit language which only requires Ameren to store the records on-site. Second, citizens' rights are compromised because MDNR may choose not to seek the records. There is no enforceable document requiring MDNR to ask Ameren for records if a public records request is made.

EPA should object to the final permit on the ground that it obstructs citizens' access to compliance records and therefore impairs citizens' ability to enforce the permit's requirements. EPA should direct MDNR to revise the permit so that it requires Ameren to make all monitoring records accessible to the public.

VI. The Permit Fails to Inform the Public of CO_2 Emissions from the Plant.

A primary goal of the Title V program is to inform the public about air pollution from major sources and the emissions limits that constrain them. Residents living in the vicinity of the Labadie plant and downwind should be able to read the plant's permit and obtain a clear understanding of the plant's air emissions.

Although the final permit states that the plant is a major source of Greenhouse Gases and lists CO_2e in its "Potential to Emit" table on page five of the Statement of Basis, it fails to include the plant's actual past CO_2 emissions. This omission impairs the ability of the public to fully appreciate the effects of the Labadie plant on their health and welfare and on the environment. MDNR has noted that fossil fuel-fired power plants are a major source of greenhouse gas emissions, *see* MDNR, "Global Climate Change: Role of Fossil Fuels" *available at* http://www.dnr.mo.gov/energy/cc/cc10.htm, and the Labadie plant is no exception. According to EPA's Clean Air Markets Data website, the Labadie plant emitted 18,714,404.7 tons of CO_2 in

2007, 17,367,191.2 tons of CO_2 in 2008, 17,433,816.8 tons of CO_2 in 2009, and 18,996,587.0 tons of CO_2 in 2010. *See* EPA, "Clean Air Markets – Data and Maps" available at http://camddataandmaps.epa.gov/gdm/index.cfm. Attached hereto as Exhibit 9. While Sierra Club is able to search EPA's Clean Air Markets website, many interested members of the public will not be able to ferret out this important information.

Federal law requires that Title V applicants include information about emissions of all regulated pollutants in their applications. Each application must describe:

> All emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. *A permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit*, except where such units are exempted under this paragraph (c) of this section.

40 C.F.R. 70.5(c)(3)(i) (emphasis added).

CO_2 is a regulated pollutant under the Clean Air Act, which gives EPA the authority to regulate greenhouse gases (GHGs), such as CO_2., *See Massachusetts v. EPA*, 549 U.S. 497 (2007). As of January 2, 2011, GHGs became subject to emission standards for new motor vehicles, EPA, NHTSA, Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule, 75 Fed. Reg. 25,324 (May 7, 2010), and thus "subject to regulation" under EPA's interpretation of the Clean Air Act. Therefore, the Labadie plant's CO_2 emissions must be included in the Title V operating permit.

During the public comment period on the draft permit, Sierra Club submitted comments to MDNR stating that CO_2 emissions should be included in the permit. In response, MDNR stated that CO_2 is not required to be reported in Missouri's EIQs, and therefore does not need to be included in the permit. MDNR Response to Public Comments on the Labadie Part 70 Operating Permit at 29 (March 17, 2011).

This response does not adequately address the comment. A Title V operating permit must adhere to all federal requirements. Because CO_2 is a federally regulated pollutant, the Labadie plant's emissions of CO_2 must be included in the Title V permit. The fact that Missouri does not require EIQs to include CO_2 emissions information is beside the point; the Title V permit must comply with federal law.

EPA should object to the final permit because it fails to notify the public of the plant's CO_2 emissions and require that the permit be revised to specify the plant's CO_2 emissions.

VII. The Permit Fails to Include the Plant's Obligation to Monitor its CO_2 Emissions.

Title V permits must include all "applicable requirements," 40 C.F.R. § 70.7(a)(iv); 10 CSR 1 0-6.065(6)(E) I.A.(iv), including monitoring requirements under the Clean Air Act's Title IV Acid Rain Program. 40 C.F.R. § 70.2(5); 10 CSR 10-6.020(23)(E). The Title IV Acid Rain Program requires Ameren's Labadie plant to monitor its CO_2 emissions. 40 C.F.R. § 75.13. Yet the final permit fails to include the Labadie plant's CO_2 monitoring requirement in accordance with 40 C.F.R. § 75.13.

During the public comment period on the draft permit, Sierra Club submitted comments to MDNR stating that the plant's CO_2 monitoring requirement must be included in the permit. MDNR responded to this comment by claiming that it is not necessary to include the CO_2 monitoring requirement directly in the permit because the requirement is included in the Labadie plant's Acid Rain Permit. This response does not adequately address the comment for two reasons. First, the Acid Rain Permit itself does not adequately list all applicable monitoring requirements. Second, even if it did, the applicable monitoring requirements are still required to be included in the Title V permit.

Regarding monitoring requirements, the Acid Rain Permit states:

> The owners and operators and, to the extent applicable, designated representatives of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

Labadie Title V Final Permit, Attachment F at 3.

The permit simply tells Ameren to comply with the law but not specify what compliance entails. Further, the regulation cited in the Acid Rain Permit does not contain a single monitoring requirement for CO_2. 40 C.F.R. § 75.13 lists four options for CO_2 monitoring that emissions sources may use, but does not indicate which one should be selected. Ameren is required to select one of these options, and its selection should be noted in the permit. Simply stating, through a complex tree of references, what Ameren's options are is insufficient to meet the requirements of a Title V permit.

Even if the Acid Rain Permit were revised to include sufficient documentation of these requirements, the Title V permit would still need to include this information. All Title V permits must include "conditions as are necessary to assure compliance with applicable requirements of this chapter." The acid rain monitoring requirements are applicable requirements within that chapter, and they must be included in the Title V permit.

In its response to a petition concerning two PacifiCorp plants, EPA stated that: " 'Applicable requirements,' defined in 40 C.F.R. § 70.2, include: '. . . (5)Any standard or other requirement of the acid rain program under Title IV of the Act or the regulations promulgated there under.' " *In the Matter of PacifiCorp's Jim Bridger and Naughton Electric Utility Steam Generating Plants*, EPA Administrator Order at 3-4 (Nov. 16, 2000).

EPA should object to the final permit on the grounds that it does not include the choice of monitoring methods selected for the plant's CO_2 monitoring requirement and require the permit be revised to include Ameren's selection of a continuous CO_2 monitoring system.

VIII. The Permit Fails to Include a Compliance Schedule to Remedy Outstanding Violations.

A Title V permit must include a compliance schedule "for requirements for which the source is not in compliance at the time of permit issuance." 40 CFR §§ 70.6(c)(3) and 70.5(c)(8)(iii)(C); *see* also 10 CSR 10-6.065(6)(B)3.I.(III)(c).

In January and October 2010, EPA issued Notices of Violation (NOV) to Ameren alleging serious Clean Air Act violations at the Labadie Plant (and at Ameren's three other coal-fired power plants in Missouri). *In re AmerenUE*, Notice of Violation, (Jan. 26, 2010) and *In re AmerenUE*, Amended Notice of Violation (Oct. 14, 2010). Attached hereto as Exhibits 10 and 11. The NOVs asserted that Ameren undertook the following major modifications at the Labadie plant without first obtaining required construction permits and without employing required pollution controls to reduce emissions associated with the modifications:

- Replaced economizer and air preheater rotor at Unit 1 in 2002
- Replaced economizer and air preheater rotor at Unit 2 in 2001
- Replaced economizer and air preheater rotor at Unit 3 in 2003
- Replaced economizer and air preheater rotor at Unit 4 in 2002
- Underwent condenser retubing at Unit 4 in 2002

Id, ¶53, p. 12.

Ameren neither noted these violations in its Title V permit application nor submitted an updated application to note the noncompliance. In addition, the final permit does not contain a compliance schedule to redress the outstanding violations.

On September 14, 2010, Sierra Club submitted a Freedom of Information Act (FOIA) request to EPA, requesting all documents obtained by EPA from Ameren in response to the Clean Air Act section 114 request dated March 11, 2008. Sierra Club has not yet received the requested documents. Sierra Club is informed that Ameren labeled nearly all of the documents Confidential Business Information, and Sierra Club understands that there will be a lengthy process to determine whether those claims were legitimate. Sierra Club therefore incorporates by reference the responses received by EPA to its section 114 request to Ameren to document the above-listed unpermitted and unlawful modifications, the resulting and ongoing failure of Ameren to limit its emissions associated with those projects pursuant to Best Available Control Technology, and the failure of Ameren to include the requirements associated with the modifications in its therefore-incomplete Title V permit application. EPA is in possession of the documents that further detail the modification projects listed above, and thus EPA should rely on those documents, and any other additional information in its possession, in determining whether to object to the final permit for lack of a compliance schedule to remedy outstanding violations.

IX. Conclusion

For the foregoing reasons, the final permit fails to meet applicable Title V requirements. Each of these issues results in a deficient Title V permit. Many of the deficiencies involve inadequate monitoring and reporting. The deficiencies noted above undermine the key purposes of the Title

V program and should be remedied. Sierra Club respectfully requests that the Administrator object to the issuance of the final permit pursuant to Clean Air Act § 505(b)(2), 42 U.S.C. § 7661d(b)(2) and 40 C.F.R. § 70.8(d) and direct MDNR to correct these deficiencies.

Respectfully submitted,

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