

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLORADO**

Civil Action No. \_\_\_\_\_

WILDEARTH GUARDIANS, a New Mexico non-profit corporation,

Plaintiff,

v.

PUBLIC SERVICE COMPANY OF COLORADO  
d/b/a XCEL ENERGY,

Defendant.

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**COMPLAINT**

1. Plaintiff WILDEARTH GUARDIANS brings this suit against PUBLIC SERVICE COMPANY OF COLORADO d/b/a XCEL ENERGY (“Xcel”) for violations at its 717-megawatt, Colorado coal-fired power plant, known as the “Cherokee Station,” of applicable air pollution emissions standards, limitations and permit conditions under the federal Clean Air Act, 42 U.S.C. §§ 7601 *et. seq.*

2. By law, Xcel shall not allow or cause the emission of any pollutant into the atmosphere in excess of 20% opacity, must continuously monitor opacity, and must report any deviations from these requirements at the Cherokee power plant. Over the past five years, Xcel has repeatedly violated these requirements. The Cherokee power plant has numerous documented violations of the opacity standard. More importantly, Xcel has failed to continuously monitor opacity at Cherokee. The excessive and unexcused monitor downtime

means that Cherokee's opacity emissions have gone unmonitored and unreported for substantial periods.

3. Opacity monitoring serves an important function in the operation of a power plant by indicating whether pollution control equipment is properly functioning and/or whether an emissions limit is being maintained. The U.S. Environmental Protection Agency ("EPA") considers opacity as a surrogate for assessing mass emissions and as a means to assure effective particulate emissions control. Particulate matter emissions are important due to their numerous serious and adverse health effects, including increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; decreased lung function; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease.<sup>1</sup> Xcel's violations of the Clean Air Act's opacity, monitoring, and reporting requirements pose a serious threat to public health due to their relationship to harmful particulate matter emissions.

4. Xcel has violated and continues to violate the Clean Air Act and its implementing regulations, the Clean Air Act Title V operating permit for the Cherokee power plant, and the Colorado State Implementation Plan ("SIP"). WildEarth Guardians, a citizen group whose members Xcel harms by violating the Clean Air Act, asks the Court, pursuant to the Clean Air Act's citizen suit provision, 42 U.S.C. § 7604(a), to: (1) declare that failure to continuously monitor opacity at Cherokee violates the Clean Air Act; (2) declare that operation of Cherokee in excess of opacity limits violates the Clean Air Act; (3) declare that failure to accurately report downtime violations and to certify reports violates the Clean Air Act; (4) order Xcel to comply with all applicable opacity, monitoring, and reporting requirements; (5) enjoin Xcel from operating Cherokee until and unless its opacity monitoring equipment is functioning properly

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<sup>1</sup> See <http://www.epa.gov/air/particlepollution/health.html>.

and continuously in compliance with applicable legal requirements; (6) assess civil penalties against Xcel for its violations of the Clean Air Act; and (7) award WildEarth Guardians its cost of litigation.

### **JURISDICTION AND VENUE**

5. This court has subject matter jurisdiction over this Clean Air Act citizen suit pursuant to 42 U.S.C. § 7604(a) and 28 U.S.C. § 1331 (federal question). The relief requested is authorized pursuant to 28 U.S.C. §§ 2201(a) and 2202, and 42 U.S.C. § 7604.

6. The Cherokee Station is located at 6198 Franklin Street in Adams County, Colorado, within the Denver Metropolitan Area. Pursuant to 42 U.S.C. § 7604(c), venue is proper because Cherokee is located in this District and violations have occurred and continue to occur in this District.

7. On January 28, 2008, WildEarth Guardians (formerly Rocky Mountain Clean Air Action) provided Xcel with notice of the violations alleged in this Complaint through October 30, 2007. On April 1, 2009, WildEarth Guardians provided Xcel with notice of additional violations through the second quarter of 2008, reiterated the violations alleged in the January 28, 2008 notice, and provided notice of intent to sue. WildEarth Guardians also provided notice to the EPA Administrator and to the State of Colorado pursuant to 42 U.S.C. § 7604(b). A true and correct copy of the January 28, 2008 and April 1, 2009 notices is attached as Exhibit A. At least 60 days have elapsed since WildEarth Guardians provided notice of the violations alleged in this Complaint. Neither EPA nor the State of Colorado have commenced or diligently prosecuted a civil action to redress these violations.

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## THE PARTIES

8. Plaintiff WILDEARTH GUARDIANS is a non-profit corporation with approximately 4,000 members throughout the United States, including in Colorado. WildEarth Guardians' mission is to bring people, science, and the law together in defense of the American West's rivers, forests, deserts, grasslands, and the delicate web of life to which we are inextricably linked. Members of WildEarth Guardians live, work, garden, and engage in outdoor recreation in areas affected by Cherokee's excessive opacity emissions and insufficient monitoring. Thus, WildEarth Guardians, its staff, and its members have a substantial interest in this matter and are adversely affected and aggrieved by Xcel's failure to comply with the Clean Air Act. WildEarth Guardians brings this action on behalf of itself and its adversely affected members. A decision requiring Xcel to comply with all opacity, monitoring, and reporting requirements under Cherokee's Title V permit and the Clean Air Act would redress these harms to WildEarth Guardians and its members.

9. Defendant PUBLIC SERVICE COMPANY OF COLORADO d/b/a XCEL ENERGY owns and operates the Cherokee Station where the violations that gave rise to this action occurred. Public Service Company of Colorado is a subsidiary of Xcel Energy, Inc., a public utility company based in Minneapolis, Minnesota. Xcel Energy has annual electricity revenue of \$8.7 billion dollars and operates power plants in eight states, Colorado, Michigan, Minnesota, New Mexico, North Dakota, South Dakota, Texas, and Wisconsin. Xcel Energy operates 16 power generating facilities in Colorado. Public Service Company of Colorado d/b/a Xcel Energy is a "person" within the meaning of Section 302(e) of the Clean Air Act, 42 U.S.C. § 7602(e).

## LEGAL BACKGROUND

### The Clean Air Act

10. Congress enacted the Clean Air Act “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of the population.” 42 U.S.C. § 7401(b)(2). The Clean Air Act sets out a regulatory scheme designed to prevent and control air pollution.

11. Under Title I of the Clean Air Act, EPA promulgated National Ambient Air Quality Standards (“NAAQS”), which define the level of air quality necessary to protect the public health and welfare for certain “criteria pollutants,” specifically sulfur dioxide, nitrogen oxides, particulate matter, carbon monoxide, lead, and ozone. 42 U.S.C. § 7409(a)-(b); 40 C.F.R. pt. 50.

12. The Clean Air Act provides for state implementation of minimum federal requirements through EPA-approved plans, known as State Implementation Plans (“SIPs”). 42 U.S.C. § 7410(a). SIPs provide for implementation, maintenance, and enforcement of the NAAQS in each state. All SIP provisions approved by EPA are federally enforceable. 42 U.S.C. § 7604(f)(4).

13. In 1990, Congress amended the Clean Air Act to add Title IV, known as the Acid Rain Program. This program seeks to reduce the impacts of acid deposition in the nation’s lakes, rivers and streams associated with air emissions of sulfur dioxide and nitrogen oxides, primarily from power plants. 42 U.S.C. § 7651. In addition to mandating reductions in these pollutants, Congress specifically imposed additional requirements on power plants to monitor, report, and maintain records associated with sulfur dioxide and oxides of nitrogen emissions, as well as for

opacity as a surrogate of these pollutant emissions. *See* 42 U.S.C. § 7651k(a).

14. Section 412 of the Clean Air Act requires owners and operators of any source which is subject to Title IV to install and operate continuous emission monitoring systems (“CEMS”) “on each affected unit at the source, and to quality assure the data for sulfur dioxide, nitrogen oxides, opacity and volumetric flow at each such unit.” 42 U.S.C. §§ 7651k, 7651a(7). An affected unit is any emission unit at a major source that is subject to an emission reduction requirement or limitation under Title IV. 42 U.S.C. § 7651a(2).

15. Title IV further states that “if CEMS data, [or data from an alternative monitor approved by the EPA administrator], is not available for any affected unit during any period of a calendar year in which such data is required . . . and the owner or operator cannot provide information, satisfactory to the Administrator, on emissions during that period, the Administrator shall deem the unit to be operating in an uncontrolled manner during the entire period for which the data was not available . . . .” 42 U.S.C. § 7651k(d).

16. EPA has promulgated regulations to implement Title IV of the Clean Air Act that are published in 40 C.F.R. Part 72 *et seq.*

17. In 1990, Congress also enacted Title V of the Clean Air Act to require all major sources of air pollution to obtain operating permits. *See* 42 U.S.C. § 7661a(a). A major source under Title V is defined as “any stationary source (or any group of stationary sources located within a contiguous area and under common control) that [] either: (A) [emits or has the potential to emit 10 tons or more of any hazardous air pollutant listed under Section 112 of the Act, or 25 tons or more of any combination of hazardous air pollutants (unless the EPA Administrator has identified a lesser quality for any particular hazardous air pollutant)] or (B) [emits or has the potential to emit one hundred tons per year as set forth in Section 302 or Part D of the Act].” 42

U.S.C. § 7661(2).

18. Section 502(b) of the Clean Air Act charged EPA with “establishing the minimum elements of a permit program to be administered by any air pollution control agency.” 42 U.S.C. § 7661a(b).

19. Each Title V permit issued pursuant to this program must “include enforceable emission limitations and standards . . . necessary to assure compliance with applicable requirements” of the Clean Air Act and the SIP. 42 U.S.C. § 7661c(a). Applicable requirement means “[a]ny standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under Title I of the Act . . . [and] [a]ny standard or other requirement of the acid rain program under Title IV of the Act or the regulations promulgated thereunder . . .” 40 C.F.R. § 70.2.

20. Title V further requires that the EPA administrator “may by rule prescribe procedures and methods for determining monitoring and analysis of pollutants regulated by [the Clean Air Act].” 42 U.S.C. § 7661c(b). In doing so, however, Congress explicitly stated that “[n]othing in [Title V] shall be construed to affect any continuous emissions monitoring requirement of [the Title IV Acid Rain Program] . . .” *Id.*

21. EPA has promulgated regulations to implement Title V of the Clean Air Act that are published in 40 C.F.R. Part 70 *et seq.*

22. In addition to the minimum requirements set forth under Titles I and IV of the Clean Air Act and its implementing regulations, state and local permitting authorities may supplement federal monitoring requirements in each permit with additional state requirements that will “assure compliance with the terms and conditions of the permit.” 40 C.F.R. § 70.6(c)(1). These requirements may include gap-filling provisions where the existing regulations are

inadequate. These additional permitting requirements established by the state shall be “not inconsistent with” the Clean Air Act. 42 U.S.C. § 7661e(a).

23. The Clean Air Act specifically prohibits any permittee from violating any requirement of a Title V permit. 42 U.S.C. § 7661a(a).

24. The State of Colorado created a Title V operating permit program to which EPA gave final approval, effective on October 16, 2000. 65 Fed. Reg. 49,919 (Aug. 16, 2000); 40 C.F.R. pt. 70, App. A.

### **Specific Clean Air Act Continuous Opacity Monitoring Requirements**

25. The EPA defines opacity as the degree to which the transmittance of light is reduced by a specific air pollutant.<sup>2</sup> An opacity value of 0% means that all light passes through, and an opacity of 100% means that no light can pass through.<sup>3</sup>

26. When measuring opacity under Title IV, the CEMS are known as continuous opacity monitoring (“COM”) systems. The COM system monitors opacity by passing a beam of light from one side of each Unit’s stack across the exhaust path to a reflector that returns light to the opacity sensor. The opacity reading reflects the “degree to which emissions reduce the transmission of light and obscure the view of an object in the background.” 40 C.F.R. § 60.2.

27. Pursuant to the Part 75 regulations promulgated under Title IV of the Clean Air Act, power plants must “install, certify, operate, and maintain, in accordance with all the requirements in this part, a continuous opacity monitoring system with the automated data acquisition and handling system for measuring and recording the opacity of emissions (in percent opacity) discharged to the atmosphere . . .” 40 C.F.R. § 75.10(a)(4). Each COM system must be “capable of accurately measuring, recording, and reporting data . . .” 40 C.F.R. § 75.10(f).

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<sup>2</sup> See <http://www.epa.gov/reg5oair/naaqs/opacity.html#use>.

<sup>3</sup> *Id.*



28. 40 C.F.R. § 75.10(d) requires owners and operators of power plants to “ensure that all continuous emission and opacity monitoring systems required by this part are in operation and monitoring unit emissions or opacity at all times that the affected unit combusts any fuel” and during the time following combustion when fans are still operating. If a unit’s boiler is combusting any fuel, except as provided in § 75.11(e) (special considerations during the combustion of gaseous fuels), the COM system may only be down “during periods of calibration, quality assurance, or preventive maintenance,” which must be performed pursuant to specific requirements set forth in Part 75, and during “periods of repair, periods of backups of data from the data acquisition and handling system, or recertification performed pursuant to § 75.20.” 40 C.F.R. § 75.10(d).

29. Downtime refers to the amount of time that the units are producing emissions, but the COM systems are not monitoring those emissions, due to monitor or non-monitor failure. During such periods, a COM system cannot provide usable data as to whether a unit is complying with applicable opacity requirements. Part 75 does not allow for COM system downtime in any other circumstance when a power-generating unit is combusting fuel.

30. Owners and operators must record opacity data and must “keep records of all incidents of opacity monitor downtime during unit operation, including reason(s) for the monitor outage(s) and any corrective action(s) taken for opacity, as measured and reported by the continuous opacity monitoring system.” 40 C.F.R. § 75.57(f).

### **Specific Clean Air Act Reporting Requirements**

31. Under Title IV, EPA has promulgated regulations that require subject sources to report opacity readings above the allowable limit to the applicable State or local air pollution control agency. 40 C.F.R. § 75.65. These reports are referred to as Excess Emissions Reports

(“EERs”).

32. EPA Title V program regulations specify state reporting requirements that must be included in every Title V permit, including requirements to file with state authorities Monitoring Deviation Reports, Permit Deviation Reports, and an Annual Compliance Certification 40 C.F.R. §§ 70.6(a)(3)(iii)(A), 70.6(a)(3)(iii)(A) (B), 70.6(c)(5). Such reports must include information pertaining to any violation or deviance from Title V requirements.

33. All reports that must be submitted pursuant to Title V permit requirements “shall be signed by a responsible corporate official, who shall certify its accuracy.” 42 U.S.C. § 7661c(c). The certification must be based “on information and belief formed after reasonable inquiry, [that] the statements and information in the document are true, accurate, and complete.” 40 C.F.R. § 70.5(d). Knowing violations of these requirements can lead to criminal conviction punishable “by a fine ... or by imprisonment for not more than 2 years, or both.” 42 U.S.C. § 7413(c)(2).

### **Clean Air Act Citizen Suit Enforcement**

34. Under 42 U.S.C. § 7604(a), any person may file suit in federal district court against any “person” who is “alleged to have violated (if there is evidence that the alleged violation has been repeated) or to be in violation of (A) an emission standard or limitation under this chapter or (B) an order issued by the Administrator or a State with respect to such a standard or limitation.”

35. An “emission standard or limitation” is defined to include any emission limitation, standard of performance, or emission standard under the Clean Air Act, as well as any EPA-approved standard of performance or emission limitation under the SIP and any permit term or condition. 42 U.S.C. § 7604(f). Violations of Title V permit conditions are subject to a

citizen enforcement action under 42 U.S.C. § 7604(a)(1).

36. 42 U.S.C. § 7413(b), amended in part by the Debt Collection Improvement Act of 1996, authorizes injunctive relief and civil penalties of up to \$32,500 per day for each violation occurring between March 15, 2004 and January 12, 2009, and \$37,500 per day for each violation occurring after January 12, 2009. 28 U.S.C. § 2461(a); 40 C.F.R. § 19.4; 74 Fed. Reg. 626 (Jan. 7, 2009).

## **FACTUAL BACKGROUND**

### **The Cherokee Power Station**

37. Xcel owns and operates the Cherokee power plant and its four major coal-fired electric generating units, Units 1 through 4.

38. The Cherokee power plant is located in Denver, Adams County, Colorado, approximately four miles west of the Rocky Mountain Arsenal National Wildlife Refuge, two miles southeast of the Western Hills and Sherrilwood residential neighborhoods, one mile north of the Denver residential neighborhood of Globeville and one-half mile west of Commerce City. Cherokee's emission stacks are surrounded by Interstate highways I-25, I-70, I-76 and I-270, and are visible to over a million travelers each week.<sup>4</sup>

39. Each of Cherokee's 4 coal fired boilers are: (1) subject to the requirements of Title I of the Clean Air Act; (2) affected units subject to the monitoring and reporting requirements of Title IV; (3) regulated under the Colorado SIP; and (4) permitted by the State of Colorado under a permit issued under Title V.

40. The Cherokee Station's Title V operating permit, Permit #96OPAD130 ("Permit"), was issued on February 1, 2002. This Title V permit was last revised on May 22,

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<sup>4</sup> See U.S. Department of Transportation Federal Highway Administration, *available at* <http://www.fhwa.dot.gov/environment/airtoxicmsat/appb.htm>.

2007. The Title V permit provisions relevant to the allegations in this Complaint did not change in permit revisions from 2002 through 2007.

**Cherokee Permit Requirements: Opacity**

41. Cherokee's Title V operating permit limits the opacity of the emissions from each boiler unit at Cherokee to 20%, except in certain circumstances. Permit § II, Condition 11.1.

42. Cherokee's Title V operating permit limits the opacity of the emissions from each boiler unit at Cherokee to "30% opacity for a period or periods aggregating more than 6 minutes in any sixty (60) consecutive minutes" resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, process modification or adjustment, or occasional cleaning of control equipment. Permit § II, Condition 11.2.

43. Violations of the opacity standards are measured in six-minute increments. *Id.*

**Cherokee Permit Requirements: Monitoring**

44. Xcel is required to install, operate, and maintain COM systems for each coal-fired unit at Cherokee. Permit § II, Condition 1.10; 40 C.F.R. § 75.14(a). The COM system is used to monitor compliance, in six-minute intervals, with Cherokee's 20% and 30% opacity limits. Permit § II, Condition 10.4.

**Cherokee Permit Requirements: Reporting**

45. Xcel must file a Monitoring Deviation Report every six months, which clearly identifies all instances of deviations from Cherokee's monitoring requirements. Monitoring means "any condition determined from observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as recordkeeping associated with that monitoring." Permit, App. B, p. 1. *See also* 40 C.F.R. § 70.6(a)(3)(iii)(A).

46. Xcel must promptly file a Permit Deviation Report whenever there is a deviation

from any requirement of its Title V permit. The report must address “deviations from permit requirements, including those attributable to upset conditions and malfunctions [], the probable cause of such deviation, and any corrective or preventative actions or preventative measures taken.” Permit, App. B, p. 1-2. *See also* 40 C.F.R. § 70.6(a)(3)(iii)(B).

47. For reporting purposes, the Air Pollution Control Division of the Colorado Department of Public Health and Environment (the “Division”) has combined the Title V Monitoring Deviation Report with the Permit Deviation Report in the operating permit for Cherokee. Permit, App. B, p. 5. Xcel must file this Semi-Annual Deviation Report (“Deviation Report”) at the end of every six months. Permit § V, General Condition 21. However, other deviations from Cherokee’s permit must be “promptly” reported within a shorter timeframe. *Id.* For instance, Xcel must report all exceptional events (malfunction events) to the Division by noon of the start of the next working day. Permit § V, Condition 3(d).

48. Xcel must file an Annual Compliance Certification. This report must state the compliance status of each requirement of the permit terms and conditions over the certification period, including emission limitations, standards, and work practices. The report must state whether compliance was intermittent or continuous. Permit, App. B, p. 2-3. All deviations from any permit term or condition must also be summarized or referenced in the annual compliance certification. Permit, App. B, p. 2.

49. Xcel must file Quarterly Excess Emissions Reports (“EERs”) at the end of each calendar quarter. Permit § II, Condition 10.5. The EERs must document the magnitude of excess emissions, any conversion factors used, the date and time of commencement, and completion of each time period of excess emissions. *Id.*, Condition 10.5.1. Moreover, the EERs must document the nature and cause of the excess emissions, the date and time identifying each

period of equipment malfunction, the date and time of any monitor downtime, the nature of the system repairs or adjustments, and a schedule of the calibration and maintenance of the continuous monitoring system. *Id.*, Conditions 10.5.2 – 10.5.4.

50. EERs constitute competent and credible evidence of a violation of the opacity regulations.

### **Opacity, Monitoring and Reporting History at Cherokee**

51. Cherokee's Excess Emission Reports ("EERs"), submitted to the Division, show repeated and continuing violations of the 20% and 30% opacity limits set forth in Cherokee's Title V permit and the Colorado SIP. These violations date back to at least the first quarter of 2004.

52. A chart summarizing all known violations of the 20% opacity limit and 30% opacity limit at the Cherokee plant from August 6, 2004 to August 6, 2009 is attached as Exhibit B.

53. Cherokee's EERs also demonstrate extensive downtime of COM systems installed in accordance with Title IV of the Clean Air Act. During each quarter from 2005 to the present, COM systems were reported down, due to monitor or non-monitor failure, yet the boilers associated with these monitors continued to operate.

54. In most cases, Cherokee's downtime as reported in its EERs does not fall within one of the limited exceptions provided by law. *See* 40 C.F.R. § 75.10(d). Instead, Cherokee's unexcused downtime includes repeated monitor equipment and communication failures. In most cases, monitoring downtime in the past five years is the result of similar and foreseeable malfunction events.

55. During this downtime, Xcel is unable to determine whether the affected unit at the

Cherokee plant is in compliance with applicable opacity limits.

56. Although the monitors for the COM systems were upgraded in 2008, Cherokee continues to have downtime for each unit.

57. A chart summarizing all known continuous opacity monitor downtime violations from August 6, 2004 to August 6, 2009 is also included in Exhibit B.

## **CLAIMS FOR RELIEF**

### **FIRST CAUSE OF ACTION**

#### ***Violation of Continuous Monitoring Requirements***

58. Plaintiff incorporates the allegations in the preceding paragraphs as if set forth in full herein.

59. Xcel has unlawfully operated Cherokee and continues to do so by failing to continuously monitor opacity emissions, in violation of the continuous emission monitoring requirements set forth in Cherokee's Title V operating permit, 40 C.F.R. Part 75, and the Clean Air Act.

60. Xcel has violated these continuous monitoring requirements with at least 2,194 known hours of downtime from August 6, 2004 to August 6, 2009.

61. Cherokee's downtime as reported in its EER in most instances does not fall within one of the limited exceptions provided by Clean Air Act regulations. *See* 40 C.F.R. § 75.10(d). Cherokee's downtime is unexcused because it includes repeated monitor equipment and communication failures. Most of the monitoring downtime in the past five years is the result of similar, foreseeable malfunction events.

62. Xcel's violations of Cherokee's continuous opacity monitoring requirements are repeated and likely to continue.

63. As a result of these ongoing monitoring violations at the Cherokee plant, Xcel has violated and continues to violate Title IV and Title V of the Clean Air Act, as well as applicable provisions of the Colorado SIP and the Cherokee Title V permit. *See* 42 U.S.C. §§ 7651k(a), 7661a(a); 40 C.F.R. pt. 75; COLO. REV. STAT. §§ 25-7-114.3, 25-7-122(d); 5 COLO. CODE REGS. § 1001-5 pt. C (Operating Permits).

**SECOND CAUSE OF ACTION**  
***Violation of Opacity Limitations***

64. Plaintiff incorporate the allegations in the preceding paragraphs as if set forth in full herein.

65. Xcel, as owner and operator of Cherokee, has violated and continues to violate Cherokee's Title V operating permit and the Clean Air Act by allowing Cherokee's emissions to exceed the applicable 20% and 30% opacity limitations contained in the Cherokee Title V operating permit, issued by the State of Colorado.

66. Cherokee exceeded opacity limits with at least 49 known violations from August 6, 2004 to August 6, 2009.

67. Xcel's violations of said opacity limits are repeated and likely to continue. Xcel has unlawfully operated units at Cherokee in an uncontrolled manner, where data from the required continuous emission monitoring is unavailable. The unavailability of monitoring data makes it impossible to determine whether the opacity limits were violated or not for those periods of time.

68. As a result of these opacity violations at the Cherokee plant, Xcel has violated and continues to violate Title IV and Title V of the Clean Air Act, as well as applicable provisions of the Colorado SIP and the Cherokee Title V permit. *See* 42 U.S.C. §§ 7651k(a), 7661a(a); 40



C.F.R. pt. 75; COLO. REV. STAT. §§ 25-7-114.3, 25-7-122(d); 5 COLO. CODE REGS. § 1001-5 pt. C (Operating Permits).

**THIRD CAUSE OF ACTION**  
***Violation of Reporting Certification Requirements***

69. Plaintiff incorporates the allegations in the preceding paragraphs as if set forth in full herein.

70. Xcel failed to accurately report downtime violations in its Deviation Reports and Annual Compliance Reports over the past five years, in violation of Cherokee's Title V operating permit and the Clean Air Act.

71. Xcel failed to certify the accuracy and completeness of all Cherokee EER and Deviation Reports submitted over the past five years, in violation of Cherokee's Title V operating permit and the Clean Air Act.

72. Xcel's reporting violations are repeated and likely to continue.

73. As a result of these ongoing reporting violations at the Cherokee plant, Xcel has violated and continues to violate Title V of the Clean Air Act, as well as applicable provisions of the Colorado SIP and the Cherokee Title V permit. *See* 42 U.S.C. §§ 7651k(a), 7661a(a); 40 C.F.R. pt. 75; COLO. REV. STAT. §§ 25-7-114.3, 25-7-122(d); 5 COLO. CODE REGS. § 1001-5 pt. C (Operating Permits).

**PRAYER FOR RELIEF**

WHEREFORE, based upon the allegations contained in the foregoing paragraphs, the Plaintiff requests that this Court:

1. Declare that Xcel's failure to continuously monitor opacity violates the Clean Air Act;
2. Declare that Xcel's operation of Cherokee in excess of opacity limits violates the Clean Air Act;
3. Declare that Xcel has violated applicable reporting requirements under federal law;

4. Order Xcel to comply with opacity emissions, monitoring, reporting and certification requirements pursuant to the Clean Air Act, its Title V permit and all applicable state and federal regulations.
5. Enjoin Cherokee from operating its coal-fired boiler units unless its COM system equipment is functioning properly.
6. Assess a civil penalty against Xcel of up to \$37,500.00 per day for each violation of the Clean Air Act and applicable regulations;
7. Award Plaintiff its cost and reasonable attorneys' fees incurred in initiating and prosecuting this action; and
8. Grant such other relief as the Court deems just and proper.

Respectfully submitted,

s/ Michael Ray Harris  
CO Bar # 35395  
Michael Ray Harris  
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Dated: August 6, 2009

Plaintiff:  
WildEarth Guardians  
1536 Wynkoop St, Ste 301  
Denver, CO 80202

# **EXHIBIT A**



April 1, 2009

*Sent Via Certified Mail*

Richard C. Kelly  
Chairman, President, and CEO Xcel Energy  
Xcel Energy  
414 Nicollet Mall  
Minneapolis, MN 55401-1993

Steve Mills  
Regional Manager, Power Generation  
Public Service Company  
P.O. Box 840  
Denver, CO 80201-0840

Dean Metcalf  
Director, Air and Water  
Cherokee Station Power Plant  
P.O. Box 840  
Denver, CO 80201-0840

**Re: Cherokee Station Clean Air Act Violations**

Dear Mr. Kelly, Mr. Mills, and Mr. Metcalf :

In a letter dated January 28, 2008, Rocky Mountain Clean Air Action put you on notice of their intent to file suit against Xcel Energy for significant and ongoing violations of the Clean Air Act at the Cherokee Station Power Plant (also referred to as "Cherokee") located at 6198 Franklin Street in Adams County Colorado.<sup>1</sup> Since that date, Rocky Mountain Clean Air Action has formally merged with the organization, WildEarth Guardians, a nonprofit 501(c)(3) organization dedicated to protecting and restoring the American West. As a result of the merger, WildEarth Guardians assumed all of Rocky Mountain Clean Air Action's rights, responsibilities, liabilities, and obligations. By this letter therefore, WildEarth Guardians hereby assumes responsibility for Rocky Mountain Clean Air Action's notice of intent and restates and reaffirms its intent to file suit against you pursuant to the Clean Air Act, 42 U.S.C. § 7604(b)(1)(2007)

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<sup>1</sup> For the purposes of this notice, Xcel Energy refer to both Xcel Energy and Public Service Company of Colorado doing business as Xcel Energy.

over the significant and ongoing violations of the Clean Air Act at Cherokee detailed in the January 28, 2008 notice of intent to file suit.

Furthermore, WildEarth Guardians hereby amends the January 28, 2008 notice of intent to file suit to include additional violations of the Clean Air Act at Cherokee. Specifically, WildEarth Guardians hereby notifies you of our intent to file suit against Xcel Energy over additional violations of the Clean Air Act that occurred subsequent to January 28, 2008 and to clarify that the violations noticed in the January 28, 2008 letter are not excused by Xcel Energy's Clean Air Act Title V operating permit.

Pursuant to the Clean Air Act, 42 U.S.C. § 7604(a)(1)(2000), citizens are entitled to bring suit to enjoin violations of an "emission standard or limitation", and to seek civil penalties for such violations. An "emission standard or limitation" is defined as: (1) "a schedule or timetable of compliance, emission limitation, standard of performance or emissions standard, ... or (4) any other standard, limitation or schedule established under any permit issued pursuant to subchapter V of this chapter or under any applicable State implementation plan approved by the administrator." 42 U.S.C. §§ 7604(f)(1) and (4) (2000). Accordingly, WildEarth Guardians will bring suit to enjoin violations of the Colorado State Implementation Plan ("SIP") and opacity emission standards under the Cherokee Title V Permit, and will seek civil penalties for such violation.

## **I. Cherokee Station**

The Cherokee Station Power Plant is a coal-fired, steam-electric generating station with four operating units. Cherokee began operating in 1957 when Unit 1 went into service, followed by Unit 2 in 1959, Unit 3 in 1962, and Unit 4 in 1968. Cherokee controls emission by baghouses installed on all four units. In addition to the four units, Cherokee has point source emissions from five ash silos, one ash blower system, two coal crushers, a coal conveying system, five sodium reagent silos, four cooling water towers, two service water towers, one emergency generator, one aboveground gasoline storage tank, two line storage silos, two ball mill slakers, and two recycle mixers.

According to data submitted by Xcel to the U.S. Environmental Protection Agency ("EPA"), Cherokee has releases from its smokestacks, on average, 10,500 tons of nitrogen oxides, also known as NOx, annually into the air of Denver.<sup>2</sup> NOx is a group of harmful air pollutants that contribute to haze, ground-level ozone (the key ingredient of smog), fine particulate matter, acid precipitation, nitrogen deposition in streams and lakes, and respiratory illnesses.<sup>3</sup> The amount of NOx released by Cherokee is equivalent to the amount released by over 549,738 cars annually.<sup>4</sup>

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<sup>2</sup> According to data submitted to the EPA's Acid Rain Program.

<sup>3</sup> U.S. Environmental Protection Agency, Health and Environmental Impacts of NOx. Available at <http://www.epa.gov/air/urbanair/nox/hlth.html>.

<sup>4</sup> According to the U.S. Environmental Protection Agency, a standard car releases 38.2 pounds of NOx annually. See, [www.epa.gov/otaq/consumer/f00013.htm](http://www.epa.gov/otaq/consumer/f00013.htm).

NOx pollution from Cherokee is of concern in light of the fact that the Denver metropolitan region recently violated federal health standards limiting ground-level ozone. On November 20, 2007, the EPA designated the region, from Douglas County north to Greeley and Fort Collins, to be in violation of health standards due to three years of excessive ground-level ozone.<sup>5</sup> Formed when NOx reacts with sunlight, ground-level ozone can trigger asthma attacks, aggravate emphysema and other respiratory conditions, make it difficult for children, seniors, and active adults to breathe, and may even lead to premature death.<sup>6</sup>

As stated in the January 28, 2008 notice letter, Cherokee also releases a number of air pollutants that are considered hazardous to human health and welfare. According to Toxic Release Inventory data submitted by Xcel to the U.S. Environmental Protection Agency, in 2007 the plant released 162 pounds of mercury into the air of North Denver.<sup>7</sup> This amount of mercury is equivalent to the amount in approximately 104,000 household thermometers.<sup>8</sup> The amount of mercury in one household thermometer is enough to contaminate all of the fish in a lake with a surface area of 15 acres.<sup>9</sup> Mercury is a potent neurotoxin that can cause brain damage in children and developing fetuses.<sup>10</sup>

Also in 2007, Xcel reported the plant released 61 pounds of lead, 18,709 pounds of hydrochloric acid, 48,027 pounds of hydrofluoric acid, among other hazardous air pollutants.

WildEarth Guardians is concerned with opacity emissions from Units 1, 2, 3, and 4, the coal fired boilers. The EPA defines opacity as the degree to which transmittance of light is reduced by a specific air pollutant.<sup>11</sup> Opacity is also “a convenient surrogate for assessing mass emissions as a means to assure effective particulate emissions control.”<sup>12</sup> In order to analyze opacity, the continuous emissions opacity monitors pass a beam of light from one side of each Unit’s stack across the exhaust path to a reflector that returns light to the opacity sensor.<sup>13</sup> The opacity reading then reflects the “degree to which emissions reduce the transmission of light and obscure the view of an object in the background.”<sup>14</sup> A 100% opacity would mean that no light at all could pass through the emissions, whereas 0% opacity would mean light passes completely through the emissions and they are effectively invisible.<sup>15</sup> Therefore, opacity violations indicate

<sup>5</sup> U.S. Environmental Protection Agency, Denver’s Ozone Designation. Available at <http://www.epa.gov/region8/air/denverozone.html>.

<sup>6</sup> U.S. Environmental Protection Agency, Health Effects of Ozone in the General Population. Available at <http://www.epa.gov/03healthtraining/population.html>.

<sup>7</sup> See TRI Data at [http://www.epa.gov/cgi-bin/broker?view=ZPFA&trilib=TRIO0&sort=VIEW&sort\\_fint=1&state=&city=&spc=&zipcode=80216&zipsrch=yes&chemical=ALL&industry=2211&year=2007&tab\\_rpt=1&fld=RELLBY&fld=TSFDSP&service=oiia&program=xp\\_tri.sasmacr.tristart.macro](http://www.epa.gov/cgi-bin/broker?view=ZPFA&trilib=TRIO0&sort=VIEW&sort_fint=1&state=&city=&spc=&zipcode=80216&zipsrch=yes&chemical=ALL&industry=2211&year=2007&tab_rpt=1&fld=RELLBY&fld=TSFDSP&service=oiia&program=xp_tri.sasmacr.tristart.macro).

<sup>8</sup> 162 pounds \* 453.5 grams/lb = 85,779 grams/0.7 grams per thermometer = 104,952.

<sup>9</sup> According to Health Care Without Harm, [www.noharm.org](http://www.noharm.org).

<sup>10</sup> U.S. Environmental Protection Agency, Mercury Health Effects. Website available at <http://www.epa.gov/mercury/effects.htm>.

<sup>11</sup> See Particulate Matter and Opacity, available at <http://www.epa.gov/Region5/air/naaqs/opacity.htm>.

<sup>12</sup> *Id.*

<sup>13</sup> *Sierra Club v. Public Service Company of Colorado Inc.*, 894 F.Supp. 1455, 1457 (D. Colo. 1995).

<sup>14</sup> *Id.*

<sup>15</sup> *Sierra Club v. Georgia Power Comp.*, 443 F.3d 1346, 1350 (11th Cir. 2006).

excess emissions of particulate matter, which can include soot, mercury particles, and condensed acid gases.

## II. The Violations

### a. Opacity Limitations and Violations

Emissions from Cherokee are subject to opacity limits. First, the Colorado SIP states that Cherokee must not cause emission into the atmosphere of any air pollutant which is in excess of 20% opacity for any six minute period.<sup>16</sup> However, during the building of a new fire, cleaning of fire-boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, an owner or operator may allow emissions of an air pollutant in excess of 30% for a period or periods aggregating more than six minutes in any sixty consecutive minute. *Id.* As a standard or limitation under the Colorado SIP, the opacity standard constitutes an "emission standard or limitation" under 42 U.S.C. § 7604(f)(4) (2000) subject to citizen suit under 42 U.S.C. § 7604(a) (2000).

Second, Cherokee is subject to a Title V Permit under the CAA. The Title V Permit, which was attached to the January 28, 2008 notice letter, limits the opacity of emissions in a manner identical to the terms of the Colorado SIP discussed above. As a standard or limitation established under a Title V permit that is in effect under the CAA and under the Colorado SIP, the opacity limitation is an "emission standard or limitation" under 42 U.S.C. § 7604(f)(4) (2000) subject to citizen suit under 42 U.S.C. § 7604(a) (2000).

In the January 28, 2008 notice letter, Rocky Mountain Clean Air Action detailed violations of opacity limits at Cherokee that were based on Xcel's own Excess Emission Reports ("EERs"). Accounting for the five-year statute of limitations, these EERs indicate Xcel Energy has violated opacity limits at Cherokee 403 occasions in the last five years. WildEarth Guardians hereby restates those violations for the purposes of this notice letter. Furthermore, WildEarth Guardians obtained more recent EERs through a Colorado Public (Open) Records Act Request to the Colorado Department of Public Health and Environment, Air Pollution Control Division. These EERs show five additional opacity violations as follows:

Date	Time	Unit	Opacity Reading
12/05/2007	05:48 a.m.	3	25.2%
12/22/2007	15:30 p.m.	3	40.1%
1/14/2008	09:48 a.m.	3	22.7%
03/24/2008	15:00 p.m.	3	22.7%
06/23/2008	17:24 p.m.	4	22.9%

<sup>16</sup> "Emission Control Regulations for Particulates Smokes Carbon Monoxide and Sulfur Oxides for the State of Colorado" *Smoke and Opacity*, 68 Fed. Reg. 4933 (Jan. 31, 2003).

WildEarth Guardians hereby alleges all the opacity violations set forth in the January 28, 2008 notice of intent to file suit against Xcel Energy, as well as the aforementioned additional opacity violations.

**b. Downtime Limitations and Violations**

In addition to opacity limitations from the Colorado SIP and Cherokee's Title V Permit, Cherokee is required to monitor opacity in accordance with 40 C.F.R. § 75.10 (2007). 40 C.F.R. § 75.10 (2007) states that opacity must be monitored "by installing, certifying, operating, and maintaining a continuous emission monitoring system and a flow monitoring system. Further, the owner or operator must ensure that all continuous emission and opacity monitoring systems are in operation and monitoring unit emissions or opacity at all times."

As noted in the January 28, 2008 notice of intent, Cherokee's Title V Permit also states that Cherokee must follow various requirements under 40 C.F.R. § 60. Cherokee's Title V permit specifically states that Cherokee must follow the calibration requirements in 40 C.F.R. § 60.13(d). Part 60.13(d) states that owners and operators must calibrate opacity monitors at least twice a day. Therefore, Cherokee is justified in claiming that monitor downtime for opacity calibration is acceptable.

The January 28, 2008 notice of intent detailed the monitor downtime violations and WildEarth Guardians hereby restates those violations. WildEarth Guardians further alleges that from the fourth quarter of 2007 to the second quarter of 2008, Xcel Energy violated monitor downtime regulations an additional 1,899 times. Taking into account the five year statute of limitations and allowing for calibration downtime, Cherokee's EERs show at least 11,504 violations of downtime regulations from the second quarter of 2004 to the second quarter of 2009. Xcel Energy's own EERs specifically list the exact dates and times of each violation.

Together, the opacity and downtime violations come to 11,912 total violations.

**III. Conclusion**

Cherokee Station Power Plant has violated opacity regulations and monitoring regulations consistently during the past five years as described above. Because civil liability for these past and present violations extends at least for the past five years, WildEarth Guardians intends to file suit to enjoin the violations, obtain civil penalties for noncompliance, recover attorneys' fees and costs, and any other appropriate relief.<sup>17</sup>

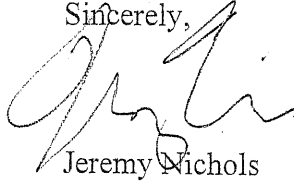
WildEarth Guardians contact information is listed below. If you have questions regarding the allegations, believe that any of the above information is in error, or would like to discuss a settlement of this matter prior to the initiation of litigation, please contact WildEarth Guardians at (303) 573-4898 x 537 or our counsel, Mike Harris, at the University of Denver Environmental Law Clinic at (303) 871-6140.

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<sup>17</sup> 28 U.S.C. § 2462 (2000).



Sincerely,



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# ROCKY MOUNTAIN CLEAN AIR ACTION

*Clean Air For Healthy Children and Healthy Communities*

January 28, 2008

*Sent Via Certified Mail, Return Receipt Requested*

Richard C. Kelly  
Chairman, President, and CEO Xcel Energy  
Xcel Energy  
414 Nicollet Mall  
Minneapolis, MN 55401-1993

Steve Mills  
Regional Manager, Power Generation  
Public Service Company  
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Denver, CO 80201-0840

Dean Metcalf  
Director, Air and Water  
Cherokee Station Power Plant  
P.O. Box 840  
Denver, CO 80201-0840

Re: Cherokee Station Clean Air Act Violations

Dear Mr. Kelly, Mr. Mills, and Mr. Metcalf:

Pursuant to the Clean Air Act, 42 U.S.C. § 7604(b)(1) (2000), this letter serves as notice that Rocky Mountain Clean Air Action (“RMCAA”) intends to sue Xcel Energy (“Xcel”), also known as Public Service Company of Colorado doing business as Xcel Energy, for significant and ongoing violations of the Clean Air Act (“CAA”) at the Cherokee Station Power Plant (“Cherokee”) located at 6198 Franklin Street in Adams County Colorado.<sup>1</sup> Specifically, Units 1, 2, 3, and 4 repeatedly violated opacity and opacity monitoring limits under federal and state law as described below. Between November 1, 2002 and October 30, 2007, Unit 1 opacity emissions violated applicable limits sixty-six times and downtime limits 2,144 times; Unit 2 opacity emissions violated applicable limits 136 times and downtime limits 4,546 times; Unit 3 opacity emissions violated applicable limits 229 times and downtime limits 3,006 times; and Unit 4 opacity emissions violated applicable limits 107 times and downtime limits 3,408 times.<sup>2</sup>

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<sup>1</sup> For the purposes of this notice, Xcel Energy refers to both Xcel Energy and Public Service Company of Colorado doing business as Xcel Energy.

<sup>2</sup> See Exhibit A.

Further, RMCAA intends to sue Xcel for failure to comply with certification compliance requirements under Cherokee's Title V Permit.<sup>3</sup> Over the past five years, Cherokee reported 126 opacity violations in its Excess Emissions Reports and Semi-Annual Deviation Reports; however, Cherokee reported an additional 412 opacity violations as downtime in those reports.

RMCAA is dedicated to protecting clean air for healthy children and healthy communities in Colorado and the surrounding region. Our members live in the Denver area and are affected by the emissions from Cherokee. These air quality violations at Cherokee harm, and will continue to harm the health, aesthetic, and economic interests of the RMCAA and its members. Redressing Cherokee's Clean Air Act violations will redress the injuries to RMCAA and its members.

Pursuant to the CAA, 42 U.S.C. § 7604(a)(1) (2000), citizens are entitled to sue to enjoin violations of an "emission standard or limitation," and to seek civil penalties for such violations. An "emission standard or limitation" is defined as: (1) "a schedule or timetable of compliance, emission limitation, standard of performance or emissions standard, ... or (4) any other standard, limitation or schedule established under any permit issued pursuant to subchapter V of this chapter or under any applicable State Implementation Plan approved by the administrator."<sup>4</sup> Accordingly, RMCAA may sue to enjoin violations of the Colorado State Implementation Plan ("SIP") and opacity emission standards under the Cherokee Title V Permit, and may seek civil penalties for such violations.

The CAA provides for civil penalties of up to \$32,500.00 for each violation per day for violations occurring on or after March 14, 2004,<sup>5</sup> and \$27,500.00 per violation per day for violations occurring before March 14, 2004.<sup>6</sup> In accordance with 42 U.S.C. § 7604(b)(1) (2000), this letter is notification that RMCAA intends to file suit in the United States District Court for the District of Colorado any time sixty days after the postmark date of this letter and to enjoin violations described below. Plaintiffs intend to seek additional civil penalties of up to \$100,000.00 to be used in beneficial mitigation projects.<sup>7</sup>

## **I. Cherokee Station**

As you know, Cherokee is a coal-fired, steam-electric generating station with four operating units. Cherokee began operating in 1957 when Unit 1 went into service, followed by Unit 2 in 1959, Unit 3 in 1962, and Unit 4 in 1968. Cherokee controls emission by baghouses installed on all four units.<sup>8</sup> According to data submitted by Xcel to the U.S. Environmental Protection Agency ("EPA"), on average, Cherokee released 10,500 tons of nitrogen oxides ("NO<sub>x</sub>"), from its smokestacks annually into the Denver metropolitan region's air.<sup>9</sup> NO<sub>x</sub> are

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<sup>3</sup> Title V Permit Appendix B Part III; Title V Permit §III 4.

<sup>4</sup> 42 U.S.C. §§ 7604(f)(1), (4) (2000).

<sup>5</sup> 42 U.S.C. §§ 7413(e), 7604(a)(200); 40 C.F.R. §§ 19.2, 19.4 (2005)

<sup>6</sup> 69 Fed. Reg. 7121.

<sup>7</sup> 42 U.S.C. § 7604(g)(2) (2000).

<sup>8</sup> In addition to the four units, Cherokee has point source emissions from five ash silos, one ash blower system, two coal crushers, a coal conveying system, five sodium reagent silos, four cooling water towers, two service water towers, one emergency generator, one aboveground gasoline storage tank, two line storage silos, two ball mill slakers, and two recycle mixers.

<sup>9</sup> According to data submitted to the EPA's Acid Rain Program.

harmful air pollutants that contribute to haze, ground-level ozone (the key ingredient of smog), fine particulate matter, acid precipitation, nitrogen deposition in streams and lakes, and respiratory illnesses.<sup>10</sup> The amount of NO<sub>x</sub> released by Cherokee is equivalent to the amount released by over 549,738 cars annually.<sup>11</sup>

NO<sub>x</sub> pollution from Cherokee is of concern in light of the fact that the Denver metropolitan region recently violated federal health standards limiting ground-level ozone. On November 20, 2007, the EPA designated the region, from Douglas County north to Greeley and Fort Collins, to be in violation of health standards due to three years of excessive ground-level ozone.<sup>12</sup> Formed when NO<sub>x</sub> reacts with sunlight, ground-level ozone can trigger asthma attacks, aggravate emphysema and other respiratory conditions, make it difficult for children, seniors, and active adults to breathe, and may even lead to premature death.<sup>13</sup>

Cherokee also releases a number of air pollutants that are hazardous to human health and welfare.<sup>14</sup> According to data that Xcel submitted to the Colorado Air Pollution Control Division in 2006, the plant released 189.15 pounds of mercury into the air of north Denver.<sup>15</sup> This amount of mercury is equivalent to the amount in approximately 122,000 household thermometers.<sup>16</sup> Mercury is a potent neurotoxin that can cause brain damage in children and developing fetuses.<sup>17</sup> According to Health Care Without Harm, the amount of mercury in one household thermometer is enough to contaminate all of the fish in a lake with a surface area of fifteen acres.<sup>18</sup> Mercury is a potent neurotoxin that can cause brain damage in children and developing fetuses.<sup>19</sup> Also in 2006, Xcel reported the plant released 65.8 pounds of lead, 1,447 pounds of selenium, 196 pounds of formaldehyde, 16,977 pounds of hydrochloric acid, and 817 pounds of sulfuric acid among other hazardous air pollutants.<sup>20</sup>

RMCAA is concerned with opacity emissions from Units 1, 2, 3, and 4. The EPA defines opacity as the degree to which transmittance of light is reduced by a specific air pollutant.<sup>21</sup> Opacity is also “a convenient surrogate for assessing mass emissions as a means to assure effective particulate emissions control.”<sup>22</sup> In order to analyze opacity, the continuous emissions opacity monitors pass a beam of light from one side of each Unit’s stack across the exhaust path

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<sup>10</sup> U.S. Environmental Protection Agency, Health and Environmental Impacts of NO<sub>x</sub>. Available at <http://www.epa.gov/air/urbanair/nox/hlth.html>.

<sup>11</sup> See [www.epa.gov/otaq/consumer/f00013.htm](http://www.epa.gov/otaq/consumer/f00013.htm).

<sup>12</sup> U.S. Environmental Protection Agency, Denver’s Ozone Designation. Website available at <http://www.epa.gov/region8/air/denverozone.html>.

<sup>13</sup> U.S. Environmental Protection Agency, Health Effects of Ozone in the General Population. Website available at <http://www.epa.gov/03healthtraining/population.html>.

<sup>14</sup> See Exhibit B.

<sup>15</sup> *Id.*

<sup>16</sup> 189.15 pounds = 85,779 grams/0.7 grams per thermometer = 122,542 thermometers.

<sup>17</sup> U.S. Environmental Protection Agency, Mercury Health Effects. Website available at <http://www.epa.gov/mercury/effects.htm>.

<sup>18</sup> Available at [www.noharm.org](http://www.noharm.org).

<sup>19</sup> U.S. Environmental Protection Agency, Mercury Health Effects. Website available at <http://www.epa.gov/mercury/effects.htm>.

<sup>20</sup> See Exhibit B.

<sup>21</sup> Particulate Matter and Opacity, available at <http://www.epa.gov/Region5/air/naaqs/opacity.htm>.

<sup>22</sup> *Id.*

to a reflector that returns light to the opacity sensor.<sup>23</sup> The opacity reading reflects the “degree to which emissions reduce the transmission of light and obscure the view of an object in the background.”<sup>24</sup> A 100% opacity reading occurs when no light at all could pass through the emissions. Conversely, 0% opacity indicates that light passes completely through the emissions and the emissions are effectively invisible.<sup>25</sup> Therefore, opacity violations indicate excess emissions of particulate matter, which can include soot, mercury particles, and condensed acid gases.

## II. The Violations

### a. Opacity Limitations and Violations

Emissions from Cherokee are subject to opacity limits. First, the Colorado SIP states that Cherokee must not emit into the atmosphere any air pollutant in excess of 20% opacity for any six-minute period.<sup>26</sup> However, during the building of a new fire, cleaning of fire-boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, an owner or operator may emit an air pollutant in excess of 30% for a period, or periods aggregating more than six minutes in any sixty consecutive minutes.<sup>27</sup> The opacity standard under the Colorado SIP constitutes an “emission standard or limitation” under 42 U.S.C. § 7604(f)(4) (2000) subject to citizen suits under 42 U.S.C. § 7604(a) (2000).

Second, Cherokee must operate in compliance with a Title V Permit under the CAA. The Title V Permit limits the opacity of emissions in a manner identical to the terms of the Colorado SIP discussed above.<sup>28</sup> A standard or limitation under a Title V permit that is in effect under the CAA and under the Colorado SIP is an “emission standard or limitation” under 42 U.S.C. § 7604(f)(4) (2000) subject to citizen suits under 42 U.S.C. § 7604(a) (2000).

RMCAA obtained Excess Emissions Reports (“EERs”) showing persistent violations of opacity limits at Cherokee from the fourth quarter of 2002 through the third quarter of 2007. RMCAA obtained this information by filing a Colorado Public (Open) Records Act Request dated October 17, 2007 to the Colorado Department of Public Health and Environment, Air Pollution Control Division. The EERs show 523 violations of the 20% opacity limit,<sup>29</sup> and 15 violations of the 30% opacity limit.<sup>30</sup> Cherokee’s EERs specifically list the exact dates and times of all opacity violations.<sup>31</sup>

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<sup>23</sup> *Sierra Club v. Public Service Company of Colorado Inc.*, 894 F.Supp. 1455, 1457 (D. Colo. 1995).

<sup>24</sup> *Id.*

<sup>25</sup> *Sierra Club v. Georgia Power Comp.*, 443 F.3d 1346, 1350 (11th Cir. 2006).

<sup>26</sup> “Emission Control Regulations for Particulates Smokes Carbon Monoxide and Sulfur Oxides for the State of Colorado” *Smoke and Opacity*, 68 Fed. Reg. 4933 (Jan. 31, 2003).

<sup>27</sup> *Id.*

<sup>28</sup> Title V Permit § 11(attached as Exhibit C).

<sup>29</sup> See Exhibit D.

<sup>30</sup> See Exhibit E.

<sup>31</sup> See Exhibit F. Please note that in an effort to save paper, copies of the EERs are only being sent to Xcel Energy, the Cherokee Station Power Plant, and the Regional EPA office. All other recipients are encouraged to reference Exhibit A for a summary of the violations contained in the reports.

While Cherokee reported 126 violations of the opacity limit in the EERs and Semi-Annual Deviation Reports, Cherokee reported and certified an additional 412 opacity violations as downtime violations in those reports.<sup>32</sup> Pursuant to Cherokee's Title V Permit, every EER and Semi-Annual Deviation Report must contain a statement of completeness certifying that the information in the report is correct.<sup>33</sup> Specifically, the "responsible officials" submitting Semi-Annual Deviation Reports must certify that they have "reviewed the information being submitted in its entirety and, based on information and belief formed after reasonable inquiry, [they] certify that the statements and information contained in [the] submittal are true, accurate, and complete."<sup>34</sup> Similarly, the "designated representative" must submit a compliance certification with every EER in accordance with 40 CFR Part 75.64.<sup>35</sup> Because Cherokee reported and certified over 400 opacity violations as downtime violations in the EERs, and then again in the Semi-Annual Deviation Reports, RMCAA alleges that Cherokee breached this requirement under the Title V Permit.

### **b. Downtime Limitations and Violations**

In addition to opacity limitations from the Colorado SIP and Cherokee's Title V Permit, Cherokee is required to monitor opacity in accordance with 40 C.F.R. § 75.10 (2007). 40 C.F.R. § 75.10 (2007) states that opacity must be monitored "by installing, certifying, operating, and maintaining a continuous emission monitoring system and a flow monitoring system. Further, the owner or operator must ensure that all continuous emission and opacity monitoring systems are in operation and monitoring unit emissions or opacity at all times."

Cherokee's Title V Permit also states that Cherokee must follow various requirements under 40 C.F.R. § 60.<sup>36</sup> Cherokee's Title V permit specifically states that Cherokee must follow the calibration requirements in 40 C.F.R. § 60.13(d).<sup>37</sup> Section 60.13(d) states that owners and operators must calibrate opacity monitors at least twice a day.<sup>38</sup> Therefore, Cherokee may claim that monitor downtime for opacity calibration is acceptable. Allowing for calibration downtime, Cherokee's EERs show 13,104 violations of downtime regulations.<sup>39</sup> Additionally, Cherokee's EERs specifically list the exact dates and times of each violation.<sup>40</sup>

Together, the opacity and downtime violations come to 13,642 total violations. Pursuant to the CAA, RMCAA plans to seek the maximum civil penalty for each violation. Because of the repeated violations, Cherokee faces a total amount of \$412,605,000.00 in civil penalties.

### **III. Conclusion**

Cherokee Station Power Plant violated opacity regulations and monitoring regulations consistently during the past five years as described above. Because civil liability for these past

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<sup>32</sup> See Exhibit A. All violations disguised as downtime included in this summary.

<sup>33</sup> Title V Permit App. B pg. 9; Title V Permit §III 4.

<sup>34</sup> *Id.*

<sup>35</sup> Title V Permit §III 4, *citing* 40 C.F.R. 75.64 (c).

<sup>36</sup> Title V Permit § 10.

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

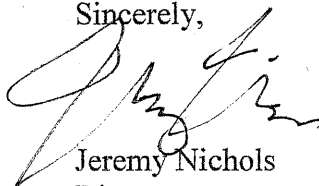
<sup>39</sup> See Exhibit G.

<sup>40</sup> See Exhibit F.

and present violations extends at least for the past five years, RMCAA intends to file suit to enjoin the violations, obtain civil penalties for noncompliance, recover attorneys' fees and costs, and any other appropriate relief.<sup>41</sup>

RMCAA's contact information is listed below. If you have any questions regarding the allegations, believe that any of the above information is in error, or would like to discuss a settlement of this matter prior to the initiation of litigation, please contact RMCAA at (303) 454-3370 or our counsel, Kay Bond, at the University of Denver Environmental Law Clinic at (303) 871-6140.

Sincerely,



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<sup>41</sup> 28 U.S.C. § 2462 (2000).

# **EXHIBIT B**



## Downtime and Opacity Exceedances from 8/6/2004

Quarter and Unit	Operating Hours	Total Downtime (Hours)	Opacity Exceedances
<b>2004Q3</b>	<b>4913.28</b>	<b>78.7</b>	<b>1</b>
Unit 1	1165.03	14.7	0
Unit 2	1318.65	35.7	0
Unit 3	1244.98	15.0	0
Unit 4	1184.62	13.3	1
<b>2004Q4</b>	<b>7461.75</b>	<b>195.6</b>	<b>5</b>
Unit 1	1201.92	18.0	2
Unit 2	2126.33	70.8	0
Unit 3	2001.17	28.2	2
Unit 4	2132.33	78.6	1
<b>2005Q1</b>	<b>6657.9</b>	<b>146.3</b>	<b>1</b>
Unit 1	1709.58	22.5	0
Unit 2	2107.87	23.3	0
Unit 3	840.57	74.4	1
Unit 4	1999.88	26.1	0
<b>2005Q2</b>	<b>8393.96</b>	<b>98.1</b>	<b>3</b>
Unit 1	2083.53	20.8	1
Unit 2	2079	24.2	0
Unit 3	2142.08	31.9	1
Unit 4	2089.35	21.2	1
<b>2005Q3</b>	<b>7773.99</b>	<b>148.5</b>	<b>0</b>
Unit 1	1712.73	19.2	0
Unit 2	2041.2	76.2	0
Unit 3	2160.63	27.9	0
Unit 4	1859.43	25.2	0
<b>2005Q4</b>	<b>8662.4</b>	<b>116.5</b>	<b>0</b>
Unit 1	2198.18	38.5	0
Unit 2	2196.7	25.3	0
Unit 3	2204.95	31.3	0
Unit 4	2062.57	21.4	0
<b>2006Q1</b>	<b>7203.95</b>	<b>88.3</b>	<b>0</b>
Unit 1	1723.88	19.4	0
Unit 2	1980.23	23.6	0
Unit 3	2082.67	25.7	0
Unit 4	1417.17	19.6	0
<b>2006Q2</b>	<b>8008.33</b>	<b>78.0</b>	<b>10</b>
Unit 1	2038.88	11.8	10
Unit 2	1950	16.9	0
Unit 3	1921.23	37.3	0
Unit 4	2098.22	12.0	0
<b>2006Q3</b>	<b>8134.5</b>	<b>70.3</b>	<b>3</b>
Unit 1	1716.72	10.1	3
Unit 2	2031.37	11.7	0
Unit 3	2207.33	27.3	0

Quarter and Unit	Operating Hours	Total Downtime (Hours)	Opacity Exceedances
Unit 4	2179.08	21.2	0
<b>2006Q4</b>	<b>7877.57</b>	<b>210.5</b>	<b>9</b>
Unit 1	2094.62	15.5	0
Unit 2	1928.75	9.0	9
Unit 3	1910.47	114.3	0
Unit 4	1943.73	71.7	0
<b>2007Q1</b>	<b>7820.82</b>	<b>115.6</b>	<b>1</b>
Unit 1	2151.88	46.1	0
Unit 2	1630.02	7.6	0
Unit 3	1896.32	28.1	0
Unit 4	2142.6	33.8	1
<b>2007Q2</b>	<b>7563.62</b>	<b>167.7</b>	<b>10</b>
Unit 1	2054.75	44.5	3
Unit 2	1321.5	47.9	0
Unit 3	2120.07	46.3	7
Unit 4	2067.3	29.0	0
<b>2007Q3</b>	<b>7873.4</b>	<b>161.3</b>	<b>0</b>
Unit 1	1828.47	14.7	0
Unit 2	2161.85	117.1	0
Unit 3	1962.23	11.8	0
Unit 4	1920.85	17.7	0
<b>2007Q4</b>	<b>6835.62</b>	<b>54.2</b>	<b>2</b>
Unit 1	702.73	3.6	0
Unit 2	2160.97	18.7	0
Unit 3	2205.7	11.9	2
Unit 4	1766.22	20.0	0
<b>2008Q1</b>	<b>7540.95</b>	<b>169.9</b>	<b>2</b>
Unit 1	2058.83	59.5	0
Unit 2	1279.62	6.1	0
Unit 3	2183.92	36.0	2
Unit 4	2018.58	68.3	0
<b>2008Q2</b>	<b>7295.83</b>	<b>81.4</b>	<b>0</b>
Unit 1	2184	12.9	0
Unit 2	2047.98	38.2	0
Unit 3	1166.17	18.5	0
Unit 4	1897.68	11.8	0
<b>2008Q3</b>	<b>8275.44</b>	<b>123.8</b>	<b>2</b>
Unit 1	2025.13	70.8	0
Unit 2	2083.03	18.1	0
Unit 3	2180.48	19.2	0
Unit 4	1986.8	15.7	2
<b>2008Q4</b>	<b>7020.92</b>	<b>42.4</b>	<b>0</b>
Unit 1	1205.37	5.9	0
Unit 2	1517.03	9.5	0
Unit 3	2093.57	15.8	0
Unit 4	2204.95	11.2	0

<b>Quarter and Unit</b>	<b>Operating Hours</b>	<b>Total Downtime (Hours)</b>	<b>Opacity Exceedances</b>
<b>2009Q1</b>	<b>4880.2</b>	<b>46.9</b>	<b>0</b>
Unit 1	1195.67	6.3	0
Unit 2	753.07	6.7	0
Unit 3	1689.18	8.6	0
Unit 4	1242.28	25.3	0
<b>Grand Total</b>	<b>140194.43</b>	<b>2194.0</b>	<b>49</b>