

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA
PITTSBURGH DIVISION**

THE SIERRA CLUB,

Plaintiff,

v.

Civil Action No. _____

NRG POWER MIDWEST LP,

Defendant.

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

1. This is a citizen suit for declaratory and injunctive relief against Defendant NRG Power Midwest LP (“NRG”) for violations of the Federal Water Pollution Control Act, 33 U.S.C. § 1251–1388 (“CWA”), and the Pennsylvania Clean Streams Law, 35 Pa. Cons. Stat. § 691.1–691.1001 (“CSL”).

2. Plaintiff brings this suit pursuant to the citizen suit provision of the CWA, 33 U.S.C. § 1365(a), and the citizen suit provision of the CSL, 35 Pa. Cons. Stat. § 691.601(c).

3. Plaintiff seeks a declaratory judgment, injunctive relief, civil penalties, and the award of costs, including attorneys’ and expert witness’ fees, for Defendant’s violation of the conditions and limitations in its Pennsylvania National Pollution Discharge Elimination System (“NPDES”) Permit No. PA0001627 at the Cheswick Generating Station (“Cheswick”) in Springdale, Pennsylvania.

JURISDICTION AND VENUE

4. This Court has subject matter jurisdiction under section 505(a) of the CWA, 33 U.S.C. § 1365(a) and 28 U.S.C. § 1331.

5. The Court has supplemental jurisdiction over the Pennsylvania Clean Streams Law claims because they form part of the same case or controversy under 28 U.S.C. § 1367(a).

6. On July 16, 2019, Plaintiff sent notice of the violations of Cheswick's NPDES permit and its intent to file suit to the Administrator of the U.S. Environmental Protection Agency ("EPA"), to the Regional Administrator of EPA's Region 3 Office, to the Pennsylvania Department of Environmental Protection ("DEP"), and to the Defendant, as required by section 505(b)(1)(A) of the CWA, 33 U.S.C. § 1365(b)(1)(A), and section 601 of the CSL, 35 Pa. Cons. Stat. § 691.601(e).

7. More than sixty days have passed since notice of the violation was served and neither the State of Pennsylvania nor EPA has commenced or is diligently prosecuting a civil or criminal action to redress the violations alleged in this complaint.

8. Venue is appropriate in the Western District of Pennsylvania pursuant to section 505(c)(1) of the CWA, 33 U.S.C. § 1365(c)(1), because the source of the violations is located within this District in Springdale Borough, Allegheny County, Pennsylvania.

PARTIES

9. Plaintiff, the Sierra Club ("Sierra Club"), is a nonprofit corporation incorporated in California, with more than 31,000 Pennsylvania members, and over 791,000 members nationwide.

10. Sierra Club is a "person" as defined by the CWA, 33 U.S.C. § 1362(5), and the CSL, 35 Pa. Cons. Stat. § 691.1.

11. Sierra Club is dedicated to exploring, enjoying, and protecting the wild places of the Earth; to practicing and promoting the responsible use of Earth's resources and ecosystems;

to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives.

12. Sierra Club's concerns encompass the exploration, enjoyment, and protection of the waters and ecosystems in Pennsylvania. Sierra Club and its members have aesthetic and recreational interests in the Allegheny River in the area affected by Cheswick's discharges.

13. Sierra Club has members, including Laura Jacko and Rick Duncan, who use, enjoy, and benefit from the water quality in the Allegheny River. See Exhibits G and H.

14. Heated wastewater discharges degrade the water quality of the Allegheny River, make the water aesthetically unpleasant and environmentally undesirable, and impair the water's suitability for aquatic life.

15. The environmental, aesthetic, and recreational interests of these members are adversely affected by Defendant's heat discharge in violation of Cheswick's NPDES permit.

16. Sierra Club's members would like to recreate in areas downstream from the Cheswick plant. The recreational interests of these members have been harmed by the discharge of heated wastewater into the Allegheny River. Members have refrained from kayaking and swimming activities in the Allegheny due to Cheswick's discharges of heated wastewater into the Allegheny River.

17. If Defendant's unlawful discharges ceased, the harm to the interests of Plaintiff's members would be redressed. Injunctions or civil penalties would redress Plaintiff's members' injuries by preventing or deterring future violations of the limits in Defendant's permit.

18. Defendant NRG Power Midwest LP is a limited partnership corporate entity incorporated in Delaware.

19. NRG is a “person” within the meaning of the CWA, 33 U.S.C. § 1362(5), and the CSL, 35 Pa. Cons. Stat. § 691.1.

FACTS

20. Defendant NRG owns and operates the Cheswick Generating Station in Springdale Borough, Allegheny County, Pennsylvania.

21. Cheswick is a single unit coal-fired power plant that has a once-through cooling system that takes in water from the Allegheny River through an intake designated as outfall 004 in Cheswick’s NPDES permit. Heated wastewater used for cooling is then discharged back into the Allegheny River through outfall 003, approximately one-quarter mile downstream of the intake.

22. Cheswick is one of the only coal-fired power plants in Pennsylvania that still uses a once-through system without an apparatus, such as a cooling tower or other cooling device, to decrease the temperature of the discharged water before it enters the receiving stream.

23. Upon information and belief, DEP was delegated authority from the United States Environmental Protection Agency under section 402 of the CWA, 33 U.S.C. § 1342(b), to issue general NPDES permits in 1991.

24. The Pennsylvania CSL authorizes DEP to issue NPDES permits in compliance with the CWA. 35 Pa. Cons. Stat. § 691.5(b)(5); 25 Pa. Code § 92a.1(a), (b).

25. Pursuant to the CWA and the Pennsylvania CSL, DEP issued NPDES permit No. PA0001627 to NRG on July 1, 2018, to be effective from August 1, 2018 through July 31, 2023.

26. The NPDES permit allows NRG to discharge limited quantities of pollutants from multiple outfalls into Little Deer Creek and the Allegheny River. See Exhibit A.

27. Cheswick discharges its cooling water from outfall 003. See Exhibit A.

28. The NPDES permit prohibits the cooling water discharged from outfall 003 from changing the receiving river temperature more than two degrees Fahrenheit during any one hour. See Exhibit A.

29. Discharging pollutants in violation of a permit condition constitutes a violation of the CWA, 33 U.S.C. §§ 1311(a), 1342(k), and the CSL, 35 Pa. Cons. Stat. § 691.611.

30. In June through October 2011, NRG sampled the river temperature on six days, approximately on a monthly basis, to track and measure the thermal discharge from outfall 003.

31. On each of these days, NRG sampled at three locations upstream and seven locations downstream of outfall 003 on the Allegheny River.

32. The sampling revealed that Cheswick's thermal discharge from outfall 003 caused an increase in temperature of the surface of the Allegheny River (a "thermal plume") of at least two degrees (and often much higher) across nearly the entire width of the river on all six days of sampling.

33. Relative to a point approximately 500 feet upstream of outfall 003, the thermal plumes caused an increase of at least two degrees in the river temperature at every point sampled for over 200 feet downstream. This temperature change occurred on all six days that NRG sampled.

34. On July 27, 2011, the surface temperature of the Allegheny was elevated above two degrees for over a mile downstream, past the Bill Young Lock & Dam.

35. On July 27, 2011, the thermal discharges raised the temperature of the river by eight (at about 100 feet downstream of the outfall) up to eighteen degrees (about 500 feet downstream of the outfall) Fahrenheit relative to the temperature measured at 500 feet upstream from outfall 003.

36. In April 2019, Sierra Club deposed NRG's environmental engineer Stephen Frank in a separate matter. During that deposition, Mr. Frank explained that since 2011 there have been no changes in the operation of the Cheswick Plant that would have an effect on the thermal plume resulting from heated wastewater discharge to the Allegheny. During the deposition, Mr. Frank also explained that there were no significant changes in the condition of the Allegheny River that would change the results of the 2011 study, if it were conducted in 2019.

37. During the deposition, Mr. Frank stated that, due to the lack of changes in the plant characteristics and river conditions, a new thermal plume study would likely produce the same outcome as the 2011 study.

38. Sierra Club compared plant characteristics and river conditions to the plant characteristics and conditions present during the 2011 thermal plume study. See Exhibit B.

39. Based on this comparison, Sierra Club found at least eight days during the current permit term in 2018 when the conditions on the Allegheny River and Cheswick operations were comparable to conditions during the 2011 thermal plume study. See Exhibit B.

40. Upon information and belief, on those eight occasions, the Cheswick plant produced similar thermal plumes to those identified in the 2011 study. See Exhibit B.

41. Upon information and belief, NRG violated its permit at least eight times from August 8, 2018 to September 6, 2018 by discharging heat from outfall 003 that raised the temperature of the Allegheny River by more than two degrees for at least one hour. See Exhibit B.

42. On June 2, 2019, Sierra Club sampled the surface temperature of the Allegheny six times upstream and fourteen times downstream of outfall 003 on the Allegheny River while the Cheswick plant was operating. See Exhibit C.

43. The samples were taken in the same area sampled in NRG's 2011 study.

44. The results of the temperature sampling study confirmed that the water downstream of the outfall was significantly warmer than recorded upstream temperatures. See Exhibit C.

45. At seven of the fourteen downstream points sampled the surface temperature of the water downstream was more than two degrees than the highest recorded upstream temperature. The differences were as large as 7.16 degrees Fahrenheit, more than five degrees warmer than NRG's permit allows. See Exhibit C.

46. The elevated river temperatures recorded downstream of outfall 003 persisted for at least one hour. See Exhibit C.

47. The thermal plume documented by Sierra Club's June 2 study extended over 1000 feet from outfall 003. See Exhibit C.

48. On August 6, 2019, Sierra Club sampled the surface temperature of the Allegheny four times upstream and fifteen times downstream of outfall 003 while the Cheswick plant was operating. See Exhibit D.

49. The samples were taken in the same area sampled in NRG's 2011 study and Sierra Club's June 2, 2019 sampling.

50. The sampling study confirmed that the water downstream of the outfall was significantly warmer than recorded upstream temperatures. See Exhibit D.

51. At eleven of the fifteen different downstream points sampled, the surface temperature of the water was more than two degrees warmer than the highest recorded upstream temperature. The differences were as large as 10.24 degrees Fahrenheit, more than eight degrees warmer than NRG's permit allows. See Exhibit D.

52. The thermal plume documented by Sierra Club's August 6 study extended over 1000 feet downstream from outfall 003. See Exhibit D.

53. The thermal plume spanned the entire width of the Allegheny River, a distance of almost 1000 feet. See Exhibit D.

54. The elevated river temperatures recorded downstream of outfall 003 persisted for at least one hour. See Exhibit D.

55. On October 1, 2019, Sierra Club sampled the surface temperature of the Allegheny ten times upstream and twelve times downstream (and in the vicinity) of outfall 003 while the Cheswick plant was operating.

56. The samples were taken in the same area sampled in NRG's 2011 study, Sierra Club's June 2 and August 6 samples.

57. The sampling study confirmed that the water downstream of the outfall was significantly warmer than recorded upstream temperatures. See Exhibit E.

58. At all twelve of the downstream points sampled, the surface temperature of the water was more than two degrees warmer than the highest recorded upstream temperature. The differences were as large as 13.30 degrees Fahrenheit, more than eleven degrees warmer than NRG's permit allows. See Exhibit E.

59. The thermal plume documented by Sierra Club's October 1 study extended over 1000 feet downstream from outfall 003. See Exhibit E.

60. The thermal plume spanned the entire width of the Allegheny River, a distance of almost 1000 feet. See Exhibit E.

61. The elevated river temperatures recorded downstream of outfall 003 persisted for at least one hour. See Exhibit E.

62. On October 3, 2019, Sierra Club sampled the surface temperature of the Allegheny four times upstream and twenty-nine times downstream of outfall 003 while the Cheswick plant was operating.

63. The samples were taken in the same area sampled in NRG's 2011 study, and Sierra Club's June 2, August 6, and October 1 samples.

64. The sampling study confirmed that the water downstream of the outfall was significantly warmer than recorded upstream temperatures. See Exhibit F.

65. At nineteen of the twenty-nine different downstream points sampled, the surface temperature of the water was more than two degrees warmer than the highest recorded upstream temperature. The differences were as large as 15.10 degrees Fahrenheit, more than thirteen degrees warmer than NRG's permit allows. See Exhibit F.

66. The thermal plume documented by Sierra Club's October 3 study extended over 2000 feet downstream from outfall 003. See Exhibit F.

67. The thermal plume spanned the entire width of the Allegheny River, a distance of almost 1000 feet. See Exhibit F.

68. The elevated river temperatures recorded downstream of outfall 003 persisted for at least one hour. See Exhibit F.

69. The facts demonstrate that in addition to the eight violations in 2018, on at least four separate days in 2019, NRG violated its permit by discharging heat from outfall 003 that raised the temperature of the Allegheny River by more than two degrees for at least one hour.

**FIRST CLAIM FOR RELIEF
CWA VIOLATIONS**

70. Plaintiffs incorporate by reference all allegations contained in paragraphs 1 through 69 above.

71. Section 301(a) of the CWA, 33 U.S.C. § 1311(a), prohibits the discharge of pollutants from a point source into the waters of the United States, unless the discharge complies with the terms of an NPDES permit issued pursuant to section 402 of the CWA, 33 U.S.C. § 1342(a).

72. Section 505(a) of the CWA, 33 U.S.C. § 1365(a)(1)(A), authorizes citizens to bring suit for violation of any “effluent standard or limitation” under the CWA.

73. The CWA defines an “effluent standard or limitation” to include “permit[s] or condition[s] thereof.” 33 U.S.C. § 1365(f)(6).

74. Since at least August 2018, NRG has operated Cheswick in a manner that discharges heated wastewater from outfall 003 into the Allegheny River.

75. Both Sierra Club and NRG are “person[s]” for purposes of the CWA. 33 U.S.C. § 1362(5).

76. The Allegheny River is a “water[] of the United States,” Under the Clean Water Act. 33 U.S.C. § 1362(7).

77. Heat is a “pollutant” subject to the jurisdiction of the CWA. 33 U.S.C. § 1362(6).

78. Cheswick outfall 003 is a “point source” within the meaning of the CWA. 33 U.S.C. § 1362(14).

79. NRG must operate Cheswick pursuant to the conditions of its NPDES permit. 33 U.S.C. § 1342(k).

80. NRG's NPDES permit No. PA0001627 imposes a condition that the "discharge at Outfall 003 shall not cause a change in the stream temperature of more than 2°F during any one hour." Exhibit A.

81. Sierra Club's comparison of river conditions and plant characteristics in 2018 to NRG's 2011 study show that Cheswick produced thermal plumes greater than 2°F on at least eight occasions during the current permit term in 2018. See Exhibit B.

82. Based on this comparison, Cheswick violated its NPDES permit on at least eight occasions in 2018.

83. In addition, temperature sampling conducted by Sierra Club on June 2, 2019, August 6, 2019, October 1, 2019, and October 3, 2019, shows that the temperature of the Allegheny River below outfall 003 was more than 2°F higher than the water upstream of the outfall when the Cheswick plant was operating.

84. The elevated river temperature downstream of outfall 003 persisted for at least one hour on June 2, 2019, August 6, 2019, October 1, 2019, and October 3, 2019.

85. Based on these instream testing results, Cheswick violated its NPDES permit on June 2, 2019, August 6, 2019, October 1, 2019, and October 3, 2019.

86. NRG is subject to an injunction ordering it to cease its permit violations.

87. Pursuant to sections 309(d) and 505(a) of the CWA, 33 U.S.C. §§ 1319(d), 1365(a), NRG is liable for civil penalties up to \$54,833 per day for each violation that occurred after August 1, 2018. See 40 C.F.R. § 19.4 (2019).

88. NRG's violation of its NPDES permit No. PA0001627 and the CWA are continuing and intermittent.

89. Because of NRG's extensive history of violating the terms and conditions of its NPDES permit, Plaintiff alleges that without the imposition of appropriate civil penalties and the issuance of an injunction, NRG will continue to violate NPDES No. PA0001627.

**SECOND CLAIM FOR RELIEF
CSL VIOLATIONS**

90. Plaintiff incorporates by reference all allegations contained in paragraphs 1 through 89 above.

91. Section 601 of the CSL, 35 Pa. Cons. Stat. § 691.601(c) authorizes citizens to bring suit for violation of a permit issued by DEP in order to "compel compliance" with the CSL.

92. Sections 611 of the CSL, 35 Pa. Cons. Stat. § 691.611, prohibits discharging pollution into the waters of the Commonwealth of Pennsylvania contrary to the terms of an NPDES permit issued by DEP. 25 Pa. Code § 92a.9.

93. Both Sierra Club and NRG are "person[s]" for purposes of the CSL. 35 Pa. Cons. Stat. § 691.1.

94. The heated wastewater discharges identified in paragraphs 20 to 89 did not comply with the terms and conditions of NRG's NPDES permit and, therefore, are violations of the CSL. 35 Pa. Cons. Stat. § 691.611.

95. NRG's violations of its NPDES permit No. PA0001627 and the CSL are continuing and intermittent.

96. Because of this extensive history of violations of the terms and conditions of NRG's NPDES permit, Plaintiff alleges that without the imposition of an injunction, NRG will continue to violate NPDES No. PA0001627.

RELIEF REQUESTED

Wherefore, Plaintiff respectfully requests this Court to grant the following relief:

- A. Declare NRG to have violated and be in violation of the Clean Water Act, 33 U.S.C. §§1311 and 1342;
- B. Declare NRG to have violated and to be in violation of the Pennsylvania Clean Streams Law, 35 Pa. Cons. Stat. § 691.611;
- C. Order NRG to comply immediately with the terms and conditions of its NPDES permit, including the limitations on thermal effluent discharge as required by sections 301(a) and 402(a) of the CWA, 33 U.S.C. §§ 1311(a), 1342(a), and section 611 of the CSL, 35 Pa. Cons. Stat. § 691.611;
- D. Order NRG to pay appropriate civil penalties for each day of each violation of its NPDES permit pursuant to Sections 309(d) and 505(a) of CWA, 33 U.S.C. §§ 1319(d) and 1365(a);
- E. Order NRG to conduct monitoring and sampling to determine the environmental effects of its violations, to remedy and repair environmental degradation caused by its violations, and restore the environment to its prior, undamaged condition;
- F. Order NRG to pay Plaintiff's attorneys' fees, expert witness's fees, and all other reasonable costs and expenses incurred in the pursuit of this action;
- G. Grant such other relief as this Court deems appropriate.

Respectfully submitted,

/s/ Benjamin M. Barczewski

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