

4. BP's violations include repeatedly emitting particulate matter consisting of particles 10 microns or smaller in diameter ("PM₁₀") from five large steam-producing boilers in excess of numeric emissions limitations required under the Indiana SIP and its Title V operating permit, and failing to conduct required retests following "stack tests"¹ that demonstrated noncompliance.

5. Plaintiff is unaware of any actions taken by Defendant that are sufficient to eliminate future violations of the types alleged in Counts I through III, and absent an appropriate order from this Court, Defendants will continue to violate the Act as described in Counts I through III. Plaintiff intends this action to encompass any post-Complaint violations of the types alleged in Counts I through III.

6. Neither the federal nor the government of Indiana has taken enforcement action or other regulatory action sufficient to prevent BP from violating the Act at Whiting Refinery.

7. Pursuant to the Clean Air Act's citizen suit provision, 42 U.S.C. § 7604, Plaintiff Sierra Club files this complaint seeking declaratory and injunctive relief to remedy BP's violations of federally enforceable emissions limitations, including the installation of air pollution control devices or operating methods, the assessment of civil penalties for violations of federally enforceable emissions limits and testing requirements enumerated in this Complaint, environmental projects to offset or mitigate the harm caused by illegal emissions, and recovery of Plaintiff's reasonable fees and costs.

The Citizen Suit Provision of the Clean Air Act

8. The declared purpose of the Clean Air Act is "to protect and enhance the quality

¹ "Stack tests," which are sometimes also referred to as "performance tests," are periodic tests designed to measure emissions of specific regulated pollutants, and the efficiency of any associated control devices used to reduce emissions at facilities subject to the requirements of the Clean Air Act.

of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." 42 U.S.C. § 7401(b)(1).

9. In the "citizen suit" provision of the Act, Congress authorized "any person," upon providing a 60-day notice of intent, to commence a civil action on his own behalf "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." 42 U.S.C. § 7604(a)(1).

10. Congress enacted the citizen suit provision "specifically to encourage citizen participation in the enforcement of standards and regulations established under this Act . . . and intended the section to afford [citizens] very broad opportunities to participate in the effort to prevent and abate air pollution." *Pennsylvania v. Delaware Valley Citizens' Council for Clean Air*, 478 U.S. 546, 560 (1986), *supplemented*, 483 U.S. 711 (1987) (internal citations omitted).

11. Accordingly, the provision adopts a broad definition of "emission standard or limitation" which includes, *inter alia*: any "schedule or timetable of compliance, emissions limitation, standard of performance or emission standard . . . any other standard, limitation, or schedule established under any permit issued pursuant to [Title V] of this chapter or under any applicable State implementation plan approved by the Administrator, any permit term or condition, and any requirement to obtain a permit as a condition of operations." 42 U.S.C. § 7604(f).

12. The citizen suit provision grants federal district courts jurisdiction "to enforce such an emission standard or limitation, or such an order," by issuing a declaratory judgment, providing injunctive relief, imposing any appropriate civil penalties, and through any other equitable relief as the Court may deem just and proper. 42 U.S.C. § 7604(a).

13. In issuing any final order in an action brought under the citizen suit provision, a court may also “award costs of litigation (including reasonable attorney and expert witness fees) to any party, whenever the court determines such award is appropriate.” 42 U.S.C. § 7604(d).

JURISDICTION AND VENUE

14. This Court has subject matter jurisdiction over this action pursuant to 42 U.S.C. § 7604(a) of the Clean Air Act, and 28 U.S.C. § 1331 (federal question jurisdiction).

15. The relief requested is authorized pursuant to 42 U.S.C. § 7604 and 28 U.S.C. §§ 2201-2202.

16. This Court is the proper venue for this action because Whiting Refinery is located within this judicial district. 42 U.S.C. § 7604(c)(1); *see also* 28 U.S.C. § 1391(e) (federal venue provision).

NOTICE

17. On February 22, 2019, Plaintiff served all necessary parties, including Defendant, the United States Environmental Protection Agency (“EPA”), and the State of Indiana, with written notice of the claims stated in this action via U.S. Postal Service certified mail, in accordance with the notice requirements of 42 U.S.C. § 7604(b)(1)(A) and 40 C.F.R. § 54.2. *See generally* Notice of Intent to Sue Letter (February 22, 2019) (“NOI”), Ex. 1; Certified Mail Return Receipts and Delivery Confirmation for NOI, Ex. 2.

18. In accordance with the requirements of the Clean Air Act’s citizen suit provision and its implementing regulations, this notice letter included information sufficient to permit Defendant to identify the specific standards, limitations, or orders alleged to have been violated,

the activities alleged to be in violation, the person(s) responsible for the alleged violations, the location of the alleged violations, the likely dates of said violations, and the full names and addresses of the persons giving notice. 42 U.S.C. § 7604(b)(1)(A); 40 C.F.R. § 54.3.

19. Pursuant to the Clean Air Act's citizen suit provision, 42 U.S.C. § 7604(c)(3), Plaintiff has served a copy of the Complaint simultaneously upon the Attorney General of the United States and the EPA Administrator.

20. More than sixty days have elapsed since Plaintiff served the required notice. 42 U.S.C. § 7604(b)(1)(A).

PARTIES

21. Plaintiff Sierra Club is a national nonprofit organization with 67 chapters and about 780,000 members, including in Indiana, dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; 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.

22. The Sierra Club's concerns encompass protecting air quality and the adverse human health impacts associated with particulate matter pollution.

23. The Indiana Chapter of the Sierra Club, known as the Hoosier Chapter, is headquartered in Indianapolis, Indiana and has approximately 10,300 members. Several members of the Hoosier Chapter live, and own or rent property, in close proximity to the Whiting Refinery, are exposed to and adversely affected by the particulate matter emissions from Whiting Refinery alleged in this Complaint, and would ordinarily have standing to sue in their own right.

24. Sierra Club is a "person" within the meaning of 42 U.S.C. § 7602(e). As such,

Plaintiff may commence a civil action under 42 U.S.C. § 7604(a).

25. Defendant's repeated and ongoing violations of the PM₁₀ emissions limitations and testing requirements imposed by both the Indiana SIP and its Title V operating permit have injured and continue to injure the interests of Plaintiff and its members.

26. BP Products North America Inc., a subsidiary of BP p.l.c., is the legal owner and operator of the Whiting Refinery, is in control of day to day operations, and is therefore a "person" as defined by the Clean Air Act who is responsible for the violations alleged herein.

STATUTORY AND FACTUAL BACKGROUND

Description of Whiting Refinery and the No. 3 Stanolind Power Station Boilers

27. Whiting Refinery, which first began operating in 1889, is a massive oil refinery that encompasses approximately 1,400 acres off of the southwestern shore of Lake Michigan shoreline, across the three cities of Whiting, East Chicago, and Hammond, Indiana.²

28. Whiting Refinery is the largest refinery operated by BP anywhere in the world, the largest refinery in the American Midwest, and the 6th largest refinery in the United States. *Id.*

29. Per day, Whiting Refinery is capable of processing up to 430,000 barrels of crude oil, and producing over 15 million gallons of refined fuel products, such as gasoline, diesel fuel, and jet fuel.³ Whiting Refinery accounts for almost 23% of BP's global crude distillation capacity.⁴

30. In 2012, BP received authorization for a significant expansion of Whiting

² BP p.l.c. "Whiting Refinery: Facility Fact Sheet." Accessed on August 21, 2019. Accessible at: https://www.bp.com/content/dam/bp-country/en_us/PDF/Asphalt/Whiting_Facility_Fact_Sheet.pdf

³ BP p.l.c. "Whiting Refinery." Last accessed on August 21, 2019. Accessible at: https://www.bp.com/en_us/united-states/home/where-we-operate/indiana/whiting-refinery.html

⁴ See BP p.l.c. *BP Annual Report and Form 20-F (2018)*. At page 284 (stating BP's total global crude distillation capacity is 1,890,000 barrels per day). Accessible at: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/investors/bp-annual-report-and-form-20f-2018.pdf>

Refinery, which modified many of the refinery's units in order to enable them to process North American crude oil, including heavy crude oil from the Canadian tar sands region.⁵

31. This expansion project, known as the Whiting Refinery Modernization Project ("WRMP"), was completed on May 10, 2014. Whiting Refinery Title V Part 70 Permit, No. T 089-38868-00453, issued January 29, 2018 ("2018 Title V Permit"), Section D.0.1.

32. Whiting Refinery's No. 3 Stanolind Power Station is comprised of five individual boilers (collectively, the "Boilers"), all of which burn refinery gas, natural gas, or liquefied petroleum gas in order to produce steam needed at process units throughout the plant. Each boiler is equipped with a conventional burner, a direct-fired duct burner, and a Select Catalytic Reduction ("SCR") system to control emissions of nitrogen dioxide. 2018 Title V Permit, Section D.24(x).

33. Each Boiler is rated at a maximum heat input capacity – which is a limit on the total amount of heat it can produce over a specific period of time – of 575 million British thermal units⁶ ("mmBtu") per hour. *Id.*

34. Boilers 31 and 32 were originally installed in 1948, Boilers 33 and 34 were installed in 1951, and Boiler 36 was installed in 1953. *Id.* From 2010 through 2012, each Boiler was modified to install their respective direct-fired duct burner. *Id.*

35. Each duct burner is rated at a maximum heat input capacity of 41 mmBtu/hr, equipped with low-NOx burners, and controlled by its Boiler's SCR system. *Id.*

36. The combined emissions from each individual Boiler, its associated duct burner, and SCR system are released to the atmosphere from Stacks 503-01 through 503-05, respectively.

⁵ The International Brotherhood of Boilermakers. *Massive Whiting refinery upgrade goes online*. April 1, 2014. Accessible at: <https://boilermakers.org/news/jobs/massive-whiting-refinery-upgrade-goes-online>

⁶ A British thermal unit is a unit of heat measurement that is defined as the amount of energy required to raise the temperature of one pound of water by one degree Fahrenheit.

Applicable Boiler and Stack Emissions limitations and Standards

37. BP is required to limit emissions of PM₁₀ from each Boiler to no more than 0.0075 pounds per mmBtu (“lb/mmBtu”) and 4.28 pounds per hour (“lb/hr”). 326 Ind. Admin. Code § 6.8-2-6(a); 2018 Title V Permit, Section D.24.1.

38. BP is separately required to limit PM₁₀ emissions from each Stack 503-01 through 503-05 to no more than 0.010 lb/mmBtu. 2018 Title V Permit, Section D.24.4(b)(2).

39. BP’s Title V permit for the Whiting Refinery requires BP to perform a retest and demonstrate compliance no later than 180 days after the date of any test failing to demonstrate compliance with an applicable emissions limitation. 2018 Title V Permit, Section C.19(b).

40. As explained further below, these PM₁₀ limitations and standards are federally enforceable through Indiana’s Clean Air Act State Implementation Plan and BP’s Title V permit, with compliance determined through periodic stack tests and other credible evidence.

The Clean Air Act and State Implementation Plans (“SIPs”)

41. Under the Clean Air Act, EPA is required to establish National Ambient Air Quality Standards (“NAAQS”) for a number of “criteria pollutants” such as particulate matter (“PM”). *See* 42 U.S.C. § 7409; *see also* 40 C.F.R., Part 50.

42. An area that meets the NAAQS for a particular criteria pollutant is classified as an “attainment” area for that pollutant, while an area that does not meet the NAAQS is a “nonattainment” area. *See* 42 U.S.C. § 7407(d)(1).

43. Under the Clean Air Act’s scheme of cooperative federalism, each State retains “primary responsibility for assuring air quality within the entire” State, and must adopt and submit to EPA for approval a “State implementation plan,” or “SIP” – a set of state laws and regulations which will “specify the manner in which” NAAQS “will be achieved and maintained within each

air quality control region in such State.” 42 U.S.C. § 7407(a); *see also* 42 U.S.C. § 7410.

44. Once a SIP is approved by EPA, it is published in the Code of Federal Regulations and becomes enforceable federal law. 42 U.S.C. § 7413; 40 C.F.R. § 52.23.

45. SIPs must specifically set forth requirements for permitting programs and implement emission standards and limitations that assure geographic areas either achieve, regain, or remain in attainment status. *See* 42 U.S.C. § 7410.

46. Title V of the Clean Air Act also requires stationary sources to obtain and periodically renew operating permits which must incorporate all applicable requirements issued by a State under its SIP, any other federally enforceable requirements applicable to the source, and include continuous monitoring provisions to assure compliance. *Id.*

47. Because compliance with permit terms and conditions is a vital component of NAAQS attainment and maintenance, violations of emissions limits and other requirements enumerated in Title V permits, or otherwise specified in a SIP, are independently enforceable violations under federal law.⁷

48. Under 40 C.F.R. Part 81, a “nonattainment area” may be reclassified as having achieved “attainment” with a specific NAAQS, based on EPA’s determination that it has met the relevant air quality standard. 42 U.S.C. § 7407(d)(3).

49. Upon EPA’s approval of re-designation, a State must revise its SIP to include additional measures to prevent backsliding into nonattainment, such as specific emissions limitations and standards “as may be necessary to ensure such maintenance.” 42 U.S.C. § 7505a(a).

⁷ *See* 326 IAC § 2-2-1(v), stating that federally enforceable limitations and conditions include all of the following: (1) requirements developed pursuant to 40 C.F.R. Part 60 and 40 C.F.R. Part 61; (2) requirements within the Indiana SIP; and (3) any permit requirements established pursuant to 40 C.F.R. Part 52.21 or 40 C.F.R. Part 51, Subpart I, “including operating permits issued under an EPA-approved program that is incorporated into the SIP and expressly requires adherence to any permit issued under the program.”

Prevention of Significant Deterioration and New Source Review

50. The Clean Air Act also establishes the Prevention of Significant Deterioration (“PSD”) program, which is intended to ensure all geographic areas remain in attainment status for NAAQS and requires all proposed new sources of air pollutants or modifications to existing stationary sources located in areas that are either in “attainment” or “unclassifiable” to apply for and receive a permit prior to the commencement of construction.⁸

51. PSD rules include a requirement that existing sources determine whether a proposed physical or operational modification will increase emissions above certain “significant” threshold amounts. *Id.* Under PSD rules, States are also authorized, through their SIPs, to impose additional emissions limitations specific to individual sources that are designed to ensure that a new project’s emissions remain below the PSD significance thresholds. *See generally* 326 IAC §§ 2-1.1-4, 2-2 and 2-3 (Indiana SIP provisions implementing PSD and New Source Review).

52. While States determine the project-specific limitations applicable under these programs, once implemented these limitations become independently enforceable federal requirements under the Clean Air Act.

Particulate Matter Emissions and NAAQS

53. Particulate matter (“PM”) is a mixture of small particles, including organic materials, metals, and ash, which can cause significant health and environmental problems.

54. Extensive peer-reviewed studies have demonstrated concrete links from human exposure to PM to serious health risks, such as respiratory issues, heart attacks, irregular heartbeat, aggravated asthma, cancer, and premature death in individuals with heart or lung disease.⁹

⁸ U.S. EPA. *Learn About New Source Review*. Accessed on August 21, 2019. Accessible at: <https://www.epa.gov/nsr/learn-about-new-source-review>

⁹ U.S. EPA. *Final Rule: Revisions to the National Ambient Air Quality Standards for Particulate Matter*. 52 Fed. Reg. 24,634, 24,663 (July 1, 1987).

55. In part due to these significant health risks, EPA has designated PM as a criteria pollutant pursuant to 42 U.S.C. § 7410.

56. EPA has not identified any truly “safe” level of exposure to PM, and health risks generally increase in proportion to increases in PM pollution.¹⁰

57. While exposure to PM of any size can present health risks, particle size is directly related to the potential for causing health problems. Fine particulates 2.5 microns or smaller in diameter (“PM_{2.5}”) – which are so small as to be undetectable without an electron microscope – pose the greatest risks due to their ability to penetrate deep into the lungs and enter the bloodstream.

58. Due to the increasing severity of health risks associated with smaller sizes of PM, for regulatory purposes EPA distinguishes between categories of PM based on size, and has established separate NAAQS specifically for (1) PM of all sizes, (2) PM₁₀, and (3) PM_{2.5} (which is also included within PM₁₀).¹¹

59. PM emissions consist of both “filterable” PM, which is directly emitted by a source in solid or liquid form, and “condensable” PM, emissions which are initially in vapor phase, but condense in the ambient air immediately after discharge to form solid or liquid PM.¹²

60. Filterable PM can be composed of PM of any size. Condensable PM emissions are gaseous and composed of particulates 1 micron or smaller in diameter, and are therefore included within both PM₁₀ and PM_{2.5}. BP’s stack test results show that more than half of the total PM₁₀ emitted from the 3SPS Boilers and Stacks is in condensable form.

¹⁰ U.S. EPA. *Particle Pollution and Health Fact Sheet*. (2012). Accessible at:

https://www.epa.gov/sites/production/files/2016-04/documents/health_2012_factsheet.pdf

¹¹ U.S. EPA. *Final Rule: National Ambient Air Quality Standards for Particulate Matter*. 78 Fed. Reg. 3086 (January 15, 2013).

¹² Stephen D. Paige, Director, EPA Office of Air Quality Planning and Standards. *Memorandum re: Interim Guidance on the Treatment of Condensable Particulate Matter Test Results in the Prevention of Significant Deterioration and Nonattainment New Source Review Permitting Programs*. (April 8, 2014). At pages 2-3. Accessible at: <https://www3.epa.gov/ttnemc01/methods/psdnsrinterimcmpmemo4814.pdf>

61. EPA has found substantial evidence of serious health effects associated with short and long-term exposure to PM_{2.5}, even in areas that are in attainment for PM₁₀ NAAQS.¹³

62. EPA's 2018 Technical Support Document for calculating benefits-per-ton for criteria pollutants emitted from certain industrial categories estimates that in 2020, each ton of PM_{2.5} released from refineries will result in public health costs of between \$360,000 to \$830,000 due to higher mortality and morbidity rates.¹⁴

63. In 2018, Lake County's PM_{2.5} NAAQS classification was re-designated from "unclassifiable" to "unclassifiable/attainment."¹⁵

64. In 2003, Lake County was re-designated from a "nonattainment" area to a "moderate maintenance" area for the PM₁₀ NAAQS.¹⁶

Applicable Clean Air Act Requirements at Whiting Refinery

65. BP is subject to specific PM₁₀ emissions limitations in the Indiana SIP that were designed and implemented to ensure that Lake County remains in attainment for PM₁₀ NAAQS.

66. Specifically, Indiana SIP provision 326 IAC § 6.8-2-6(a), entitled "BP Products North America, Inc.-Whiting Refinery" establishes source-specific PM₁₀ emissions limitations for individual units at Whiting Refinery, including the limits for each individual 3SPS Boiler. ¶ 37.

67. Per Indiana's SIP, any requirements or emissions limitations established in a Title V operating permit are independently enforceable federal requirements, regardless of whether such limits are included in the SIP. *See* 326 IAC § 2-2-1(v)(1)-(3); *see also* 326 IAC § 2-1.1-4(a).

¹³ U.S. EPA. *Final Report: Integrated Science Assessment for Particulate Matter*. (December 2009), at pgs. 1-5, 2-8 to 2-22. Accessible at: http://ofmpub.epa.gov/eims/eimscomm.getfile?p_download_id=494959

¹⁴ U.S. EPA, Office of Air and Radiation. *Technical Support Document: Estimating the Benefit Per Ton of Reducing PM_{2.5} Precursors from 17 Sectors*. (February 2018), Table 7, pg. 16. Accessible at: https://www.epa.gov/sites/production/files/2018-02/documents/sourceapportionmentbpttsd_2018.pdf

¹⁵ *See* U.S. EPA. *Final Rule: Air Plan Approval; Illinois; Indiana; Revised Designation of Illinois and Indiana 2012 PM_{2.5} Unclassifiable Areas*. 83 Fed. Reg. 66631 (December 27, 2018).

¹⁶ *See* U.S. EPA. *Direct Final Rule: Redesignation and Approval and Promulgation of Indiana Implementation Plans*. 68 Fed. Reg. 1370 (Jan. 10, 2003).

68. In addition to being enforceable requirements of the Indiana SIP, the Boiler emissions limitations have also been explicitly incorporated as requirements of each of BP's federally enforceable Title V, Part 70 operating permits for the BP Whiting Refinery issued by IDEM since 2012 to present. 2018 Title V Permit, Section D.24.1.¹⁷

69. Section D.24.1 of the 2018 Title V Permit establishes that these Boiler emissions limitations are specific to the Boilers, and do not apply to emissions from their associated duct burners or SCR systems. *Id*; *see also* 326 IAC § 6.8-2-6(a).

70. Defendant's Title V operating permit for the Whiting Refinery also includes an additional limit that applies to the combined PM₁₀ emissions from each individual Stack 503-01 through 503-05. ¶ 38; *see also* 2018 Title V Permit, Section D.24.4(b)(2).¹⁸

71. Section D.24.4(b)(2) explicitly states BP accepted this Stack emissions limit in order to render the more stringent "major" PSD requirements not applicable to Whiting Refinery.

72. The PSD significance threshold for PM₁₀ is 15 tons of emissions per year, while the significance threshold for PM_{2.5} is 10 tons per year. 40 C.F.R. § 52.21(b)(23)(i).

Requirements for Stack Testing and Demonstrating Compliance at Whiting Refinery

73. Pursuant to 42 U.S.C. § 7413(e)(2), EPA's 1991 Clean Air Act Stationary Source Civil Penalty Policy states that violations are "assumed to be continuous from the first provable date of violation until the source demonstrates compliance." *See* U.S. EPA, Clean Air Act Stationary Source Civil Penalty Policy (October 25, 1991) (excerpted), Ex. 3, pgs. 2-3 (emphasis added); *e.g.*, *Sierra Club v. Khanjee Holding (US) Inc.*, 655 F.3d 699, 708 (7th Cir. 2011) (noting

¹⁷ Because the applicable emissions limitations and standards have remained unchanged between permit iterations, the remainder of this Complaint will cite the relevant provisions from the currently operative 2018 Title V Permit. However, the 0.0075 lb/mmBtu and 4.28 lb/hr Boiler emissions limitations can be found in Section D.24.1.1 of the 2012 Title V Permit, and Section D.24.1. of the 2015, 2016, and 2018 Title V Permits.

¹⁸ The 0.010 lb/mmBtu Stack emissions limitation may be found in Section D.24.4(b)(3) of the 2012 and 2015 Title V Permits, and Section D.24.4(b)(2) of the 2016 and 2018 Title V Permits.

“the Clean Air Act imposes strict liability from the first day of the offense.”).

74. The Act further defines “emissions limitations” and “emission standards” to mean any requirement “which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction and any design, equipment, work practice or operational standard promulgated under this chapter.” 42 U.S.C. § 7602(k) (emphasis added).

75. EPA’s Stack Testing Guidance states that for a source to demonstrate “continuous compliance” with an emissions limit, “any stack test that is conducted . . . must demonstrate that a facility is capable of complying with the applicable emissions standards at all times.” (emphasis added). *See* U.S. EPA, Clean Air Act National Stack Testing Guidance (April 27, 2009) (excerpted), Ex. 4, pg. 2 (citing 42 U.S.C. § 7602(k)); *see also* EPA, Definition of “Continuous Compliance” and Enforcement of O&M Violations (June 24, 1982) (“sources are required to meet, without interruption, all applicable emissions limitations and other control requirements[.]”).

76. Both EPA and IDEM guidance emphasize that all stack tests must be conducted under representative operating conditions. Ex 4, pgs. 2-3; IDEM Stack Test Guidance (excerpted), Ex. 5, pg. 2; *see also* 40 C.F.R. § 60.8(c) (stating all “[p]erformance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility”) (emphasis added).

77. 326 IAC § 6.8-2-6(d) specifically states that the Boiler PM₁₀ emissions limitations apply to both filterable and condensable PM₁₀ emissions.

78. Indiana’s SIP explicitly requires BP to demonstrate compliance with the PM₁₀ Boiler emissions limitations through periodic stack testing, performed in accordance with the EPA Methods and procedures set forth in 40 C.F.R. Part 60. 326 IAC § 6.8-1-3.

79. 326 IAC § 6.8-2-6(d) further states that the total quantity of filterable PM₁₀ emissions “shall be determined in accordance with” either EPA Method 201A or Method 5, and the total quantity of condensable PM emissions shall be determined using EPA Method 202. *Id.*

80. 326 IAC § 6.8-2-6(d) states that alternatives to these Methods may be used only if they are approved in writing by EPA prior to a stack test.

81. Section D.24.11(b) of the 2018 Title V Permit states that in order to demonstrate compliance with the Stack emissions limitation in Section D.24.4, BP “shall perform PM and PM₁₀ testing” of each individual Stack “at least once every 5.0 years from the date of the most recent valid compliance demonstration.”

82. Section D.24.11(b) further provides that all stack tests must be conducted in accordance with 326 IAC § 3-6 and the federal stack testing standards of 40 C.F.R., Part 60, and that the Stack emissions limit explicitly includes the sum of both filterable and condensable PM₁₀.

83. Per these standards and their implementing guidance, upon a failed stack test, BP is out of compliance with its PM₁₀ limits until it successfully demonstrates compliance. ¶¶ 73-76.

84. Section C.19 of the 2018 Title V Permit, entitled “Actions Related to Noncompliance Demonstrated by a Stack Test,” states that when “the results of a stack test . . . exceed the level specified in any condition of this permit,” BP shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test, and perform a retest to demonstrate compliance no later than 180 days after the date of the test.¹⁹ ¶ 39.

85. BP remains in continuing violation of the testing requirement and the emissions limit until it successfully performs the required retest to demonstrate compliance. ¶¶ 73-76.

86. The Clean Air Act provides that any person who violates any such emission

¹⁹ The requirement to retest can be found in Section C.19 of all four Title V permits.

standard, limitation, or other permit condition or requirement may be assessed a civil penalty amount “per day for each violation.” 42 U.S.C. § 7413(b).

87. Civil penalties are subject to a mandatory inflation adjustment under EPA’s 2019 Civil Monetary Penalty Inflation Rule,²⁰ promulgated pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990 as amended by the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015.

88. Per these mandatory adjustments, which are codified in Tables 1 and 2 of 40 C.F.R. § 19.4, a defendant is liable for \$37,500 per day, per violation of the Clean Air Act occurring from December 6, 2013 through November 2, 2015, and for \$99,681 per day, per violation occurring after November 2, 2015. *See* 40 C.F.R. § 19.4.

BP’s Stack Test Results for PM₁₀ Emissions

89. Since August 2015, BP has performed 12 stack tests for PM₁₀ emissions at Stacks 503-01 through 503-05, to measure the combined emissions from a specific Boiler and its associated duct burner and SCR system.

90. For 10 of the 12 stack tests, BP reported total PM₁₀ emissions that exceeded the applicable Stack emissions limit of 0.010 lb/mmBtu. *See* Table 1, ¶¶ 92(a) – 92(l).

91. IDEM determined 10 of these 12 stack tests demonstrated noncompliance with BP’s applicable PM₁₀ emissions limits, and that compliance could not be determined for one of the stack tests. ¶¶ 92(a) – 92(k). IDEM has not yet issued a determination for one stack test. ¶ 92(l).

92. The results of these stack tests are summarized in Table 1 below, along with notes of any accompanying IDEM reviews; each row is itemized as ¶¶ 92(a) – 92(l) of this Complaint.

²⁰ U.S. Environmental Protection Agency. *Final Rule: Civil Monetary Penalty Inflation Adjustment Rule*. 84 Fed. Reg. 2056, 2059 (Feb. 6, 2019).

Table 1
Summary of BP’s Stack Test Results for the 0.010 lb/mmBtu Emission Limit

¶	Unit	Test Date	PM ₁₀ Results (lb/mmBtu)	PM ₁₀ Results (lb/hr)	Additional Notes
92(a)	Stack 503-01	10/8/2018	0.0154	9.318	IDEM found this test demonstrated noncompliance with both the Stack and Boiler PM ₁₀ limits.
92(b)	Stack 503-02	8/3/2015	0.0171	10.33	IDEM found this test demonstrated noncompliance with both the Stack and Boiler PM ₁₀ limits.
92(c)	Stack 503-02	10/20/2015	0.0177	9.937	IDEM found this test demonstrated noncompliance with both the Stack and Boiler PM ₁₀ limits.
92(d)	Stack 503-02	1/28/2016	0.0226	11	IDEM found this test demonstrated noncompliance with both the Stack and Boiler PM ₁₀ limits.
92(e)	Stack 503-02	11/1/2016-11/2/2016	0.0047 (0.012)	2.806 (7.13)	IDEM found BP failed to count sulfates as required, and found BP was out of compliance with both the Stack and Boiler PM ₁₀ limits based on corrected results (in parentheses).
92(f)	Stack 503-02	10/9/2018	0.0163	10.002	IDEM found this test demonstrated noncompliance with both the Stack and Boiler PM ₁₀ limits.
92(g)	Stack 503-03	10/11/2018	0.0151	9.009	IDEM found this test demonstrated noncompliance with both the Stack and Boiler PM ₁₀ limits.
92(h)	Stack 503-04	10/12/2018	0.0114	7.375	IDEM found that compliance could not be determined on this test for either the Stack or Boiler PM ₁₀ limits.
92(i)	Stack 503-05	8/5/2015	0.0151	9.42	IDEM found this test demonstrated noncompliance with both the Stack and Boiler PM ₁₀ limits.
92(j)	Stack 503-05	10/21/2015	0.0137	7.788	IDEM found this test demonstrated noncompliance with both the Stack and Boiler PM ₁₀ limits.
92(k)	Stack 503-05	11/2/2016-11/3/2016	0.0079 (0.021)	4.741 (12.95)	IDEM found BP failed to count sulfates as required, and found BP was out of compliance with both the Stack and Boiler PM ₁₀ limits based on corrected results (in parentheses).
92(l)	Stack 503-05	4/16/2019	0.0109	6.854	No IDEM determination yet issued.

93. On October 10, 2017, BP performed a stack test at Boiler 32 which recorded an average PM₁₀ emissions rate of 0.0048 lb/mmBtu and 3.223 lb/hr from the Boiler only. ¶ 127.

94. These 13 stack tests are the only stack tests BP has performed to measure PM₁₀ emissions from either the Boilers or the Stacks since August 3, 2015.

Any Credible Evidence May Be Used to Prove Violations of the Clean Air Act

95. In 1990, the Clean Air Act was explicitly amended to state that a violation may be “established by any credible evidence (including evidence other than the applicable test

method).” 42 U.S.C.A. § 7413(e).

96. Pursuant to § 7413(e), EPA’s 1997 Credible Evidence Revisions rule (“Credible Evidence Rule”) established that “EPA, States, and citizens” may “prosecute actions based exclusively on any credible evidence, without the need to rely on any data from a particular reference test”²¹ (emphasis added).

97. The Rule notes that this clarification was necessary because evidence, including reports from the U.S. General Accounting Office and State pollution control agencies, indicated stack tests alone were often “inadequate to ensure that sources continuously stay within their emissions limits,” due in part to their infrequency (typically once every 5 years). *Id.* at 8315.

98. The Rule also noted EPA’s further concern that stack tests may not always “yield a representative emissions picture because the sources typically schedule, set up and run the tests themselves,” which “allows sources to ‘fine tune’ their operations and emissions control processes prior to tests, and generate results that may not be typical of day-to-day source operations.” *Id.*

99. Accordingly, the Credible Evidence Rule states that while “an appropriate and properly conducted test” using the applicable EPA method “will still generally be the best method for determining a source’s compliance . . . Other emissions or parametric data, or engineering analyses, may be considered if relevant to the results that would have been obtained by the appropriate, properly conducted reference test methods.” *Id.* at 8317.

100. The Credible Evidence Rule states that “credible evidence” that can establish a source’s noncompliance include, *inter alia*, “engineering calculations, indirect estimates of emissions . . . continuous emissions monitoring (CEM) data and well-chosen parametric monitoring data, such as the operating temperature and air flow rate” of a unit. *Id.* at 8315.

²¹ U.S. EPA. *Final Rule: Credible Evidence Revisions*. 62 Fed. Reg. 8315-8316 (February 24, 1997). Accessible at: <https://www.govinfo.gov/content/pkg/FR-1997-02-24/pdf/97-4196.pdf>

101. Accordingly, 40 C.F.R. § 60.11(g) states that for the purpose of establishing whether or not a person has violated or is in violation of any standard in this part, “nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.”

102. BP’s Title V permit explicitly incorporates § 60.11(g) in full, and states that “any credible evidence or information” may be used to “establish[] whether or not the Permittee has violated or is in violation of any condition of this permit[.]” *See* 2018 Title V Permit, Section B.24.

BP’s Annual Air Emission Statements for Whiting Refinery

103. While properly conducted stack tests using the applicable EPA test methods are generally the best method for determining compliance, as BP’s 2018 Title V Permit explicitly reiterates, for the purpose of establishing a violation “nothing . . . shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.” *See* 2018 Title V Permit, Section B.24.

104. Under Indiana’s SIP, all stationary sources that are required to have a Title V operating permit must submit an annual emission statement to IDEM. *See* 326 IAC § 2-6. These annual emission statements must include a report of the estimated actual tons of criteria pollutants, including PM₁₀ and PM_{2.5}, emitted by the source over the previous calendar year, as well as operating data for each emission unit. 326 IAC § 2-6-4.

105. Emission statements must be signed by a responsible official for the source, who must also certify that all “information in the emission statement is accurate based on reasonable estimates using data available to the preparers and on a reasonable inquiry into records and persons

responsible for the operation of the source, and is true, accurate, and complete.” 326 IAC § 2-6-4(c).

106. BP submitted its Whiting Refinery Air Emission Statement for calendar year 2016 on June 27, 2017; for calendar year 2017 on June 28, 2018; and for calendar year 2018 on June 27, 2019. *See* Whiting Refinery Air Emission Statements for 2016-2018 (excerpted), Ex. 6. Each Emission Statement separately reports the annual filterable PM₁₀ emissions (PM10-FIL), condensable PM emissions (PM-CON), and heat input for each boiler and duct burner. Part B of each Emission Statement defines “PM-CON” as “Primary PM Condensable [sic] Only (All Less Than 1 Micron),” and PM10-FIL as “Primary PM10, Filterable Portion Only.” *Id.*, pgs. 1, 7, 13.

107. Total PM₁₀ emissions for each Boiler are comprised of the sum of PM₁₀ filterable and condensable emissions, as required by the Indiana SIP and BP’s Title V Permit. ¶¶ 77–79, 82.

108. Table 2 below presents the annual heat input and emissions of Total PM₁₀ (in tons per year) reported for each Boiler in the Emission Statements for 2016, 2017, and 2018; each row is itemized as ¶¶ 108(a) – 108(e) of this Complaint.

Table 2
Summary of 2016-2018 Air Emission Statements

¶	Unit	Total PM ₁₀ Emissions (tons/year)			Total Heat Input (mmBtu/year)		
		2016	2017	2018	2016	2017	2018
108(a)	Boiler 31	34.06	39.23	32.69	3,095,847	3,565,884	2,971,505
108(b)	Boiler 32	40.29	11.65	8.81	2,748,324	3,697,950	2,797,136
108(c)	Boiler 33	34.89	26.66	37.97	3,171,859	2,423,542	3,451,532
108(d)	Boiler 34	39.93	35.55	39.03	3,630,566	3,232,491	3,548,332
108(e)	Boiler 36	39.09	17.35	13.96	3,220,775	3,613,984	2,908,277

109. In accordance with § 7413(e) of the Clean Air Act, the Credible Evidence Rule, and BP’s Title V permit, these PM₁₀ emission and heat rate estimates, which were provided and certified by BP as required by Indiana’s SIP, may be used as credible evidence of noncompliance with BP’s PM₁₀ emissions limits during periods where no stack test data exists. ¶¶ 95 – 102.

110. Annual emissions rates, in pounds per mmBtu, can be determined by dividing each unit’s total annual emissions of PM₁₀ by said unit’s reported total annual heat input (mmBtu).

111. Annual emission rates, in pounds per hour, can be determined by dividing each unit’s total annual PM₁₀ emissions by 8,760 hours (which is the total number of hours in a year).

112. Table 3 presents annual emission rates in pounds per mmBtu and pounds per hour, based on the total annual PM₁₀ emissions and heat inputs reported for each Boiler in the Emission Statements for 2016, 2017, and 2018; each row is itemized as ¶¶ 112(a) – 112(e) of this Complaint. Highlighted text indicates a violation of the applicable Boiler PM₁₀ emissions limitation.

Table 3
2016-2018 Calculated Annual Boiler PM₁₀ Emissions Rates

¶	Unit	PM ₁₀ Emissions Rate (lb/mmBtu)			PM ₁₀ Emissions Rate (lb/hr)		
		2016	2017	2018	2016	2017	2018
112(a)	Boiler 31	0.0220	0.0220	0.0220	7.78	8.96	7.46
112(b)	Boiler 32	0.0293	0.0063	0.0063	9.20	2.66	2.01
112(c)	Boiler 33	0.0220	0.0220	0.0220	7.97	6.09	8.67
112(d)	Boiler 34	0.0220	0.0220	0.0220	9.12	8.12	8.91
112(e)	Boiler 36	0.0243	0.0096	0.0096	8.92	3.96	3.19

113. Plaintiff understands that due to an error in reporting on the Emission Statements, Defendant may have intended to quantify estimated Boiler emissions based on an assumed annual

emission rate of 0.010 lb/mmBtu. Even if correct, an emission rate of 0.010 lb/mmBtu exceeds the PM₁₀ emissions limit for each Boiler, which is 0.0075 lb/mmBtu.

BP'S ALLEGED VIOLATIONS OF THE CLEAN AIR ACT

114. Plaintiff re-alleges and incorporates ¶¶ 1–113 by reference into each Count below.

115. Each type of violation alleged in Counts I through III occurred more than once, and therefore was “repeated” within the meaning of 42 U.S.C. § 7604(a)(1).

COUNT I: Violations of PM₁₀ Emissions limits at Boilers 31 through 36

116. The Indiana SIP and BP’s Title V permit require BP to limit emissions of PM₁₀ from each Boiler to no more than 0.0075 lb/mmBtu and 4.28 lb/hr PM₁₀. 326 IAC 6.8-2-6(a); o 2018 Title V Permit, Section D.24.1.

Boiler 31

117. Based on the total annual heat input and PM₁₀ emissions reported by BP in its annual Emission Statements, annual PM₁₀ emission rates for Boiler 31 averaged 0.0220 lb/mmBtu in calendar years 2016, 2017, and 2018. ¶ 108(a), ¶ 112(a).

118. Alternatively, to the extent that Whiting Refinery’s annual Emission Statements for 2016, 2017, and 2018 are meant to reflect an assumed emission rate of 0.010 lb/mmBtu, Boiler 31 failed to comply with the PM₁₀ limit of 0.0075 lb/mmBtu in those years. ¶ 113.

119. Based on credible evidence derived from BP’s Emission Statements, BP violated the Boiler emissions limits at Boiler 31 on each day from January 1, 2016, until October 8, 2018.

120. Based on the results of an October 8, 2018 stack test, IDEM determined that Boiler 31 failed to meet either the 0.0075 lb/mmBtu or the 4.28 lb/hr PM₁₀ emissions limits. *See* October 8-12, 2018 Performance Test Reports for Boilers 31, 32, 33, and 34 (excerpted) & corresponding

IDEM Office of Air Quality Compliance Memorandum (January 10, 2019), Ex. 7, pgs. 1-2 & 5-6; ¶ 92(a).

121. Each violation of the each of the 0.0075 lb/mmBtu and 4.28 lb/hr emissions limits is a separate violation of the Indiana SIP and Whiting Refinery's Title V operating permit.

122. Based on BP's stack test results and IDEM's findings, BP violated the Boiler emissions limits at Boiler 31 on each day from October 8, 2018, to the date of this filing. ¶ 92(a). These violations are ongoing.

Boiler 32

123. Based on the results of an August 3, 2015 stack test, IDEM determined that Boiler 32 failed to meet either the 0.0075 lb/mmBtu or the 4.28 lb/hr PM₁₀ emissions limits. *See* Enforcement Referral Letter from Rick Massoels, IDEM Deputy Director of Northwest Regional Office, to Linda Wilson, BP Products North America, Inc. (April 8, 2016), Ex. 8; ¶ 92(b).

124. Based on the results of a October 20, 2015 stack test, IDEM determined that Boiler 32 failed to meet either the 0.0075 lb/mmBtu or the 4.28 lb/hr PM₁₀ emissions limits. *See* October 20, 2015 Performance Test Report for Boiler 32 (excerpted) & corresponding IDEM Office of Air Quality Compliance Memorandum (July 25, 2016), Ex. 9, pgs. 1, 4; ¶ 92(c).

125. Based on the results of a January 28, 2016 stack test, IDEM determined that Boiler 32 failed to meet either the 0.0075 lb/mmBtu or the 4.28 lb/hr PM₁₀ emissions limits. *See* January 28, 2016 Performance Test Report for Boiler 32 (excerpted) & corresponding IDEM Office of Air Quality Compliance Memorandum (June 1, 2016), Ex. 10, pgs. 1 & 3; ¶ 92(d).

126. Based on the corrected results of 0.012 lb/mmBtu and 7.13 lb/hr for a November 1-2, 2016 stack test, IDEM determined that Boiler 32 failed to meet either the 0.0075 lb/mmBtu or the 4.28 lb/hr PM₁₀ emissions limits. *See* November 1-3, 2016 Performance Test Report for

Boilers 32 and 36 (excerpted) & corresponding IDEM Office of Air Quality Compliance Memorandum (September 18, 2017), Ex. 11, pgs. 1 & 4; ¶ 92(e).

127. Based on the results of an October 10, 2017 stack test, IDEM determined that Boiler 32 was in compliance with the 0.0075 lb/mmBtu and 4.28 lb/hr PM₁₀ emissions limits. *See* October 10, 2017 Performance Test Report for Boiler 32 (excerpted) & corresponding IDEM Office of Air Quality Compliance Memorandum (March 23, 2018), Ex. 12, pgs. 1 & 3; ¶ 93.

128. Based on the results of an October 9, 2018 stack test, IDEM determined that Boiler 32 failed to meet either the 0.0075 lb/mmBtu or the 4.28 lb/hr PM₁₀ emissions limits. Ex. 7, pgs. 2, 7-8 ; ¶ 92(f).

129. Each violation of the each of the 0.0075 lb/mmBtu and 4.28 lb/hr emissions limits is a separate violation of the Indiana SIP and Whiting Refinery's Title V operating permit.

130. Based on BP's stack test results and IDEM's findings, BP violated the Boiler emissions limits at Boiler 32 on each day from August 3, 2015, to the date of this filing. These violations are ongoing. ¶¶ 92(b) – 92(f).

Boiler 33

131. Based on the total annual heat input and PM₁₀ emissions reported by BP in its annual Emission Statements, annual PM₁₀ emission rates for Boiler 33 averaged 0.0220 lb/mmBtu in calendar years 2016, 2017, and 2018. ¶ 108(c), ¶ 112(c).

132. Alternatively, to the extent that Whiting Refinery's annual Emission Statements for 2016, 2017, and 2018 are meant to reflect an assumed emission rate of 0.010 lb/mmBtu, Boiler 33 failed to comply with the PM₁₀ limit of 0.0075 lb/mmBtu in those years. ¶ 113.

133. Based on credible evidence derived from BP's Emission Statements, BP violated the Boiler emissions limits at Boiler 33 on each day from January 1, 2016, until October 11, 2018.

¶ 108(c), ¶ 112(c).

134. Based on the results of an October 11, 2018 stack test, IDEM determined that Boiler 33 failed to meet either the 0.0075 lb/mmBtu or the 4.28 lb/hr PM₁₀ emissions limits. Ex. 7, pgs. 3, 9-10; ¶ 92(g).

135. Each day BP violates either the 0.0075 lb/mmBtu or 4.28 lb/hr emissions limits is a separate violation of both the Indiana SIP and Whiting Refinery's Title V operating permit.

136. Based on BP's stack test results and IDEM's findings, BP violated the Boiler emissions limits at Boiler 33 on each day from October 11, 2018, to the date of this filing. These violations are ongoing. ¶ 92(g).

Boiler 34

137. Based on the total annual heat input and PM₁₀ emissions reported by BP in its annual Emission Statements, annual PM₁₀ emission rates for Boiler 34 averaged 0.0220 lb/mmBtu in calendar years 2016, 2017, and 2018. ¶ 108(d), ¶ 112(d).

138. Alternatively, to the extent that Whiting Refinery's annual Emission Statements for 2016, 2017, and 2018 are meant to reflect an assumed emission rate of 0.010 lb/mmBtu, Boiler 34 failed to comply with the PM₁₀ limit of 0.0075 lb/mmBtu in those years ¶ 113.

139. Based on credible evidence derived from BP's Emission Statements, BP violated the Boiler emissions limits at Boiler 34 on each day from January 1, 2016, until October 12, 2018. ¶ 108(d), ¶ 112(d).

140. Based on the results of an October 12, 2018 stack test, IDEM determined that Boiler 34's compliance could not be determined for either the 0.0075 lb/mmBtu or the 4.28 lb/hr PM₁₀ emissions limits. Ex. 7, pgs. 4, 11-12; ¶ 92(h).

141. The emissions rates of 0.0114 lb/mmBtu and 7.375 lb/hour reported on October

12, 2018 exceed the Boiler emissions limits of 0.0075 lb/mmBtu and 4.28 lb/mmBtu. ¶ 116.

142. Each day BP violates either the 0.0075 lb/mmBtu or 4.28 lb/hr emissions limits is a separate violation of both the Indiana SIP and Whiting Refinery's Title V operating permit.

143. Based on BP's stack test results, BP violated the Boiler emissions limits at Boiler 34 on each day from October 12, 2018, to the date of this filing. ¶ 92(h). These violations are ongoing.

Boiler 36

144. Based on the results of an August 5, 2015 stack test, IDEM determined that Boiler 36 failed to meet either the 0.0075 lb/mmBtu or the 4.28 lb/hr PM₁₀ emissions limits. Ex. 8; ¶ 92(i).

145. Based on the results of an October 21, 2015 stack test, IDEM determined that Boiler 36 failed to meet either the 0.0075 lb/mmBtu or the 4.28 lb/hr PM₁₀ emissions limits. *See* October 21, 2015 Performance Test Report for Boiler 36 (excerpted) & corresponding IDEM Office of Air Quality Compliance Memorandum (July 25, 2016), Ex. 13, pgs. 1 & 4; ¶ 92(j).

146. Based on the corrected results of 0.021 lb/mmBtu and 12.95 lb/hr for a November 2-3, 2016 stack test, IDEM determined that Boiler 36 failed to meet either the 0.0075 lb/mmBtu or the 4.28 lb/hr PM₁₀ emissions limits. Ex. 11, pgs. 2 & 5; ¶ 92(k).

147. Each day BP violates either the 0.0075 lb/mmBtu or 4.28 lb/hr emissions limits is a separate violation of both the Indiana SIP and Whiting Refinery's Title V operating permit.

148. Based on BP's stack test results and IDEM's findings, BP violated the Boiler emissions limits at Boiler 36 on each day from August 5, 2015, to the date of this filing. ¶¶ 92(i) – 92(k). These violations are ongoing.

COUNT II: Violations of PM₁₀ Emissions limits at Stacks 503-01 through 503-05

149. BP's Title V permit for the Whiting Refinery requires BP to ensure that PM₁₀

emissions from each Stack 503-01 through 503-05 do not exceed an emissions rate of 0.010 lb/mmBtu. *See* 2018 Title V Permit, Section D.24.4(b)(2).

Stack 503-01

150. BP's October 8, 2018 stack test reported an average PM₁₀ emissions rate that exceeded the 0.010 lb/mmBtu Stack emissions limit, and IDEM confirmed that the test results demonstrated a failure to comply with that limit. Ex. 7, pgs. 1-2, 6; ¶ 92(a).

151. Based on BP's stack test results and IDEM's findings, BP violated the Stack emissions limit at Stack 503-01 on each day from October 8, 2018, to the date of this filing. These violations are ongoing. Ex. 7, pgs. 1-2, 6; ¶ 92(a).

Stack 503-02

152. BP's August 3, 2015 stack test reported an average PM₁₀ emissions rate that exceeded the 0.010 lb/mmBtu Stack emissions limit, and IDEM confirmed that the test results demonstrated a failure to comply with that limit. Ex. 8; ¶ 92(b).

153. BP's October 20, 2015 stack test reported an average PM₁₀ emissions rate that exceeded the 0.010 lb/mmBtu Stack emissions limit, and IDEM confirmed that the test results demonstrated a failure to comply with that limit. Ex. 9, pgs. 1 & 4; ¶ 92(c).

154. BP's January 28, 2016 stack test reported an average PM₁₀ emissions rate that exceeded the 0.010 lb/mmBtu Stack emissions limit, and IDEM confirmed that the test results demonstrated a failure to comply with that limit. Ex. 10, pgs. 1 & 3; ¶ 92(d).

155. Based on a corrected result of 0.012 lb/mmBtu for the November 1-2, 2016 stack test, IDEM confirmed that the stack test results demonstrated a failure to comply with the 0.010 lb/mmBtu PM₁₀ emissions limit. Ex. 11, pgs. 1 & 4; ¶ 92(e).

156. BP's October 9, 2018 stack test reported an average PM₁₀ emissions rate that

exceeded the 0.010 lb/mmBtu Stack emissions limit, and IDEM confirmed that the test results demonstrated a failure to comply with that limit. Ex. 7, pgs. 2 & 8; ¶ 92(f).

157. Based on BP's stack test results and IDEM's findings, BP violated the Stack emissions limit at Stack 503-02 on each day from August 3, 2015, to the date of this filing. These violations are ongoing. Ex. 7; Ex. 8; Ex. 9; Ex. 10; Ex. 11; ¶¶ 92(b) – 92(f).

Stack 503-03

158. BP's October 11, 2018 stack test reported an average PM₁₀ emissions rate that exceeded the 0.010 lb/mmBtu Stack emissions limit, and IDEM confirmed that the test results demonstrated a failure to comply with that limit. *See* Ex. 7, pgs. 3 & 10; ¶ 92(g).

159. Based on BP's stack test results and IDEM's findings, BP violated the Stack emissions limit at Stack 503-03 on each day from October 11, 2018, to the date of this filing. These violations are ongoing. Ex. 7; ¶ 92(g).

Stack 503-04

160. BP's October 12, 2018 stack test reported an average PM₁₀ emissions rate that exceeded the 0.010 lb/mmBtu Stack emissions limit, and IDEM confirmed that the test results demonstrated a failure to comply with that limit. *See* Ex. 7, pgs. 4 & 12; ¶ 92(h).

161. Based on BP's stack test results and IDEM's findings, BP violated the Stack emissions limit at Stack 503-04 on each day from October 11, 2018, to the date of this filing. These violations are ongoing. Ex. 7; ¶ 92(h).

Stack 503-05

162. BP's August 5, 2015 stack test reported an average PM₁₀ emissions rate that exceeded the 0.010 lb/mmBtu Stack emissions limit, and IDEM confirmed that the test results demonstrated a failure to comply with that limit. Ex. 8; ¶ 92(i).

163. BP's October 21, 2015 stack test reported an average PM₁₀ emissions rate that exceeded the 0.010 lb/mmBtu Stack emissions limit, and IDEM confirmed that the test results demonstrated a failure to comply with that limit. Ex. 13, pgs. 1 & 4; ¶ 92(j).

164. Based on a corrected result of 0.021 lb/mmBtu for the November 2-3, 2016 stack test, IDEM confirmed that the stack test results demonstrated a failure to comply with the 0.010 lb/mmBtu PM₁₀ emissions limit. Ex. 11, pgs. 2 & 5; ¶ 92(k).

165. On April 16, 2019, BP's stack test for Stack 503-05 recorded an average PM₁₀ emissions rate of 0.0109 lb/mmBtu. April 16, 2019 Performance Test Report for Boiler 36 (excerpted), Ex. 14; ¶ 92(l).

166. The rate of 0.0109 lb/mmBtu reported on the April 16, 2019 stack test exceeds the Stack emissions limit of 0.010 lb/mmBtu. ¶ 149.

167. Based on BP's stack test results and IDEM's findings, BP violated the Stack emissions limit at Stack 503-05 on each day from August 5, 2015, to the date of this filing. These violations are ongoing. Ex. 8; Ex. 11; Ex. 13; Ex. 14; ¶¶ 92(i) – 92(l).

**COUNT III: Violations of the Requirement to Retest Within 180 Days
of Each Stack Test Failure at Stacks 503-01 through 503-05**

168. BP's Title V permit for the Whiting Refinery requires BP to perform a retest and demonstrate compliance no later than 180 days after the date of any test failing to demonstrate compliance with an applicable emissions limitation. *See* 2018 Title V Permit, Section C.19(b); *see also* Ex. 8, pg. 2 (“Please note Section C.19 in your T089-35729-00453 Operating Permit... requires a retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test.”).

Stack 503-01

169. BP was required to perform a retest to demonstrate compliance at Stack 503-01

by April 6, 2019, no later than 180 days after the failed October 8, 2018 stack test.

170. BP violated the requirement to retest at Stack 503-01 on each day from April 7, 2019, to the date of this filing. These violations are ongoing.

Stack 503-02

171. BP was required to perform a retest to demonstrate compliance at Stack 503-02 by July 26, 2016, no later than 180 days after the failed January 28, 2016 stack test.

172. BP violated the requirement to retest at Stack 503-02 on each day from July 27, 2016 to November 1, 2016.

173. BP was required to perform a retest to demonstrate compliance at Stack 503-02 by May 1, 2017, no later than 180 days after the failed November 1-2 stack test.

174. BP violated the requirement to retest at Stack 503-02 on each day from May 2, 2017 to October 9, 2018.

175. BP was required to perform a retest to demonstrate compliance at Stack 503-02 by April 7, 2019, no later than 180 days after the failed October 9, 2018 stack test.

176. BP violated the requirement to retest at Stack 503-02 on each day from April 8, 2019, to the date of this filing. These violations are ongoing.

Stack 503-03

177. BP was required to perform a retest to demonstrate compliance at Stack 503-03 by April 9, 2019, no later than 180 days after the failed October 11, 2018 stack test.

178. BP violated the requirement to retest at Stack 503-03 on each day from April 10, 2019, to the date of this filing. These violations are ongoing.

Stack 503-04

179. BP was required to perform a retest to demonstrate compliance at Stack 503-04

by April 10, 2019, no later than 180 days after the failed October 12, 2018 stack test.

180. BP violated the requirement to retest at Stack 503-04 on each day from April 11, 2019, to the date of this filing. These violations are ongoing.

Stack 503-05

181. BP was required to perform a retest to demonstrate compliance at Stack 503-05 by April 18, 2016, no later than 180 days after the failed October 21, 2015 stack test.

182. BP violated the requirement to retest at Stack 503-05 on each day from April 19, 2016, to November 2, 2016.

183. BP was required to perform a retest to demonstrate compliance at Stack 503-05 by May 2, 2017, no later than 180 days after the failed November 2-3, 2016 stack test.

184. BP violated the requirement to retest at Stack 503-05 on each day from May 3, 2017, to April 16, 2019.

Summary of Violations Alleged

185. All of BP's alleged violations of the Clean Air Act are itemized by applicable requirement in Tables 4, 5, and 6 below; each row is itemized as ¶¶ 186 - 216 of this Complaint.

**Table 4
Summary of Boiler PM₁₀ Emissions Limitations Violations**

¶	Applicable Requirement	Unit	Evidence of Violations	Violations Start Date	Violations End Date	Total Days
186	326 IAC 6.8-2-6(a) 0.0075 lb/mmBtu and 4.28 lb/hr Boiler Emissions Limitations	Boiler 31	2016-2018 Emissions Statements, ¶ 108(a), ¶ 112(a), ¶ 113	1/1/2016	10/8/2018	1,011
187		Boiler 31	10/8/2018 Stack Test & IDEM finding of noncompliance, ¶ 92(a)	10/8/2018	Ongoing	333
188		Boiler 32	Stack Tests & IDEM findings of noncompliance, ¶¶ 92(b)-(e)	8/3/2015	10/10/2017	799
189		Boiler 32	10/9/2018 Stack Test & IDEM finding of noncompliance, ¶ 92(f)	10/9/2018	Ongoing	332
190		Boiler 33	2016-2018 Emissions Statements, ¶ 108(c), ¶ 112(c), ¶ 113	1/1/2016	10/11/2018	1,014
191		Boiler 33	10/11/2018 Stack Test & 2018 Emission Statement, ¶ 92(g)	10/11/2018	Ongoing	330
192		Boiler 34	2016-2018 Emissions Statements, ¶ 108(d), ¶ 112(d), ¶ 113	1/1/2016	10/12/2018	1,015
193		Boiler 34	10/12/2018 Stack Test & IDEM finding of noncompliance, ¶ 92(h)	10/12/2018	Ongoing	329
194		Boiler 36	Stack Tests & IDEM findings of noncompliance, ¶¶ 92(i)-(k)	8/5/2015	Ongoing	1,493
195	2018 Title V Permit, Section D.24.1 0.0075 lb/mmBtu and 4.28 lb/hr Boiler Emissions Limitations	Boiler 31	2016-2018 Emissions Statements, ¶ 108(a), ¶ 112(a), ¶ 113	1/1/2016	10/8/2018	1,011
196		Boiler 31	10/8/2018 Stack Test & IDEM finding of noncompliance, ¶ 92(a)	10/8/2018	Ongoing	333
197		Boiler 32	Stack Tests & IDEM findings of noncompliance, ¶¶ 92(b)-(e)	8/3/2015	10/10/2017	799
198		Boiler 32	10/9/2018 Stack Test & IDEM finding of noncompliance, ¶ 92(f)	10/9/2018	Ongoing	332
199		Boiler 33	2016-2018 Emissions Statements, ¶ 108(c), ¶ 112(c), ¶ 113	1/1/2016	10/11/2018	1,014
200		Boiler 33	10/11/2018 Stack Test & 2018 Emission Statement, ¶ 92(g)	10/11/2018	Ongoing	330
201		Boiler 34	2016-2018 Emissions Statements, ¶ 108(d), ¶ 112(d), ¶ 113	1/1/2016	10/12/2018	1,015
202		Boiler 34	10/12/2018 Stack Test & IDEM finding of noncompliance, ¶ 92(h)	10/12/2018	Ongoing	329
203		Boiler 36	Stack Tests & IDEM findings of noncompliance, ¶¶ 92(i)-(k)	8/5/2015	Ongoing	1,493

**Table 5
Summary of Stack PM₁₀ Emissions Limitations Violations**

¶	Applicable Requirement	Unit	Evidence of Violations	Violations Start Date	Violations End Date	Total Days
204	2018 Title V Permit, Section D.24.4(b)(2)	Stack 503-01	10/8/2018 Stack Test & IDEM finding of noncompliance, ¶ 92(a)	10/8/2018	Ongoing	324
205		Stack 503-02	Stack Tests & IDEM findings of noncompliance, ¶¶ 92(b)-(f)	8/3/2015	Ongoing	1,486
206	0.010 lb/mmBtu Stack Emissions limit	Stack 503-03	10/11/2018 Stack Test & 2018 Emission Statement, ¶ 92(g)	10/11/2018	Ongoing	321
207		Stack 503-04	10/12/2018 Stack Test & IDEM finding of noncompliance, ¶ 92(h)	10/12/2018	Ongoing	320
208		Stack 503-06	Stack Tests & IDEM findings of noncompliance, ¶¶ 92(i)-(l)	8/5/2015	Ongoing	1,484

**Table 6
Summary of Requirement to Retest Violations**

¶	Applicable Requirement	Unit	Violations Start Date	Violations End Date	Total Days of Violation
209	2018 Title V Permit, Section C.19	Stack 503-01	4/7/2019	Ongoing	152
210		Stack 503-02	7/27/2016	11/1/2016	97
211		Stack 503-02	5/2/2017	10/9/2018	525
212		Stack 503-02	4/8/2019	Ongoing	151
213		Stack 503-03	4/10/2019	Ongoing	149
214		Stack 503-04	4/11/2019	Ongoing	148
215		Stack 503-05	4/19/2016	11/2/2016	197
216		Stack 503-05	5/3/2017	4/16/2019	713

PRAYER FOR RELIEF

WHEREFORE, based upon the allegations set forth above, Plaintiff respectfully requests that this Court:

- A. Declare that Defendant has violated, and is currently in violation of, the Clean Air Act, the relevant provisions of the Indiana SIP, and its Title V operating permit by

failing to comply with the PM₁₀ emissions limitations and requirements to retest mandated therein;

- B. Enjoin Defendant from operating the Boilers, except in accordance with a compliance schedule that will cause the Boilers to attain the standards of the Indiana SIP and Whiting Refinery's Title V operating permit in a timely manner;
- C. Order Defendant to take other appropriate actions, including beneficial mitigation projects authorized under the Clean Air Act, 42 U.S.C. § 7604(g)(2), to remedy, mitigate, and offset the harm to the public health and the environment caused by the violations of the Clean Air Act alleged above;
- D. Assess a civil penalty against Defendant, for each violation proven by Plaintiff, of \$37,500 per day, per violation occurring from August 3, 2015 through November 2, 2015, and a civil penalty of \$99,681 per day, per violation occurring after November 2, 2015;
- E. Retain jurisdiction to ensure compliance with its decree;
- F. Award Plaintiff its costs and attorney's fees related to this action; and
- G. Grant such other relief as the Court deems just and proper.

Respectfully submitted this the 6th day of September 2019,

/s/ Eric Schaeffer
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