



April 1, 2009

*Sent Via Certified Mail*

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Steve Mills  
Regional Manager, Power Generation  
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Dean Metcalf  
Director, Air and Water  
Cherokee Station Power Plant  
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**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 NO<sub>x</sub>, annually into the air of Denver.<sup>2</sup> NO<sub>x</sub> 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 NO<sub>x</sub> 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 NO<sub>x</sub>. 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 NO<sub>x</sub> 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

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<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=TRIQ0&sort=VIEW\\_&sort\\_fmt=1&state=&city=&spc=&zipcode=80216&ziprch=yes&chemical=ALL\\_&industry=2211&year=2007&tab\\_rpt=1&fld=RELLBY&fld=TSFDSP&\\_service=oiaa&\\_program=xp\\_tri.sasmacr.tristart.macro](http://www.epa.gov/cgi-bin/broker?view=ZPFA&trilib=TRIQ0&sort=VIEW_&sort_fmt=1&state=&city=&spc=&zipcode=80216&ziprch=yes&chemical=ALL_&industry=2211&year=2007&tab_rpt=1&fld=RELLBY&fld=TSFDSP&_service=oiaa&_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%

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<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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