A Perfect Storm: Environmental Justice and Air Quality Impacts of Offshore Oil and Gas Development in the Arctic Outer Continental Shelf

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Abstract

The Arctic Outer Continental Shelf is the next great legal battleground over oil and gas resources, environmental protection, and environmental justice. The Arctic is home to an array of sensitive ecological resources and a large Native Alaskan population that relies heavily on the natural environment for food and supplies. The Arctic Ocean also holds a vast amount of untapped oil and gas resources that had previously been largely inaccessible because of harsh climatic conditions and withdrawals of large swaths of the Shelf by Congress and multiple presidents. However, climate change is melting Arctic sea ice and opening up previously inaccessible areas. In addition, President Trump is pushing to expand oil and gas development everywhere, including the Arctic. If President Trump's plans prevail against the many legal challenges seeking to protect the Arctic, Native Alaskans will face a multitude of threats to their health, safety, and way of life.

Scholars, journalists, and environmental groups have already illuminated the threats of oil spills and climate change. This Comment focuses on a less discussed impact of offshore oil and gas development: air pollution and its effects on Native Alaskans. Onshore oil and gas development has already been polluting the air of Alaskan communities, causing increases in respiratory illnesses and other health problems, and leading to climate change, which is disrupting the natural environment upon which Native Alaskans depend for food and supplies. A new era of offshore development would amplify these problems and create new and unique challenges that disproportionately burden Native Alaskan communities.

This Comment makes two novel contributions. First, it illuminates the erratic history and disjointed nature of air quality regulation on the Outer Continental Shelf. Second, this Comment highlights how the federal government's current regulatory structure for offshore air emissions uniquely fails Native Alaskans who are seeking to protect their health and way of life. In addition, this Comment makes some recommendations for statutory and regulatory changes to better address the environmental justice impacts of air pollution from offshore oil and gas development in the Arctic.

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Introduction

The oil and gas industry has been encircling Alaska's North Slope with development in every direction, and now has Native Alaskan villages in a chokehold. On February 15, 2012, a "wall of coffee-colored smoke rolled toward the village of Nuiqsut."[1] Eighteen miles from the village and 1.75 miles inland from the Arctic coastline, an exploratory oil well owned by Repsol on the North Slope of Alaska had suffered a blowout, sending gas and 42,000 gallons of drilling mud shooting out of the well for nearly nine hours.[2] Panicked Nuiqsut residents scrambled to contact local authorities to find out if they should evacuate, but found no answers.[3] The village's air monitoring equipment happened to be down for "routine maintenance" at the time.[4] It also just so happened that the entity in charge of monitoring Nuiqsut's air was ConocoPhillips, the oil company that owned drilling sites on the outskirt of town.[5]

Many villagers reported feeling ill that day, but the response from the oil industry and state agencies alike has been dismissive.[6] ConocoPhillips said decades of the company's air monitoring data shows "the air quality of the North Slope . . . is consistently better than national ambient air quality standards."[7] The chairman of the Alaska Oil and Gas Conservation Commission—the state agency that regulates drilling for worker safety and environmental

1. Sabrina Shankman, *Oil Boom Sets Off Health Fears in Alaskan Arctic*, S.F. Chron. (Aug. 1, 2018), https://www.sfchronicle.com/nation/article/Oil-boom-sets-off-health-fears-in-Alaskan-Arctic-13124725.php [https://perma.cc/HBT9-2R2X] [hereinafter Shankman, *Oil Boom*].

2. Richard Mauer, *North Slope Oil Well Suffers a Blowout*, Anchorage Daily News (Feb. 15, 2012), https://www.adn.com/economy/article/north-slope-oil-well-suffers-blowout/2012/02/15 [https://perma.cc/T66M-NSJ2]. Reports just over a month later indicated that as much as 91,939 gallons of liquid had been spilled and cleaned up at the February 2012 incident. Tim Bradner, *Repsol Closes Exploration Well After Gas Blowout*, Alaska J. of Com. (Mar. 19, 2012), http://www.alaskajournal.com/business-and-finance/2012-03-19/repsol-cements-closes-exploration-well-after-gas-blowout [https://perma.cc/92DJ-BZNC].

3. Shankman, *Oil Boom*, *supra* note 1.

4. *Id.*

5. *Id.*

6. *Id.*

7. *Id.*

protection—simply said: "Blowouts are exceedingly rare."[8] Nevertheless, just over a year later, on April 9, 2013, 6,600 gallons of crude oil sprayed out of another Repsol oil well located on Alaska's North Slope.[9] This trend was concerning, given that Repsol held the exploration rights to more than 500,000 acres in Alaska[10] and more than 100 offshore leases in the Chukchi Sea, making it second only to Shell in Arctic oil and gas exploration.[11]

Nuiqsut residents' concerns are broader than pollution from one-off blowouts. Nuiqsut residents have reported that the "every-day airborne pollutants from vast drilling operations" surrounding the village form a "hazy green" sky and "black soot on the snow."[12] As a result, "noses run and asthma flares up."[13] The number of people in Nuiqsut being treated for respiratory illness rose from one person in 1986 to seventy-five people by the turn of the century—a "stunning" increase for a village of 400 people.[14] A doctor told one mother who rushed her son to urgent medical care for respiratory distress on several occasions, "It's something in the air he's breathing."[15] State officials, however, assert that the connection between residents' symptoms and the industry's pollution is too attenuated. "Studies done by various state and regional agencies, based largely on ConocoPhillips' data, attribute respiratory health issues to spikes in viruses, smoking, poor indoor ventilation and cars left idling for hours in freezing temperatures."[16] Some Nuiqsut residents tried to prove the connection between their respiratory problems and oil and gas pollution by initiating a community-based air monitoring program, but fear of retribution by community elders with ties to the oil and gas industry thwarted these monitoring efforts.[17]

In addition to the immediate health impacts of oil and gas pollution in their village, Nuiqsut residents worry about the impact of the industry (onshore and offshore) and climate change on their native fishing, whaling,

8. Mauer, *supra* note 2. According to a local news article, the Commissioner also noted that "[s]ince 1949, Alaska's 7,553 wells have generated 19 blowouts. None have resulted in oil spills on tundra or water, he said. Before [the blowout at issue in the article], the last blowout on the North Slope was in 1994 in the Endicott field." *Id.*

9. Braden Reddall & Joseph Radford, *Repsol Suffers Spill at Alaska Exploration Well*, Reuters (Apr. 9, 2013), https://www.reuters.com/article/us-repsol-alaska/repsol-suffers-spill-at-alaska-exploration-well-state-idUSBRE93900X20130410 [https://perma.cc/GC75-W4C6].

10. *Id.*

11. Mauer, *supra* note 2.

12. Shankman, *Oil Boom*, *supra* note 1.

13. *Id.*

14. Sabrina Shankman, *Surrounded by Oil Fields, an Alaska Village Fears for Its Health*, Inside Climate News (Aug. 2, 2018), https://insideclimatenews.org/news/01082018/alaska-north-slope-oil-drilling-health-fears-pollution-risk-native-village-nuiqsut [https://perma.cc/C96T-7AHY] [hereinafter Shankman, *Surrounded by Oil Fields*].

15. Shankman, *Oil Boom*, *supra* note 1.

16. Shankman, *Surrounded by Oil Fields*, *supra* note 14.

17. *Id.*

and hunting activities—the primary source of food for more than three-quarters of Nuiqsut residents.[18] Greenhouse gas emissions associated with oil and gas production contribute to climate change, which is "causing Arctic temperatures to rise twice as fast as the global average, changing the sea ice and impacting species that people rely on for hunting."[19] In addition, *offshore* drilling carries the unique risks of oil spills and increased marine traffic that could physically interfere with Native whaling and fishing activities.[20] The Bureau of Ocean Energy Management (BOEM)—the federal agency responsible for permitting oil and gas activities in federal waters—acknowledged that drilling in Arctic waters presents "possible conflicts" with the subsistence hunting and fishing activities of Native communities.[21] Further, harmful air pollutants from offshore drilling threaten the health of Native Alaskan hunters, including those from Nuiqsut, who "spend extended periods of time closer to the emissions sources"[22] because their pursuit of whales and walruses takes them up to sixty miles offshore, toward drilling activities.[23] In response to a legal challenge brought by the Native Village of Point Hope[24] and other environmental justice groups against Shell's offshore drilling efforts, the Environmental Appeals Board of the U.S. Environmental Protection Agency (EPA) recognized the unique air emissions impacts of Arctic offshore drilling on Native Alaskans in the North Slope.[25] This array of problems could worsen for the Villages of

18. *Id.*

19. *Id.*; *see also* John Tetpon, *Lack of Ice and Climate Change Creating Fear in Alaska—Subsistence Hunting is Becoming a Key Issue as Food Becomes More Scarce*, Anchorage Press (Mar. 18, 2019), https://www.anchoragepress.com/lack-of-ice-and-climate-change-creating-fear-in-alaska/article_aae8b78e-49e7-11e9-b9d7-e3dbcb42f1e3.html [https://perma.cc/3WNE-ZP5X]; Michael Brubaker, et al., Center for Climate and Health, Climate Change in Nuiqsut, Alaska, Alaska Native Tribal Health Consortium (July 2014), https://anthc.org/wp-content/uploads/2016/01/CCH_AR_072014_Climate-Change-in-Nuiqsut.pdf [https://perma.cc/S9W9-Q3FE]. Moreover, climate change is even threatening some native villages' very existence. *See* Native Vill. of Kivalina v. ExxonMobil Corp., 696 F.3d 849, 853–54 (9th Cir. 2012).

20. Jerry Beilinson, *Everything You Need to Know About Shell Oil and Arctic Offshore Drilling in Alaska*, Popular Mechanics, Sept. 14, 2012, https://www.popularmechanics.com/science/energy/a7938/everything-you-need-to-know-about-shell-oil-and-arctic-offshore-drilling-in-alaska-10720112 [https://perma.cc/DE7T-4ZHP].

21. Bureau of Ocean Energy Management, 2017–2022 Outer Continental Shelf Oil and Gas Leasing Proposed Final Program S-3 (Nov. 2016), https://www.boem.gov/2017-2022-OCS-Oil-and-Gas-Leasing-PFP [https://perma.cc/5G3T-H5J4] [hereinafter BOEM, 2017–2022 OCS Program].

22. Shell Gulf of Mex., Inc., 15 E.A.D. 103, 2010 WL 5478647, at *31, n.80 (EAB 2010) (internal quotes and citation omitted).

23. Shell Gulf of Mex., Inc., 15 E.A.D. 470, 2012 WL 119962, at *18, n.32 (EAB 2012).

24. The Native Village of Point Hope is located on Alaska's North Slope along the Chukchi Sea, west of Nuiqsut.

25. *See* Shell Gulf of Mex., Inc., 15 E.A.D. 103, 2010 WL 5478647, at *31–32, n.80 (EAB 2010) (internal quotes and citations omitted). After promising preliminary results, this multiyear legal battle ultimately ended with Shell receiving all approvals needed to drill. *See*

Nuiqsut, Point Hope, and others similarly situated if the Trump Administration succeeds in its quest to foster more Arctic drilling, both onshore and offshore.[26] In particular, a new era of offshore development would amplify the challenges that uniquely burden Native Alaskan communities.

In the past, offshore drilling in the Arctic had been limited by what the U.S. Department of the Interior described as "unique challenges associated with environmental and weather conditions, geographical remoteness, social and cultural considerations, and the absence of fixed infrastructure to support oil and gas activity, including resources necessary to respond in the event of an emergency."[27] BOEM has recognized the "risks of oil and gas activity to the Arctic may . . . be greater than in other regions."[28] The sea ice that pervades for most of the year, the months without sun, the "[e]xtended periods of heavy fog, freezing temperatures and weeklong storms approaching hurricane strength" have earned the Arctic descriptors such as "demanding and challenging"[29] and "harsh and unforgiving."[30] The Arctic also contains ecologically important resources such as a "iconic" marine mammals, millions of migratory birds, more than 100 species of fish,[31] and many endangered species.[32] In addition, BOEM recognized "the remote nature of the Arctic program areas, the lack of widespread infrastructure, and the presence of sea ice for a large part of the year also make Arctic coastal zones more vulnerable to impacts from oil spills because of the challenges associated with conducting cleanup activities."[33]

Despite these many challenges, the Arctic's lure of "huge, if uncertain, oil and gas resource endowments," especially in the Beaufort Sea and Chukchi Sea,[34] alongside Congressional and presidential interests in improving

infra Part II.D.

26. *See* Exec. Order No. 13,795, 82 Fed. Reg. 20,815 (Apr. 28, 2017); *see also infra* Part I.D for more detailed discussion of Trump's offshore drilling order.

27. U.S. Dep't of the Interior, Report to the Secretary of the Interior, Review of Shell's 2012 Alaska Offshore Oil and Gas Exploration Program 6 (Mar. 8, 2013), https://www.doi.gov/sites/doi.gov/files/migrated/news/pressreleases/upload/Shell-report-3-8-13-Final.pdf [https://perma.cc/8KJS-NR7Y] [hereinafter U.S. Dep't of the Interior, Review of Shell's 2012 Alaska Offshore Oil And Gas Program].

28. BOEM 2017–2022 OCS Program, *supra* note 21, at S-2.

29. Pew Env't Group, Policy Recommendations: Oil Spill Prevention and Response in the U.S. Arctic Ocean 2 (2012), https://www.arctic-report.net/wp-content/uploads/2012/02/PEW-Oil-Spill-Prevention-and-Response-in-the-US-Arctic-Ocean.pdf [https://perma.cc/BBB2-WBA5] [hereinafter Pew, Policy Recommendations].

30. Jacob D. Unger, Note, Regulating the Arctic Gold Rush: Recommended Regulatory Reforms to Protect Alaska's Arctic Environment From Offshore Oil Drilling Pollution, 31 Alaska L. Rev. 263, 264 (2014).

31. Pew, Policy Recommendations, *supra* note 29, at 3.

32. BOEM, 2017–2022 OCS Program, *supra* note 21, at S-8.

33. *Id.* at S-9.

34. Bureau of Ocean Energy Management, 2019–2024 National Outer Continental Shelf Oil and Gas Leasing, Draft Proposed Program 6–13 (Jan. 4, 2018), https://www.boem.gov/NP-Draft-Proposed-Program-2019–2024 [https://perma.cc/V95W-9NKL] [hereinafter BOEM, 2019–2024 Draft OCS Program]. Oil and gas potential in Alaska is many

U.S. national security by increasing domestic energy supply,[35] inspired several attempts at Arctic offshore drilling over the last half-century.[36] While scholars, journalists, and environmental groups have devoted much attention to the risk of offshore oil spills as a result of several catastrophes,[37] the challenges faced by the Native Villages of Nuiqsut and Point Hope highlight an underdiscussed threat that is the focus of this Comment—the air pollution impacts of offshore oil and gas drilling on Native Alaskans, and how a disjointed regulatory framework for Outer Continental Shelf (OCS) air emissions affects those communities' potential for legal recourse. Part I delineates the evolution of drilling in the Arctic OCS. Part I provides additional detail on the impacts of offshore oil and gas development on Native Alaskans and puts their plight in the context of the broader environmental justice movement in the United States. Part I also describes the history of how courts have cripplingly limited the legal tools that environmental justice communities have attempted to use over the last four decades. Part II explores Native Alaskans' temporary win achieved through administrative remedies that were available under the Clean Air Act before Congress removed EPA's air permitting authority in the Arctic OCS. Part II analyzes the erratic history of air regulation on the OCS, and the differences between the EPA's OCS regulatory regime under the Clean Air Act and BOEM's regime under the Outer Continental Shelf Lands Act (OCSLA). Part II also examines how these different regulations and agency structures impact Native Alaskan communities and their ability to bring environmental justice-based challenges to OCS development. Part III

times greater than in the Atlantic and Pacific. The Congressional Research Service estimated in 2012, using 2011 BOEM data, that Alaska contains between 1 billion and 22 billion barrels of "undiscovered economically recoverable resources," while the Atlantic only has 1 billion to 2 billion, the Pacific has 4 billion to 8 billion, and the Gulf of Mexico has 33 to 45 billion. Jonathan L. Ramseur, Cong. Research Serv., R42123, Controlling Air Emissions from the Outer Continental Shelf: A Comparison of Two Programs—EPA and DOI 3, T.1 (2012) [hereinafter Cong. Research Serv., Controlling Air Emissions from the OCS]. Moreover, in 2018, CRS estimated that, based on a 2015 report from BOEM, the Alaska OCS contains "undiscovered, technically recoverable [though not necessarily economically viable] resources of approximately 27 billion barrels of oil and 131 trillion cubic feet of natural gas." Cong. Research Serv., R41153, Changes in the Arctic: Background and Issues for Congress 65 (2019) [hereinafter Cong. Research Serv., Changes in the Arctic].

35. Cong. Research Serv., R40645, U.S. Offshore Oil and Gas Resources: Prospects and Processes 1 (2012) [hereinafter Cong. Research Serv., U.S. Offshore Oil and Gas Resources].

36. *See infra* Part I.

37. These catastrophes include the Exxon Valdez spill off the coast of Alaska in 1989, the Santa Barbara spill of 1969, and the *Deepwater Horizon* spill in the in the Gulf of Mexico in 2010. *See* Robin Kundis Craig, *Regulation of U.S. Marine Resources: An Overview of the Current Complexity*, 19 Nat. Res. & Env't. 3, 7 (2004) (describing how the 1969 oil spill off the coast of Santa Barbara, California "continues to haunt some coastal states, like California and Florida, that depend heavily upon tourism."); Henry Fountain, *Lessons From the Exxon Valdez Oil Spill*, N.Y. Times, (Dec. 9, 2013), https://nyti.ms/1bQ8Dp0 [https://perma.cc/8TYX-VENC] (comparing the 1989 Exxon Valdez spill and the 2010 *Deepwater Horizon* blowout).

observes how, while some of the past legal frameworks may have been better than others for Native Alaskan communities, none of these past legal frameworks are truly adequate to address environmental justice. Accordingly, Part III makes recommendations for agencies and Congress to improve legal tools to address both air emissions and environmental justice impacts on the OCS.

I. History of Drilling in the Arctic

A. *The Outer Continental Shelf Lands Act: The Early Years*

The United States federal government first established the jurisdiction and framework for regulating offshore oil and gas development in federal waters with the adoption of the OCSLA in 1953.[38] OCSLA, which some revered as the "key to a new frontier,"[39] set a primary goal of making offshore oil and gas resources "available to meet the Nation's energy needs as rapidly as possible."[40] OCSLA directs the Secretary of the Interior (who now delegates responsibilities to the BOEM)[41] to establish a leasing system over development on the OCS—the area extending seaward from state-controlled waters (generally three nautical miles off the shoreline)[42] out to two hundred nautical

38. Outer Continental Shelf Lands Act, ch. 345, 67 Stat. 462 (1953) (codified as amended at 43 U.S.C. §§ 1331 et seq. (2012)).

39. Warren M. Christopher, *The Outer Continental Shelf Lands Act: Key to a New Frontier*, 6 Stan L. Rev. 23, 23 (1953).

40. 43 U.S.C. § 1802(2)(A) (2012).

41. Mark K. DeSantis, Cong. Research. Serv., R45480, U.S. Department of the Interior: An Overview 9 (2019) (explaining that Secretarial Order 3071, issued on January 19, 1982, delegated OCSLA leasing and management authority to BOEM's predecessor, the Minerals Management Service (MMS), and that authority was redelegated to BOEM after its establishment in 2010).

42. A nautical mile is equal to 6,076.12 feet, while a mile over land us 5,280 feet. Cong. Research. Serv., RL33404, Offshore Oil and Gas Development: Legal Framework 2, n.11 (2018) [hereinafter Cong. Research. Serv., Offshore Oil and Gas Development]. The Submerged Lands Act of 1953 granted most coastal states jurisdiction over submerged lands extending three nautical miles from their coastline, but provided for boundary out to "three-marine-leagues" (a marine league is the equivalent of 18,228.3 feet, or roughly 3.5 miles on land) for Gulf of Mexico states that could show such a boundary was provided for by the state's "constitution or laws prior to or at the time such State became a member of the Union, or if it has heretofore been approved by Congress." 43 U.S.C. § 1301(b) (2012); *see also* Cong. Research. Serv., Offshore Oil and Gas Development, *supra* at 2. As a result of litigation following the passage of the Submerged Lands Act, Texas and the Gulf Coast of Florida now have state waters extending three-marine-leagues, or roughly nine nautical miles, offshore. *Id.* at 2, n. 15.

miles from the U.S. coastline.[43] OCS energy leasing occurs in four regions: the Gulf of Mexico, the Atlantic, the Pacific, and Alaska.[44]

In the first two decades after the adoption of OCSLA, little development occurred anywhere on the OCS.[45] In the 1970s, however, a combination of technological advancements, the nation's growing dependence on oil, and an energy crisis prompted Congress and Presidents Nixon and Ford to accelerate OCS development.[46] At the same time, the "environmental movement also emerged as a vital aspect of our society,"[47] inspiring a series of congressional moratoria and executive withdrawals[48] between 1982 and 2008 that barred oil and gas development along the Atlantic and Pacific coasts, the eastern portion of the Gulf of Mexico (off Florida's coast), and the North Aleutian Basin off the western coast of Alaska.[49] However, the western Gulf of Mexico and large parts of the Alaskan OCS remained legally open for development.

B. *The Rise and Fall (and Rise and Fall) of Arctic Offshore Oil and Gas Development*

While robust and consistent oil and gas development and production has occurred in the western Gulf of Mexico over the last half-century,[50] development in the Arctic has been a roller coaster. A "major oil discovery" first occurred in northern Alaska in 1968, but drilling did not begin in earnest in the

43. *See* 43 U.S.C. § 1331(a) (defining "outer Continental Shelf"); *see also* Craig, *supra* note 37, at 4 (describing the 1982 United Nations Convention on the Law of the Sea (UNCLOS III), which allows for signatory coastal nations to claim a two hundred-nautical mile "exclusive economic zone" (EEZ) for exploiting resources, and how the United States, although not a UNCLOS signatory, has claimed a two hundred-nautical mile EEZ "through customary international law and presidential proclamations").

44. Curry L. Hagerty, Cong. Research. Serv., R41132, Outer Continental Shelf Moratoria on Oil and Gas Development 1 (2011) [hereinafter Cong. Research Serv., OCS Moratoria].

45. Sam Kalen, *Cruise Control and Speed Bumps: Energy Policy and Limits for Outer Continental Shelf Leasing*, 7 Envt'l & Energy L. & Pol'y J. 155, 161 (2012).

46. *Id.* at 161–62.

47. *Id.*

48. Areas of the OCS "may be withdrawn by the President under Section 12(a) of the OCS lands Act, 43 U.S.C. 1341(a)" as well as "under the Antiquities Act, or by Congress by such statutes as GOMESA." BOEM 2019–2024 Draft OCS Program, *supra* note 34, at 4–2.

49. *See* Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 8; *see also* Cong. Research Serv., OCS Moratoria, *supra* note 44, at 5. While Congress and President George W. Bush allowed most of the moratoria to expire in 2008, Congress allowed the North Aleutian Basin moratorium to expire in 2003 at the request of the Alaskan Delegation. *Id.*

50. For example, as of 2010, there were 3,409 production wells in the Gulf of Mexico, while only 23 in the Pacific. Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 1, n. 3 (citing Bureau of Ocean Energy Management, *Installations and Removals—Offshore Production Facilities in Federal Waters Offshore Production Facilities in Federal Waters*, http://www.boem.gov/BOEM-Newsroom/Offshore-Statsand-Facts/Offshore-Stats-and-Facts.aspx [https://perma.cc/RX6Z-B7SB]).

Beaufort and Chukchi Seas until the late 1970s or early 1980s.[51] By the mid-1990s, however, after having drilled thirty-one exploratory wells, the industry halted most drilling activities because of "difficult operating conditions," the industry's failure to find "commercially viable oil deposits," and "the public relations fallout from the 1989 *Exxon Valdez* disaster in Alaska's Prince William Sound."[52] After this brief pause, the industry reversed course once again in the early 2000s, as high energy prices, rising demand, and interest in American energy independence spurred a renewed focus on Arctic offshore drilling.[53] In 2003, the Alaskan delegation in Congress convinced their peers to allow the drilling moratorium in the North Aleutian basin (off of the western coast of Alaska) to expire.[54] Interest in the Arctic's oil and gas resources grew even stronger in 2008, when the United States Geological Survey (USGS) estimated that offshore areas of the Arctic Circle contain 75 billion barrels of oil (or about 13 percent of the world's undiscovered oil); 1,402 trillion cubic feet of natural gas (approximately 30 percent of the world's undiscovered gas); and 37 billion barrels of natural gas liquids—all "believed to be recoverable using existing technology."[55] BOEM estimates that the Beaufort and Chukchi Seas combined contain more than 23 billion barrels of technically recoverable oil and 106 trillion cubic feet of natural gas.[56] Moreover, climate change and melting Arctic sea ice has increased the ability for industry to reach these previously inaccessible areas.[57] The federal government capitalized on the industry's

51. *See* David Hults, *Environmental Regulation at the Frontier: Government Oversight of Offshore Oil Drilling North of Alaska*, 44 Envtl. L. 761, 781–82 (2014) (citing 1981 as the starting year for drilling in the Beaufort and Chukchi Seas); U.S. Dep't of the Interior, Review of Shell's 2012 Alaska Offshore Oil And Gas Program, *supra* note 27, at 8 (citing the "late 1970s through the mid-1980s" as the period for when "[m]ost of the exploration wells in Federal waters in the Beaufort and Chukchi Seas were drilled").

52. Hults, *supra* note 51, at 782–83.

53. Michael Levine, Andrew Hartsig, and Maggie Clements, *What About BOEM? The Need to Reform the Regulations Governing Offshore Oil and Gas Planning and Leasing*, 31 Alaska L. Rev. 231, 241 (2014); *see also* Kalen, *supra* note 45, at 156–58 (discussing the reemergence of American interest in "energy independence" around 2012).

54. Cong. Research Serv., OCS Moratoria, *supra* note 44, at 7 n.30.

55. U.S. Geological Surv., Fact Sheet 2008–3049, Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle 1 (2008), https://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf [https://perma.cc/BJ6Q-KR6Q]; *see also* Unger, *supra* note 30, at 269 (describing the "flurry of new leasing activity" following USGS's report). The Arctic wasn't the only region of the OCS that drew renewed attention in 2008—President George W. Bush also lifted the executive moratoria along the Atlantic and Pacific Coasts, and Congress allowed the expiration of the moratoria provisions that had historically been in annual appropriations laws. Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 8.

56. U.S. Dep't of the Interior, Review of Shell's 2012 Alaska Offshore Oil And Gas Program, *supra* note 27, at 7. The Beaufort Sea contains 8 billion barrels of oil and 28 trillion cubic feet of natural gas, while the Chukchi Sea contains 15 billion barrels of oil and 78 trillion cubic feet of natural gas. *Id.*

57. *See* Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note

growing interest, holding a highly successful lease sale for the Beaufort Sea in 2005 and a $2.7 billion lease sale for the Chukchi Sea in 2008, $2.1 billion of which was spent by Shell, with the remaining leases going to ConocoPhillips, Repsol, and Statoil.[58]

Arctic OCS development hardly missed a beat when President Obama took office in January 2009; he accelerated the oil and gas leasing momentum that President George W. Bush had started. While many remember President Obama for protecting most of the Arctic from offshore drilling,[59] he did not put those protections in place until the final few days of his presidency—after he had rammed through approvals for Arctic OCS development and after the industry tried and failed to develop the area.[60] Although President Obama had been "hesitant" toward Arctic drilling during the initial phases of his presidential campaign, strategic lobbying by Shell won him over by midsummer of 2008.[61]

Before Arctic drilling could reach full throttle, however, the 2010 *Deepwater Horizon* disaster in the Gulf of Mexico "killed 11 rig workers and unleashed an undersea gusher . . . that took three months to cap."[62] In response, the Obama Administration cancelled several planned lease sales in the Atlantic, Pacific, and Alaskan OCS.[63] The Obama Administration also issued a moratorium on other approvals[64] while it launched "the most aggressive and comprehensive reforms to offshore oil and gas regulation and oversight in U.S.

34, at 3; Cong. Research Serv., Changes in the Arctic, *supra* note 34, at 22–25 (discussing climate change and loss of sea ice in the Arctic); Edith Allison & Ben Mandler, *Petroleum and the Environment*, The American Geosciences Institute § 12-1 (2018), https://www.americangeosciences.org/sites/default/files/AGI_PetroleumEnvironment_web.pdf [https://perma.cc/6965-CUWA].

58. Hults, *supra* note 51, at 783.

59. Memorandum on Withdrawal of Certain Portions of the United States Arctic Outer Continental Shelf from Mineral Leasing, 2016 Daily Comp. Pres. Doc. 1 (Dec. 20, 2016). President Obama also "separately withdrew from leasing consideration planning areas in the North Bering Sea." Cong. Research Serv., Changes in the Arctic *supra* note 34, at 67 (citing Exec. Order No. 13,754, 81 Fed. Reg. 90,669 (Dec. 9, 2016)).

60. For a discussion of President Obama's involvement in pushing forward approvals for Shell's drilling, *see infra*, Parts I.B–C; *see also* John M. Broder & Clifford Krauss, *New and Frozen Frontier Awaits Offshore Oil Drilling*, N.Y. Times (May 23, 2012), https://nyti.ms/2tGZ86I [https://perma.cc/N3EG-WZUQ]. President Obama issued two withdrawals from waters off of Alaska in December 2016. *See* Cong. Research Serv., Changes in the Arctic, *supra* note 34, at 67 (citing Exec. Order No. 13,754, 81 Fed. Reg. 90,669 (Dec. 9, 2016)).

61. Broder & Krauss, *supra* note 60.

62. Matt Smith, *Shell's Arctic Dreams Postponed Another Year*, CNN (Jan. 30, 2014, 4:51 PM), https://www.cnn.com/2014/01/30/us/shell-arctic [https://perma.cc/92PM-QGZQ].

63. Cong. Research Serv., U.S. Offshore Oil and Gas Resources, *supra* note 35, at 2.

64. *See* Nat'l Comm'n on the BP Deepwater Horizon Oil Spill and Offshore Drilling, Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling, Report to the President 152 (Jan. 2011) [hereinafter Deep Water] (explaining that on May 27, 2010, Interior "Secretary Salazar directed MMS to issue a six-month moratorium on all drilling at a water depth of more than 500 feet in the Gulf of Mexico and the Pacific Ocean").

history."[65] These reforms included updating safety regulations and reorganizing the Minerals Management Service (MMS)—the division of the Department of the Interior that had managed most aspects of OCS development.[66] After acknowledging the problems that can arise from one agency managing "three conflicting missions," the Secretary of the Interior divided MMS into three separate entities with three independent missions: (1) BOEM would manage energy development and leasing; (2) the Bureau of Safety and Environmental Enforcement (BSEE) would handle safety and environmental responsibility; and (3) the Office of Natural Resources Revenue (ONRR) would ensure a fair return to the taxpayer from offshore royalties.[67]

C. *Shell's Arctic Offshore Drilling Efforts*

Independent of the *Deepwater Horizon* aftermath, but later that same year, the EPA's Environmental Appeals Board revoked an air permit that Shell needed under the Clean Air Act in order to operate in the Arctic OCS.[68] The Board found that the EPA had inadequately examined the impact of Shell's air emissions on Native Alaskan communities.[69]

Ironically, it was these development slowdowns—which occurred in response to the serious environmental and public health concerns sparked by Shell's Arctic proposals and *Deepwater Horizon*—that prompted President Obama to "put his foot on the gas" for Arctic OCS drilling.[70] Following unrelenting lobbying by Mark Begich, a freshman Senator from Alaska who was a "crucial Democratic vote in a narrowly divided Senate representing a decidedly Republican state", President Obama, in the summer of 2011, "created an unusual interagency group . . . to clear Shell's path through the often fractious federal regulator bureaucracy."[71] Shell had also won unlikely supporters in Washington by making a strategic decision to "abandon its oil industry brethren and join advocates for a strong response to climate change."[72] At the

65. *Regulatory Reforms*, Bureau of Ocean Energy Management, https://www.boem.gov/Regulatory-Reform [https://perma.cc/F7J7-YWHN].

66. *Id.*

67. *See* Press Release, Dep't of The Interior, Salazar Divides MMS's Three Conflicting Missions: Establishes Independent Agency to Police Offshore Energy Operations (May 19, 2010), https://www.doi.gov/news/pressreleases/Salazar-Divides-MMSs-Three-Conflicting-Missions [https://perma.cc/RYW5-F57V]; *The Reorganization of the Former MMS*, Bureau of Ocean Energy Management, https://www.boem.gov/Reorganization [https://perma.cc/S5UW-6U8B].

68. Shell Gulf of Mex., Inc., 15 E.A.D. 103, 2010 WL 5478647 (EAB 2010); *see also infra* Parts II.C and III.E for more detailed discussions of regulations controlling on air emissions in the OCS.

69. Shell Gulf of Mex., Inc., 15 E.A.D. 103, 2010 WL 5478647, at *3 (EAB 2010).

70. Broder & Krauss, *supra* note 60 (explaining that the 2010 Environmental Appeals Board decision "infuriated Shell executives, frustrated White House officials and unleashed the ire of Alaska's two senators, who introduced legislation to streamline permitting.").

71. *Id.; see also* Exec. Order No. 13,580, 76 Fed. Reg. 41987 (July 15, 2011).

72. Broder & Krauss, *supra* note 60.

same time, the company built support for its Arctic oil drilling among some Native Alaskans by donating to a local college's Inupiaq language program, financing equipment for Native whaling crews, paying for village celebrations, and sending a "personable executive" who traveled to remote villages, held company-sponsored meetings, passed out raffle tickets and food, joined in Native dances, and chewed on the "the local delicacy—raw whale meat."[73] Meanwhile, the perceived need for the United States to attain energy independence and increase domestic oil production had become a key issue in the 2012 U.S. presidential campaigns. This prompted President Obama in his January 2012 State of the Union Address to announce that his administration would be opening approximately 75 percent of the nation's offshore oil and gas resources for development.[74] By March 2012, Shell had the approvals it needed for Arctic OCS drilling: an exploration permit from BOEM and a revised air permit approved by the EPA's Environmental Appeals Board.[75]

In actual operation, however, Shell's venture into the Arctic OCS was anything but smooth. In 2012, the company had a "disastrous first year" that included running one of its drill ships aground and racking up $1.1 million in fines for violating its air permits.[76] In 2013, Shell suspended plans to drill in Arctic waters,[77] then announced its intent in May 2015 to reinitiate Arctic drilling,[78] only to reverse course again in September 2015, when the company announced it would "cease further exploration activity in offshore Alaska for the foreseeable future," citing insufficient oil resources.[79] In December 2016, after Shell and other companies "relinquished more than 90 percent of [Beaufort and Chukchi Sea] Arctic OCS leases" between February 2016 and November 2016,[80] President Obama invoked his authority under Section 12(a) of OCSLA[81] to indefinitely withdraw from leasing a large portion of the Arctic OCS, including the entire Chukchi Sea and Beaufort Sea planning areas.[82] In

73. *Id.*

74. Kalen, *supra* note 45, at 156–58.

75. Broder & Krauss, *supra* note 60; *see also* Shell Gulf of Mex., Inc., 15 E.A.D. 470, 2012 WL 119962, at *34 (EAB 2012) (approving the EPA's revised environmental justice analysis for Shell's OCS air permits).

76. Joanna M. Foster, *Shell Suspends 2014 Offshore Drilling Plans in Arctic*, ThinkProgress, (Jan. 30, 2014, 2:44 PM), https://thinkprogress.org/shell-suspends-2014-offshore-drilling-plans-in-arctic-4638f5370618 [https://perma.cc/SVZ3-V8US]; *see also* Smith, *supra* note 62.

77. *See* Foster, *supra* note 76; *see also* Smith, *supra* note 62.

78. *See* Daniel Gilbert & Sarah Kent, *Shell Places Huge Bet on Arctic Oil Riches*, Wall St. J. (July 7, 2015), https://www.wsj.com/articles/shell-places-huge-bet-on-arctic-oil-riches-1436311938 [https://perma.cc/V93W-7WDY].

79. Press Release, Shell Global, Shell Updates on Alaska Exploration (Sept. 28, 2015), https://www.shell.com/media/news-and-media-releases/2015/shell-updates-on-alaska-exploration.html [https://perma.cc/2DSM-WYEE].

80. BOEM, 2017–2022 OCS Program, *supra* note 21, at S-3.

81. 43 U.S.C. 1341(a) (2012).

82. Memorandum on Withdrawal of Certain Portions of the United States Arctic

essence, President Obama fired the oil industry from the Arctic OCS after they had already quit. Nonetheless, environmental groups were "thrilled."[83]

D. *Arctic Offshore Drilling under President Trump*

The Arctic's OCS hiatus was shortlived. In April 2017, President Trump announced a new "America-First Offshore Energy Strategy" with Executive Order 13795, which revoked most of President Obama's withdrawals, reopened almost all of the Arctic OCS for leasing, and ordered the Secretary of the Interior to schedule oil and gas lease sales "to the maximum extent permitted" in the Chukchi Sea, Beaufort Sea, and Cook Inlet, as well as the western and central Gulf of Mexico, Mid-Atlantic, and South Atlantic.[84] Since then, the Trump Administration has approved two permits to drill in the Beaufort Sea, one in November 2017[85] and one in October 2018.[86] In addition, in January 2018, BOEM proposed a new offshore leasing program for 2019 to 2024 to replace the Obama Administration's 2017 to 2022 program.[87]

The future of these plans, however, is now highly tenuous. In March 2019, the U.S. District Court for the District of Alaska reinstated President Obama's Arctic OCS withdrawal and overturned President Trump's attempted reversal, finding that OCSLA gives presidents the power only to *withdraw* areas of the OCS from leasing, and only Congress has the power to *add* areas for leasing.[88]

Outer Continental Shelf from Mineral Leasing, 2016 Daily Comp. Pres. Doc. 1 (Dec. 20, 2016). President Obama also "separately withdrew from leasing consideration planning areas in the North Bering Sea." Cong. Research Serv., Changes in the Arctic *supra* note 34, at 67 (citing Exec. Order No. 13,754, 81 Fed. Reg. 90,669 (Dec. 9, 2016)).

83. Brad Plumer, *Obama Tries to Preempt Trump by Banning Oil Drilling in Parts of the Arctic and Atlantic*, Vox (Dec. 20, 2016, 6:15 PM), https://www.vox.com/2016/12/20/14032588/obama-oil-drilling-arctic-trump [https://perma.cc/3S5A-AUTA].

84. Exec. Order No. 13,795, 82 Fed. Reg. 20,815 (Apr. 28, 2017).

85. Cong. Research Serv., Changes in the Arctic, *supra* note 34, at 66 (citing Press Release, Bureau of Safety and Environmental Enforcement (BSEE), "BSEE Approves New Drilling Operations in Arctic," (Nov. 28, 2017), https://www.bsee.gov/newsroom/latest-news/statements-and-releases/press-releases/bsee-approves-new-drilling-operations-in [https://perma.cc/4ZLC-38D5]). The BSEE Director stated in the press release that "responsible resource development in the Arctic is a critical component to achieving American energy dominance." *Id.*

86. Darryl Fears, *The Trump Administration Just Approved a Plan to Drill for Oil in Alaska's Federal Waters. It's a Major First.*, Wash. Post (Oct. 24, 2018, 3:26 PM), https://www.washingtonpost.com/energy-environment/2018/10/24/trump-administration-just-approved-plan-drill-oil-alaskas-federal-waters-its-major-first/?utm_term=.470f234d13d4 [https://perma.cc/6GRE-ZDP2]. This approval is now under review in the U.S. District Court for the District of Alaska, after environmental groups brought a lawsuit in December 2018. *Lawsuit Challenges Trump Approval of Offshore Drilling Project in the Arctic*, Earthjustice (Dec. 17, 2018), https://earthjustice.org/news/press/2018/lawsuit-challenges-approval-of-offshore-oil-drilling-project-in-the-arctic [https://perma.cc/CW9Y-56VB].

87. *BOEM*, 2019–2024 Draft OCS Program, *supra* note 34, at 4–1.

88. League of Conservation Voters v. Trump, 363 F. Supp. 3d 1013, 1030 (D. Alaska Mar. 29, 2019), *appeal docketed*, No. 19-35462 (9th Cir. May 29, 2019).

However, this decision is now under appeal in the U.S. Court of Appeals for the Ninth Circuit,[89] once again putting in question the fate of Arctic drilling and the wellbeing of Native Alaskans, such as those in the Villages of Nuiqsut and Point Hope.

	EPA (Clean Air Act § 328)	BOEM (OCSLA)
Location	Offshore & Onshore (+ meet state standards if w/in 25 miles of shore)	Onshore only, and only if "significant"
Pollutant Types Regulated	Regulates Carbon Monoxide (CO); Nitrogen Dioxide (NO_2); Sulphur Dioxide (SO_2); Ozone (O_3); Particulate Matter (PM); and Lead (Pb)	Does Not Regulate Pb, O_3, $PM_{2.5}$
Quantity of Pollutants that Trigger Permitting	PSD Permit Required for "Major Sources" = + 250 tons/year	Permit Required if: Tons/Yr > (33.3 x distance from shore)
Mobile Sources	Counts Mobile Support Vessels w/in 25miles of OCS source toward BACT trigger (But no BACTs applied to Mobile Sources)	Doesn't Count Mobile Vessels at all in Regulations (Though some offices do in practice)
Timing of Approvals & Public Comments	30-day comment period on Permits	60-day comment period on Development Plan
Administrative Appeal	Environmental Appeals Board (e.g. In Re Shell)	None

Figure 1: Areas Targeted for Drilling by the Trump Administration, But Under Legal Dispute[90]

E. *The Missing Issue in Arctic Offshore Drilling: Environmental Justice*

Native Alaskans have already shown they're not willing to let Arctic oil and gas expansion happen without a fight. In the past decade, Native Alaskans have had some success in delaying onshore and offshore oil and gas development by bringing claims in federal court under the National Environmental Policy Act (NEPA). In multiple such cases, the courts found that the federal agencies failed to take a "hard look" at projects' effects on wildlife as a part of the environmental review required by NEPA.[91] With respect to challenging the

89. League of Conservation Voters v. Trump, No. 19-35462 (9th Cir. Docketed May 29, 2019).

90. Map Source: Pew Charitable Trusts, Arctic Standards: Recommendations on Oil Spill Prevention, Response, and Safety in the U.S. Arctic Ocean 6 (2013) (circles added), https://www.pewtrusts.org/-/media/assets/2013/09/23/arcticstandardsfinal.pdf [https://perma.cc/T26R-SMBF].

91. *See* Native Vill. of Point Hope v. Salazar, No. 1:08-CV-0004-RRB, 2010 WL 2943120, at *7 (D. Alaska July 21, 2010), order clarified, No. 1:08-CV-0004-RRB, 2010 WL 3025163 (D. Alaska Aug. 2, 2010) (finding the Department of Interior's environmental review on an offshore lease to Shell in the Chukchi Sea had inadequately examined the lease's impacts on wildlife and subsistence); *see also* Kunaknana v. U.S. Army Corps of Engineers, 23 F. Supp. 3d 1063, 1099 (D. Alaska 2014) (reviewing the Army Corps' issuance of a permit under the Clean Water Act related ConocoPhillips' oil and gas development in the National Petroleum

direct impacts of offshore drilling on the Native Alaskans themselves, however, successes were few and far between and appeared to be an inviable option[92]—that is, until 2010. In that year, the Native Village of Point Hope and other environmental justice plaintiffs successfully delayed Shell's ability to obtain two air permits required by the Clean Air Act to drill in the Chukchi and Beaufort Seas.[93] The EPA Environmental Appeals Board ruled in *Shell Gulf of Mexico* that the EPA had not adequately considered the impacts of nitrogen oxide (NOx) emissions on environmental justice communities (Native Alaskans), thereby violating a 1994 executive order from President Clinton that requires federal agencies to address the environmental justice impacts of their activities.[94]

The *Shell* decision had the potential to be a turning point for environmental justice communities, particularly Native Alaskans, to challenge offshore oil and gas development based on the disproportionate health impacts of air emissions on their people. However, in 2011, Congress and President Obama quietly extinguished this option by passing an Appropriations Act provision that eliminated the Clean Air Act's requirement that Arctic OCS development obtain an air emissions permit from the EPA.[95] To add insult to injury, the EPA Environmental Appeals Board approved Shell's revised air permits in 2012, as one of the Board's final actions over Arctic OCS drilling.[96] Now, Native Alaskans have a severely limited ability to effectively challenge offshore oil and gas projects based on environmental justice concerns related to air pollution. The next Part of this Comment takes a closer look at the concept of environmental justice and related legal options.

II. Environmental Justice—From North Carolina to the Outer Continental Shelf

A. *Introduction to Environmental Justice*

The Village of Nuiqsut's story of industrial pollution infiltrating a low-income community of color and wreaking havoc on their health is not unique. Rather, it is emblematic of the situation countless communities of color face throughout the United States and the world. This trend is called environmental

Reserve, and finding that the Army Corps failed to provide a reasoned explanation for why a Supplemental Environmental Impact Statement was not needed to take into account project changes and new information such as new climate change science).

92. *See infra* Part II, for legal history of lawsuits based on "environmental justice" and background on environmental justice.

93. Shell Gulf of Mex., Inc., 15 E.A.D. 103, 2010 WL 5478647, at *32 (EAB 2010).

94. *Id.* at 148, 161 (citing Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 16, 1994)). For historical and legal background on "environmental justice," *see infra* Part II.A. For further discussion of *Shell* and Executive Order 12898, *see infra* Part II.D.

95. Consolidated Appropriations Act, 2012, P.L. 112–74, § 432, 125 Stat. 786, 1048–49 (adopted Dec. 23, 2011) (amending Section 328 of the Clean Air Act, 42 U.S.C. § 7627).

96. Shell Gulf of Mex., Inc., 15 E.A.D. 470, 2012 WL 119962, at *34 (EAB 2012).

injustice or environmental racism. The inverse of environmental racism is environmental justice.[97] The EPA defines "environmental justice" as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies."[98]

Environmental justice advocates and scholars generally attribute the birth of the environmental justice movement to a series of incidents wherein hazardous facilities were being located in low-income, predominantly black communities, beginning in North Carolina and spreading to other southeastern states throughout the 1980s.[99] These incidents ignited outrage and protests, and led the General Accounting Office (now the Government Accountability Office) and the United Church of Christ Commission (UCC) for Racial Justice to commission groundbreaking studies examining environmental injustice in southeastern states,[100] and the entire country, respectively.[101] Notably, the UCC's 1987 report found that race was "the most significant of variables tested in association with the location of commercial hazardous waste facilities."[102] In fact, the UCC's report found race was a more significant factor than socioeconomic status in hazardous facilities citing.[103] A 1994 update to the UCC study found that "people of color are 47 percent more likely to live near a hazardous waste facility than white Americans."[104] Since then, "study after study" has reconfirmed that "people of color face disproportionate risks from pollution, and that polluting industries are often located in the middle of their communities."[105] Even the EPA under the Trump Administration released a study

97. *Environmental Justice/Environmental Racism*, Energy Just. Network, https://www.ejnet.org/ej [https://perma.cc/LS7E-EAWL].

98. *Learn About Environmental Justice*, U.S. Envtl. Prot. Agency, https://www.epa.gov/environmentaljustice/learn-about-environmental-justice [https://perma.cc/AVC7-HJ57].

99. The first incident in the "environmental justice movement" is usually listed as the citing of a highly toxic polychlorinated biphenyls (PCBs) landfill in Warren County, North Carolina, which was 84 percent African American and one of the poorest counties in the state. *See, e.g.* U.S. Comm'n on Civil Rights, FN 13–14 (Oct. 2013) [hereinafter U.S. Commission on Civil Rights 2013 EJ Report]; Haydn Davies, *From Equal Protection to Private Law*, 2 Brit. J. Am. Legal Stud. 163, 164–65 (Spring 2013); Robert D. Bullard et al., *Toxic Waste and Race at Twenty: Why Race Still Matters After All of These Years*, 38 Envtl. L. 371, 373 (2008).

100. *See* Davies, *supra* note 99, at 165.

101. *See* Benjamin F. Chavis, Jr. & Charles Lee, Comm'n For Racial Justice, United Church of Christ, Toxic Wastes and Race in the United States (1987), http://www.ucc.org/about-us/archives/pdfs/toxwrace87.pdf [https://perma.cc/56WS-RP8Z].

102. *Id.* at xiii.

103. *Id.*

104. Bullard et al., *supra* note 99 (citing Benjamin A. Goldman & Laura Fitton, Center for Policy Alternatives and the United Church of Christ, Commission for Racial Justice, Toxic Wastes and Race Revisited: An Update of the 1987 Report on the Racial and Socioeconomic Characteristics of Communities with Hazardous Waste Sites 2–4 (1994)).

105. Vann R. Newkirk II, *Trump's EPA Concludes Environmental Racism Is Real*, The Atlantic (Feb. 28, 2018), https://www.theatlantic.com/politics/archive/2018/02/

in 2018 acknowledging not only that "people in poverty are exposed to more fine particulate matter than people living above poverty," but that "non-Whites tend to be burdened disproportionately to Whites."[106]

B. *Disproportionate Impacts of Offshore Drilling on Native Alaskans*

The federal government recognizes Native Americans and populations with a subsistence lifestyle as "environmental justice" communities, in other words, communities that face "disproportionately high and adverse human health or environmental effects" of pollution.[107] Native Alaskans have a complicated history with the oil industry. Native Alaskans have come to rely on the industry for jobs, tax revenue, and the development of key infrastructure such as electricity, running water, roads, fire stations, and schools.[108] At the same time, proposals to drill offshore, in particular, collide with Native Alaskans' cultural view of the ocean as their "garden"—their source of food.[109] Native Alaskan communities, such as the Iñupiat along the Beaufort and Chukchi Seas, "depend largely on the natural environment, especially the marine environment, for food and materials."[110] The Native Village of Nuiqsut estimates that over eighty percent of its residents are Iñupiat Eskimos who "practice a traditional subsistence lifestyle."[111] These traditional "subsistence activities, including fishing and hunting . . . take the Inupiat far from their local villages."[112] In fact, some of the northern Iñupiat communities, including Nuiqsut residents, "have traveled up to sixty miles offshore . . . to hunt for bowhead

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the-trump-administration-finds-that-environmental-racism-is-real/554315 [https://perma.cc/5VSD-JEMQ]; *see also Environmental Justice/Environmental Racism*, Energy Justice Network, https://www.ejnet.org/ej [https://perma.cc/LS7E-EAWL] (listing more than a dozen studies documenting environmental racism and classism).

106. *See* Newkirk II, *supra* note 105.

107. *See* Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 16, 1994). § 6–606 explains that this "environmental justice" order "shall apply equally to Native American programs." § 4–401 discusses the "need for ensuring protection of populations with differential patterns of subsistence consumption of fish and wildlife." *Id.* at § 4–401, § 6–606; *see also* U.S. Envtl. Protection Agency, EPA Policy on Environmental Justice for Working with Federally Recognized Tribes and Indigenous Peoples 1 (2014), https://www.epa.gov/sites/production/files/2017-10/documents/ej-indigenous-policy.pdf [https://perma.cc/2EC8-3U2W].

108. Broder & Krauss, *supra* note 60.

109. *Id.*

110. BOEM, 2019–2024 Draft OCS Program, *supra* note 34, at 7–6 (explaining that "fish (e.g. cod, herring, whitefish, Arctic cisco, Arctic char, and salmon), ringed seals, bearded seals, and beluga whales are all important marine subsistence species" for Alaska Native peoples).

111. Brubaker, *supra* note 19; *see also* BOEM, 2019–2024 Draft OCS Program, *supra* note 34, at 6–18 (citing an Alaska Department of Fish and Game study which "found that 63 percent of households in the Arctic harvested game, and 92 percent of households used game.").

112. Shell Gulf of Mex., Inc., 15 E.A.D. 103, 2010 WL 5478647, at *31 n.80 (EAB 2010) (internal quotes and citations omitted).

whale."[113] "Kaktovik residents have traveled as far as thirty-five miles offshore to hunt for bowhead whale and walrus," which are their "traditional subsistence food sources."[114] As a result, BOEM has acknowledged that drilling in Arctic waters presents "possible conflicts" with the subsistence hunting and fishing activities of Native communities.[115]

Moreover, the EPA's Environmental Appeals Board has recognized that air emissions from offshore oil and gas development present a unique threat to Native Alaskans because their subsistence activities of offshore fishing and hunting require them to "spend extended periods of time closer to the emissions sources."[116] Air emissions come from a variety of sources and activities related to oil and gas drilling on the OCS and can vary in type and intensity depending on the needs of the location and operation.[117] Offshore drilling has advanced over the last century "from drilling rigs mounted on shoreline piers, to rigid platforms mounted on the seafloor, to floating and seafloor systems in water depths up to 10,000 feet."[118] Sources of air emissions may include diesel engines used to drill exploratory or development wells, "supply and tug boat engines, natural gas turbines (used during production to operate platform facilities), leakage of vapors from pump and compressor seals and storage tanks, and flaring of excess gas."[119] In addition, Arctic oil and gas exploration requires certain types of mobile vessels such as ice breakers, oil spill support

113. Shell Gulf of Mex., Inc., 15 E.A.D. 470, 2012 WL 119962, at *18, n.32 (EAB 2012).

114. *Id.*

115. BOEM, 2017–2022 OCS Program, *supra* note 21, at S-10.

116. Shell Gulf of Mex., Inc., 15 E.A.D. 103, 2010 WL 5478647, at *31 n.80 (EAB 2010) (internal quotes and citations omitted).

117. Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 4.

118. Allison & Mandler, *supra* note 57, at 13-1.

119. William Cohen & Jack Haugrud, *Environmental Considerations in Outer-Continental Shelf Oil and Gas Leasing in the United States*, 3 Tulane Envtl. L.J. 1, 6 (1990). For example, BOEM's Environmental Impact Statement for the recently approved (2018) "Liberty Development" in the Beaufort Sea, 60 miles east of the Village of Nuiqsut, listed its relevant air emissions sources as:

> 1) mobile sources associated with proposed LDPI and offshore pipeline construction activities;
> 2) mobile sources associated with onshore facilities and pipeline construction activities;
> 3) stationary sources associated with drilling operations;
> 4) stationary sources associated with production operations;
> 5) propulsion and auxiliary engines operated onboard vessels;
> 6) helicopters and light aircraft; and
> 7) mobile and stationary sources associated with accidental oil spills and gas releases.

Bureau of Ocean Energy Management, Liberty Development and Production Plan, Beaufort Alaska, Final Environmental Impact Statement, Vol. 1, at 4–33 (Aug. 2018) [hereinafter BOEM, Liberty Development and Production Plan, FEIS], https://www.boem.gov/Vol-1-Liberty-FEIS [https://perma.cc/3LUD-KBED].

vessels, and trucks that operate over ice—all of which emit high amounts of pollution and need to be used more often because of the unique climate of the Arctic.[120] As a result, emissions from mobile sources supporting OCS drilling facilities are even more impactful in the Arctic than other areas of the OCS, notwithstanding the fact that mobile source emissions have increased throughout the OCS as drilling moves farther from the shore.[121] Mobile sources are now responsible for eighty percent of oil and gas exploration and production emissions in the Alaskan OCS, while they account for 55 percent of emissions in the Gulf of Mexico OCS.[122]

Emissions from offshore drilling projects can include: nitrogen oxide (NOx), carbon monoxide (CO), sulfur dioxide (SO2), particulate matter (fine particles PM2.5 and coarse particles, PM10), lead (Pb), volatile organic compounds (VOCs), and greenhouse gases (GHGs), including carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O).[123] Nitrogen oxide, carbon monoxide, sulphur dioxide, particulate matter, and lead are all listed by the EPA as "criteria" pollutants under Clean Air Act, meaning that they have the potential to harm human health and the environment.[124]

Particulate matter, which is a "mixture of solid particles and liquid droplets found in the air," is concerning for human health because particles less than 10 micrometers in diameter (PM10) can lodge deep into lungs and the bloodstream "and cause serious health problems."[125] Such problems include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeats, aggravated asthma, decreased lung function, and "increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing."[126] In fact, particulate matter is so detrimental that even the American Trucking Association—in a challenge *against* Clean Air Act regulations—told the U.S. Supreme Court that "particulate matter . . . inflict[s]

120. Air Quality Control, Reporting, and Compliance, Proposed Rule, 81 Fed. Reg. 19,717, 19,736 (proposed Apr. 5, 2016); *see also* Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 4.

121. Air Quality Control, Reporting, and Compliance, Proposed Rule, 81 Fed. Reg at 19,736.

122. *Id.*

123. BOEM, Liberty Development and Production Plan, FEIS, *supra* note 119, at 4–32.

124. *Criteria Air Pollutants*, U.S. Envtl. Prot. Agency, https://www.epa.gov/criteria-air-pollutants [https://perma.cc/J8J5-E25L]. The name "criteria pollutants" comes from the fact that the Clean Air Act requires the EPA to adopt National Ambient Air Quality Standards (NAAQS) for air pollutants that the EPA determines, based on scientific "air quality criteria," harm human health and welfare. 42 U.S.C. § 7409 (2012).

125. *Particulate Matter (PM) Pollution*, U.S. Envtl. Prot. Agency, https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM [https://perma.cc/LCK2-S7CF].

126. *Health and Environmental Effects of Particulate Matter (PM)*, U.S. Envtl. Prot. Agency, https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm [https://perma.cc/RV66-NQ5F].

a continuum of adverse health effects at any airborne concentration greater than zero."[127]

Lead can also have serious longterm health impacts because, once lead enters the body, it "distributes throughout the body in the blood and is accumulated in the bones" and can "adversely affect the nervous system, kidney function, immune system, reproductive and development systems and the cardiovascular system" in people of all ages, as well as lower the IQ of children.[128] In terms of volume, however, lead emissions from OCS sources are small.[129]

Nitrogen oxide and carbon monoxide are the air pollutants that OCS activities most abundantly produce.[130] For example, Shell's air permit for drilling in the Chukchi Sea in 2012 "allowed the [drillship] and its support vessels to emit 336 tons of NOx, 154 tons of carbon monoxide, and 43 tons of particulate matter, or soot, during the summer drilling season . . . roughly the same emissions generated by a fleet of 300,000 cars operating for a full year."[131] Large emissions of NOx are concerning because longterm exposure to NOx can "contribute to the development of asthma" or respiratory infections, while even shortterm exposure "can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions, and visits to emergency rooms."[132]

C. *Legal Tools for Addressing Environmental Justice—A History of Closed Doors*

Environmental justice advocates have tried a number of legal avenues to challenge polluting projects that disproportionately impact communities of color. However, over the last nearly half-century, courts have closed off many of those avenues.

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127. Whitman v. Am. Trucking Ass'ns, Inc., 531 U.S. 457, 475 (2001).

128. *Basic Information about Lead Air Pollution*, U.S. Envtl. Prot. Agency, https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution#health [https://perma.cc/AG3S-H3HY].

129. For example, BOEM's Environmental Impact Statement for the "Liberty Development" in the Beaufort Sea concluded that "lead emissions from the project would not cause nor contribute to a violation of the lead National Atmospheric Air Quality Standards" because "[n]one of the fuels used for the project contain lead additives and only trace levels of lead would originate from equipment lubricants containing lead or engine wear. BOEM, Liberty Development and Production Plan, FEIS, *supra* note 119, at 4–33.

130. *See* Bureau of Ocean Energy Management, BOEM 2016–060, Outer Continental Shelf Oil and Gas Leasing Program: 2017–2022, Final Programmatic Environmental Impact Statement, Vol. 1, at 4–88 (Nov. 2016); *see also* Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 4.

131. Beilinson, *supra* note 20.

132. *Basic Information about NO2*, U.S. Envtl. Prot. Agency, https://www.epa.gov/no2-pollution/basic-information-about-no2#Effects [https://perma.cc/2XH3-EYD6].

1. Civil Rights-Based Environmental Justice Litigation

Many parties have attempted to challenge polluting projects with claims that the projects' disparate impact on communities of color violates the Equal Protection Clause of the U.S. Constitution[133] or Title VI of the Civil Rights Act of 1964, which bars discrimination by any entity that receives or spends federal funds.[134] Those challenges have been largely unsuccessful, however, and "the door to environmental justice litigation based on disparate racial justice impact was gradually closed by [a series of Supreme Court cases] so that absent strong evidence of racial motivation, evidence of racial impact now has little purchase in litigation."[135]

Although the Supreme Court removed the possibility of using *courts* to vindicate Title VI claims based on discriminatory *effect* (rather than intent), Title VI still provides an avenue for any person to bring *administrative* complaints to federal agencies when a federally funded program or activity allegedly discriminates (in effect or intentionally) based on race, color, or national origin.[136] For such claims involving the EPA, complaints may allege—pursuant to EPA regulations—that the EPA or a recipient of EPA assistance discriminated in "purpose *or effect*" in administering its programs or in siting a facility.[137] EPA regulations also require the EPA Office of Civil Rights to "promptly investigate" and respond within 20 days to civil rights complaints.[138] Notwithstanding these regulations, studies have found that the EPA Office of Civil Rights rarely

133. The Equal Protection Clause provides that states may not "Deny any person within its jurisdiction the equal protection of the laws." U.S. Const. amend. XIV § 1.

134. Title VI of the Civil Rights Act of 1964, 42 U.S.C. §§ 2000d-2000d-4a (2012). § 2000d of the Civil Rights Act requires that "[n]o person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." § 2000d-1 provides that "[e]ach Federal department and agency which is empowered to extend Federal financial assistance to any program or activity, by way of grant, loan, or contract other than a contract of insurance or guaranty, is authorized and directed to effectuate the provisions of section 2000d of this title."

135. *See* Davies, *supra* note 99, at 196. For an excellent review of the keystone Supreme Court cases closing the door to environmental justice lawsuits under the Equal Protection Clause and Title VI of the Civil Rights Act, *see id.* at 171–78.

136. *See* Office of Environmental Justice, U.S. Envtl. Prot. Agency, Title VI and Executive Order 12898 Comparison (Apr. 3, 2014),

https://www.epa.gov/sites/production/files/2015-02/documents/title-vi-ej-comparison.pdf [https://perma.cc/4RUV-L6JC]; *see also Title VI and Environmental Justice*, U.S. Envtl. Prot. Agency, https://www.epa.gov/environmentaljustice/title-vi-and-environmental-justice [https://perma.cc/W3DK-7E74].

137. 40 C.F.R. § 7.35(c) (2018) (emphasis added) ("A *recipient* shall not choose a site or location of a facility that has *the purpose or effect* of excluding individuals from, denying them the benefits of, or *subjecting them to discrimination under any program or activity* to which this part applies on the grounds of race, color, or national origin or sex; or with the purpose or effect of defeating or substantially impairing the accomplishment of the objectives of this subpart.").

138. 40 C.F.R. § 7.120(d)(1)(i) (2018).

reviews complaints,[139] and when it does it almost never finds in favor of the complainant.[140] As a result, environmental justice advocates have called the EPA's response to Title VI complaints "slow[] and poor[]"[141] and "anemic."[142]

2. Statutory Causes of Action—The Clean Air Act, Take 1

After the virtual failure of attempts to apply civil rights laws to environmental justice cases, environmental justice advocates "recognized that the best protection may prove to be within the environmental laws themselves."[143] One such statutory avenue is the Clean Air Act, which is the federal law that "defines EPA's responsibilities for protecting and improving the nation's air quality."[144] The Clean Air Act requires the EPA to adopt National Ambient Air Quality Standards (NAAQS) for air pollutants that the EPA determines, based on scientific "air quality criteria," harm human health and welfare.[145] The pollutants regulated under the NAAQS program are the "criteria pollutants" described above in Part III.B (particulate matter, ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead).[146] The Clean Air Act also authorizes the development of federal and state regulations to limit emissions from major stationary sources and mobile sources, and requires states to adopt enforceable plans (State Implementation Plans (SIPs)) to attain and maintain the NAAQS.[147] Relevant to many environmental justice lawsuits is the Clean Air Act's requirement that major new stationary sources of air pollution

139. As of 2011, only 6 percent of Title VI complaints were reviewed within the legally required timeframe. *See* Davies, *supra* note 99, at 177.

140. In fact, between 1993 and 2015, the Office of Civil Rights "hadn't made a finding of discrimination . . . despite having received hundreds of complaints." Talia Buford, *Rare Discrimination Finding by EPA Civil-Rights Office*, The Center for Public Integrity (Jan. 25, 2017), https://publicintegrity.org/environment/rare-discrimination-finding-by-epa-civil-rights-office [https://perma.cc/G76R-WE5E].

141. *Title VI of the Civil Rights Act of 1964*, Earthjustice, https://earthjustice.org/features/what-you-need-to-know-about-title-vi [https://perma.cc/S2GH-N7AG].

142. Buford, *supra* note 140.

143. Richard J. Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 Ecology L.Q. 617, 618–19 (1999); *see also* U.S. Envtl. Prot. Agency Office of General Counsel, Memorandum, EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting 10–14 (Dec. 1, 2000) (discussing EPA's authority to incorporate environmental justice into Clean Air Act permitting).

144. *Clean Air Act Overview*, U.S. Envtl. Prot. Agency, https://www.epa.gov/clean-air-act-overview/clean-air-act-text [https://perma.cc/CPQ8-3CCY].

145. 42 U.S.C. § 7409 (2012).

146. *Criteria Air Pollutants*, U.S. Envtl. Prot. Agency, https://www.epa.gov/criteria-air-pollutants [https://perma.cc/J8J5-E25L].

147. *See* 42 U.S.C. §§ 7407–7671q (2012); *see also Clean Air Act Requirements and History*, U.S. Envtl. Prot. Agency, https://www.epa.gov/clean-air-act-overview/clean-air-act-requirements-and-history#text [https://perma.cc/9Q2R-XHXH]; *Evolution of the Clean Air Act*, U.S. Envtl. Prot. Agency, https://www.epa.gov/clean-air-act-overview/evolution-clean-air-act [https://perma.cc/VL82-AC8N].

obtain a preconstruction permit and install technology-based pollution controls in compliance either with the nonattainment new source review program (if the source's location is in "non-attainment" with the NAAQS), or with the Prevention of Significant Deterioration (PSD) Program (if the location is in "attainment" with the NAAQS or is "unclassifiable").[148] Major new stationary sources of air emissions can include OCS facilities such as drillships or rigs located in some areas of the OCS.[149]

As Part III will discuss in more detail, the Clean Air Act's applicability to offshore oil and gas development has vacillated over time.[150] The important point here is that the Clean Air Act's utility in promoting environmental justice has also evolved over time. Although scholars and the EPA now recognize that the Clean Air Act provides many "opportunities to integrate environmental justice concerns into the Act's substantive standards,"[151] early on the Clean Air Act was not an effective tool to promote environmental justice. Prior to the issuance of President Clinton's environmental justice Executive Order 12898 in 1994, the EPA and its Environmental Appeals Board took the position that the Agency could not even consider environmental justice concerns in an air quality permitting process.[152] That position changed, however, following the issuance of Executive Order 12898, as will be discussed in the next Subpart.

148. *See* U.S. Envtl. Prot. Agency, Clean Air Act in a Nutshell 4–9 (Mar. 22, 2013), https://www.epa.gov/sites/production/files/2015-05/documents/caa_nutshell.pdf [https://perma.cc/7T82-SV8M]; *see also* 42 U.S.C. §§ 7503 (2012) (permit requirement in nonattainment areas), 7472 (classifications of areas under the PSD program), and 7475 (preconstruction requirements under the PSD program).

149. Clean Air Act Section 328, 42 U.S.C. § 7627(a) (2012) (requiring the EPA to "establish requirements to control air pollution from Outer Continental Shelf sources . . . to attain and maintain Federal and State ambient air quality standards and to comply with the provisions of [the Prevention of Significant Deterioration program]"); *see also infra* Part III for additional history on the oscillating requirements pertaining to OCS.

150. *See infra* Part III.

151. Lazarus & Tai, *supra* note 143, at 631; *see also* U.S. Envtl. Prot. Agency Office of General Counsel, Memorandum, EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting 10–14 (Dec. 1, 2000) (describing the provisions of the Clean Air Act that allow the EPA to impose permitting requirements based on environmental justice concerns); EPA Activities to Promote Environmental Justice in the Permit Application Process, 78 Fed. Reg. 27,220 (May 9, 2013) (providing a "notice of availability of regional actions to promote public participation in the permitting process and promising practices for permit applicants seeking EPA-issued permits," including permits issued pursuant to the Clean Air Act). *See generally EJ 2020 Action Agenda: EPA's Environmental Justice Strategy*, U.S. Envtl. Prot. Agency, https://www.epa.gov/environmentaljustice/ej-2020-action-agenda-epas-environmental-justice-strategy [https://perma.cc/8MXZ-XFK9].

152. Lazarus & Tai, *supra* note 143, at 656 (citing Genesee Power Station, 4 E.A.D. 832, 837 (EAB 1993) (requiring proof of "racially discriminatory intent")).

3. President Clinton's Environmental Justice Executive Order 12898

In 1994, President Bill Clinton issued an executive order requiring federal agencies to address environmental justice, which had a "marked effect" on the EPA's and the Environmental Appeals Board's approach to considering environmental justice in permitting.[153] Executive Order 12898 provides that:

> To the greatest extent practicable and permitted by law . . . each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.[154]

With respect to considering offshore oil and gas development, Executive Order 12898 created the *potential* for environmental justice to come into play in a few different stages: (a) in the environmental analysis that NEPA[155] requires during each of the four stages of offshore planning, leasing, exploring, or drilling under OCSLA;[156] or (b) during the EPA's OCS air permitting processes, if such a permit is required for the particular OCS area.[157] As

153. *Id.*

154. Exec. Order No. 12,898, § 1–101, 59 Fed. Reg. 7629 (Feb. 16, 1994).

155. NEPA is the federal law requiring analysis of the environmental impacts of federal actions. National Environmental Policy Act of 1969, Pub. L. No. 91–190, 83 Stat. 852 (1970) (codified as amended at 42 U.S.C. §§ 4321–4347 (2012)). In a memorandum to the heads of departments accompanying Executive Order 12,898, President Clinton instructed agencies to analyze the environmental justice impacts of Federal actions when such analysis is required by NEPA, and to provide environmental justice communities with the opportunity to participate in the NEPA process. Memorandum for the Heads of All Departments and Agencies. 30 Weekly Comp. Pres. Doc. 279, 280 (Feb. 11, 1994). The Council on Environmental Quality (CEQ)—the entity within the Office of the President responsible for providing baseline NEPA regulations for all federal agencies—reiterated these instructions in a guidance document in 1997. Council on Environmental Quality, Environmental Justice Guidance Under the National Environmental Policy Act (Dec. 1997). However, the CEQ's NEPA regulations do not mention "environmental justice," or "minority," or Executive Order 12,898, except in a requirement which bars projects with environmental justice impacts from being "categorically excluded" from NEPA review altogether. 40 C.F.R. §§ 1500–1508 (2018).

156. Pursuant to the Outer Continental Shelf Lands Act (OCSLA), offshore oil and gas development occurs in four stages: (1) BOEM develops a five-year leasing program for the entire OCS; (2) BOEM holds lease sales for individual areas scheduled in the five-year plan; (3) lessees apply to "explore"; and (4) lessees submit an Application to Drill or approval of a Development and Production Plan (DPP). Andrew Hartsig et al., *Next Steps to Reform the Regulations Governing Offshore Oil and Gas Leasing*, 33 Alaska L. Rev. 1, 5 (2016) (citing 43 U.S.C. § 1337, 1340, 1344, 1345, 1351 (2012)); *see also* Cong. Research Serv., U.S. Offshore Oil and Gas Resources, *supra* note 35, at 26, for more discussion of the intersection of NEPA and the phases of OCSLA.

157. *See* Clean Air Act Section 328, 42 U.S.C. § 7627(a) (2012). Specifically, Clean Air Act Section 328 requires that the EPA:

> establish requirements to control air pollution from Outer Continental Shelf sources located offshore of the States along the Pacific, Arctic and Atlantic Coasts (other than Outer Continental Shelf sources located offshore of the North Slope Borough of the State of Alaska) and along the United States Gulf

explained below, neither statute (NEPA or the Clean Air Act) has sufficient teeth to independently enforce Executive Order 12898 on the OCS. However, administrative review of Clean Air Act permits began to look like a more promising option in 2010 with the Environmental Appeals Board's *Shell* decision, before Congress and President Obama removed that option for Alaska's North Slope in 2011.[158]

a. Judicial Review of Executive Order 12898 in NEPA

The fatal flaw of Executive Order 12898 is that it expressly does *not* "create any right to judicial review involving compliance or noncompliance of the United States."[159] As a result of this limiting language, some courts have declined to review claims alleging violation of Executive Order 12898.[160] However, the U.S. Circuit Court of Appeals and the U.S. District Court for the District of Columbia have "permitted challenges to environmental-justice analyses under NEPA and the Administrative Procedure Act"[161] and have required that agencies' analyses be something more than a "bare bones conclusion."[162]

Nonetheless, the bar is still extremely low for environmental justice analyses in NEPA reviews. Despite the fact that the EPA issued guidance in 1998 and 1999 explaining how the EPA should consider environmental justice in its own NEPA reviews and in its reviews of other agencies' environmental impact

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> Coast off the State of Florida eastward of longitude 87 degrees and 30 minutes . . . to attain and maintain Federal and State ambient air quality standards and to comply with the provisions of [the Prevention of Significant Deterioration program].

Id.

158. *See* Consolidated Appropriations Act, 2012, Pub. L. No. 112–74, § 432, 125 Stat. 1049 (adopted Dec. 23, 2011) (amending Section 328 of the Clean Air Act, 42 U.S.C. § 7627).

159. Exec. Order No. 12,898, § 6–609, 59 Fed. Reg. 7629 (Feb. 16, 1994).

160. *See* Sur Contra La Contaminacion v. EPA, 202 F.3d 443, 449 (1st Cir. 2000) (declining to review a claim that the EPA's decision to grant a permit violated Executive Order 12,898, because the Order does not "create any right to judicial review"); *see also* Protect our Communities Found. v. Salazar, No. 12CV2211-GPC PCL, 2013 WL 5947137, at *15 (S.D. Cal. Nov. 6, 2013) (explaining that "[i]t does not appear the Ninth Circuit allows a cause of action under Executive Order 12,898 even if brought under the APA") (citation omitted)), *aff'd sub nom*. Backcountry Against Dumps v. Jewell, 674 F. App'x 657 (9th Cir. 2017).

161. Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers, 255 F. Supp. 3d 101, 136 (D.D.C. 2017) (citing Communities Against Runway Expansion, Inc. v. F.A.A., 355 F.3d 678, 689 (D.C. Cir. 2004) (holding that an environmental justice claim was "properly before this court because it arises under NEPA and the APA, rather than [Executive Order 12898]," and, because the agency "exercised its discretion to include the environmental justice analysis in its NEPA evaluation . . . that analysis therefore is properly subject to arbitrary and capricious review under the APA.").

162. *Standing Rock Sioux Tribe*, 255 F. Supp. 3d at 138–40 (holding that it was arbitrary and capricious for the Army Corp to use a 0.5-mile buffer for its environmental justice in an EA on a crude oil pipeline, where the "EA does not identify any project involving a crude-oil pipeline for which a 0.5-mile buffer was employed" and the plaintiffs pointed to cases that had used a larger buffer).

statements pursuant to Clean Air Act Section 309,[163] few environmental justice-based NEPA claims have been successful in court.[164] This lack of success by environmental justice advocates under NEPA is not surprising, given that environmental plaintiffs raising NEPA claims on any issue succeed only about one-third of the time.[165] Further, if an agency chooses not to consider environmental justice at all, and public comments do not raise the issue, the agency's choice is "not subject to the [c]ourt's review under the APA."[166] Therefore, reliance on NEPA to address environmental justice impacts in OCS development is unlikely to yield satisfactory results.

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163. *See* U.S. Envtl. Prot. Agency, Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses (1998); *see also* U.S. Envtl. Prot. Agency, Final Guidance for Consideration of Environmental Justice in Clean Air Act 309 Review (1999). Clean Air Act Section 309 requires the EPA to "review and comment in writing on the environmental impact of any matter relating to duties and responsibilities of the [EPA] Administrator contained in any (1) legislation proposed by any Federal department or agency, (2) newly authorized Federal projects for construction and any major Federal action [subject to NEPA] and (3) proposed regulations published by any department or agency of the Federal Government." 42 U.S.C. § 7609(a) (2012).

164. *See, e.g.*, Sierra Club v. Fed. Energy Regulatory Comm'n, 867 F.3d 1357, 1368 (D.C. Cir. 2017) (holding that FERC's discussion of environmental justice in an EIS was not arbitrary and capricious); Protect our Communities Found. v. Salazar, No. 12CV2211-GPC PCL, 2013 WL 5947137, at *15 (S.D. Cal. Nov. 6, 2013), *aff'd sub nom.* Backcountry Against Dumps v. Jewell, 674 F. App'x 657 (9th Cir. 2017) (upholding DOI and BLM's approval of a utility scale wind development, concluding that "even if judicial review of Executive Order 12898 were available under NEPA and the APA, the Court finds that the BLM reasonably concluded that the minority population and low income populations would not be disproportionately affected by the Project," and that "BLM's decision to limit its analysis to one-half mile of the Project was reasonable and is entitled to deference"); Allen v. Nat'l Institutes of Health, 974 F. Supp. 2d 18, 47 (D. Mass. 2013) (holding the environmental justice assessment in a NEPA review was sufficient, where it considered the potential impact the BioLab may have on low-income and minority populations); Coal for Healthy Ports v. United States Coast Guard, No. 13-CV-5347 (RA), 2015 WL 7460018, at *25–26 (S.D.N.Y. Nov. 24, 2015) (holding the Coast Guard's environmental justice analysis in an EA was sufficient where it followed 5 steps of: "1) identifying the Project's study area; 2) identifying low-income and minority populations within the study area; 3) identifying the Project's potential adverse impacts on these populations; 4) determining whether any such impacts would disproportionately burden these populations; and 5) identifying measures to avoid or reduce any disproportionate adverse impacts.").

165. David E Adelman & Robert L. Glicksman, *Presidential and Judicial Politics in Environmental Litigation*, 50 Ariz. St. L.J. 3, 27 (2018) (noting that environmental plaintiffs win 35 percent of NEPA cases at the federal district court level and 27 percent on appeal).

166. City of Dallas, Tex. v. Hall, No. CIVA 307-CV-0060-P, 2007 WL 3125311, at *12 (N.D. Tex. Oct. 24, 2007), *aff'd*, 562 F.3d 712 (5th Cir. 2009) (clarifying that *Coliseum Square Ass'n, Inc. v. Jackson*, 465 F.3d 215, 232 (5th Cir. 2006), and *Communities Against Runway Expansion, Inc. v. FAA*, 355 F.3d 678, 688 (D.C. Cir. 2004), "stand for the principle that when an agency considers an environmental justice study as a part of its NEPA analysis and consequently, submits that study as part of the administrative record, that study is subject to arbitrary and capricious review under the APA," but judicial review is not required if environmental justice is absent from the NEPA process and administrative record).

Moreover, NEPA may be a limited tool to address *any* environmental issue in OCS development because, as some scholars have observed, "short of catastrophe, public outcry, or lack of industry interest, the lease sale process in the 5-year plan is on cruise control almost from the outset."[167] Scholars also observe that the combination of the truncated timeframe of OCSLA's five-year leasing plan, OCSLA's requirement that BOEM approve or deny exploration plans within thirty days of submission, and BOEM's practice of granting "conditional approvals" of exploration plans before approval of required safety plans results in BOEM either rushing its NEPA analysis or using categorical exclusions to avoid a full NEPA analysis.[168] This "make[s] it difficult or impossible for agency staff to change or cancel some or all of the proposed oil and gas operations."[169]

b. Administrative Review of Executive Order 12898 in Clean Air Act Permits

In comparison to the largely skeptical approach that courts have taken in reviewing environmental justice claims under NEPA,[170] administrative review of environmental justice claims in EPA permitting—including Clean Air Act permitting for major stationary sources of air pollution—has followed a slightly more positive trajectory. After President Clinton issued Executive Order 12898 in 1994, the EPA's Environmental Appeals Board (EAB)—which reviews initial permitting decisions of the EPA regional offices—recognized through a series of cases over fifteen years that the EPA had the *authority* to condition permits on environmental justice grounds, even in the absence of formal rules or guidance documents;[171] moreover, the Agency was in fact "encouraged" or even required in certain circumstances to consider environmental justice concerns.[172]

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167. Kalen, *supra* note 45, at 176.

168. *See id.* at 175–77 (discussing the truncated timing of OCS leasing and environmental reviews); *see also* Hartsig, *supra* note 156, at 26–28.

169. *See* Hartsig, *supra* note 156, at 28.

170. *See supra*, Subpart II.C.3.a.

171. EcoElectrica, 7 E.A.D. 54, 1997 WL 160751, at *9 n.15 (EAB 1997) (recognizing that, even in the absence of "formal rules or detailed written guidance on environmental justice with respect to PSD permitting," the EPA is permitted to address environmental justice issues).

172. *See* Lazarus & Tai, *supra* note 143, at 656–77 for an excellent review of EAB permitting decisions considering environmental justice between 1993 and 1999. As Lazarus and Tai explain:

> A clear pattern emerges from the past ten years of Appeals Board rulings. The Board is no longer reflexively skeptical of the merits of environmental justice claims and has begun to consider the claims more carefully. Now, when the Board rejects environmental justice claims, it centers its rejections less on deference to regional office discretion and more on factual challenges within the scope of the environmental justice determinations already made by the regional office permitting authorities.

Id. at 676–77.

Further, the EAB's evolution with respect to environmental justice was bolstered by the 1999 conclusion of the EPA's Office of General Counsel that the agency could consider environmental justice in *all* permitting decisions.[173] The EPA also issued a series of plans and guidance documents throughout the 2000s regarding the consideration of environmental justice in regulatory actions, regulatory analyses, and other agency programs and decisions.[174] The EAB subsequently reinforced EPA's environmental justice policies, now requiring that, when the EPA issues permits such as new source air permits and OCS air permits, the permit issuer must examine any "superficially plausible" claim that the project will disproportionately impact a minority or low-income population.[175]

Notwithstanding the EPA's and EAB's positive evolution on considering environmental justice, the EAB has also made clear that Executive Order 12898 "impart[s] considerable leeway to federal agencies in determining how to comply with the spirit and letter of the Executive Order."[176] Moreover, as with NEPA, Executive Order 12898 is merely procedural and "does not mandate that the Agency reach a determinative outcome when it conducts an environmental justice analysis, especially when the available valid data is not sufficient to support a determinative outcome."[177] As the EAB explained in *Avenal Power Center*:

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173. *See* EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting, *supra* note 151, at 10–14 (describing the provisions of the Clean Air Act that allow the EPA to impose permitting requirements based on environmental justice concerns). In addition, the EPA had in 1998 and 1999 issued guidance regarding consideration of environmental justice in NEPA reviews. *See supra* note 162.

174. *See* U.S. Envtl. Prot. Agency, Plan EJ 2014 (Sept. 2011), https://nepis.epa.gov/Exe/ZyPDF.cgi/P100DFCQ.PDF?Dockey=P100DFCQ.PDF [https://perma.cc/WDC8-YFZN]; EPA Activities to Promote Environmental Justice in the Permit Application Process, 78 Fed. Reg. 27,220 (May 9, 2013) (proving a "notice of availability of regional actions to promote public participation in the permitting process and promising practices for permit applicants seeking EPA-issued permits," including permits issued pursuant to the Clean Air Act); U.S. Envtl. Prot. Agency, Guidance on Considering Environmental Justice During the Development of Regulatory Actions (May 2015), https://www.epa.gov/sites/production/files/2015-06/documents/considering-ej-in-rulemaking-guide-final.pdf [https://perma.cc/XG58-BB9R]; U.S. Envtl. Prot. Agency, Technical Guidance for Assessing Environmental Justice in Regulatory Analysis (June 2016), https://www.epa.gov/sites/production/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf [https://perma.cc/H4UW-W242]; U.S. Envtl. Prot. Agency, EJ 2020 Action Agenda (Oct. 2016), https://www.epa.gov/sites/production/files/2016-05/documents/052216_ej_2020_strategic_plan_final_0.pdf [https://perma.cc/4CN5-NVES]; *see generally Environmental Justice*, U.S. Envtl. Prot. Agency, https://www.epa.gov/environmentaljustice [https://perma.cc/JDT9-QZXV].

175. Avenal Power Center, LLC, 15 E.A.D. 384, 2011 WL 4881823, at *11 (EAB 2011) (citing Eco Eléctrica, L.P., 7 E.A.D. 56, 69 n.17 (EAB 1997)).

176. Avenal Power Center, LLC, 15 E.A.D. 384, 2011 WL 4881823, at *13, (EAB. 2011); *see also* Pio Pico Energy Center, 16 E.A.D. 56, 2013 WL 4038622 at *67 (EAB 2013).

177. Avenal Power Center, LLC, 15 E.A.D. 384, 2011 WL 4881823 at *14 (EAB 2011).

> [Where] the Agency conducts a substantive environmental justice analysis that endeavors to include and analyze data that is germane to the environmental justice issue raised during the comment period . . . and the permit issuer demonstrates that it exercised its considered judgment when determining that it could not reach a determinative conclusion due to the insufficiency of available valid data, the Board will decline to grant review of the environmental justice analysis.[178]

Therefore, just as environmental plaintiffs have had minimal success using Executive Order 12898 in courts, their success in front of the EAB has also been limited. Only in rare circumstances has the EAB remanded a permit on environmental justice grounds—generally when the EPA provided little to no explanation.[179] Notably, as the next Part explores, one of those rare remands pertained to Shell's air permit on the Arctic OCS.[180] Further, as this Comment has already noted, the 2010 *Shell* ruling could have provided some hope and precedent for future challenges to oil and gas drilling in the Arctic OCS.[181]

D. *Shell—A Turning Point?*

1. A Temporary Win for Environmental Justice in 2010—One Paragraph is Not Enough

In 2010, the Native Village of Point Hope and other environmental justice plaintiffs challenged EPA Region 10's issuance of two Clean Air Act PSD permits required for Shell's offshore drillships in the Chukchi and Beaufort Seas off the North Slope of Alaska.[182] Both permits accounted not only for the

178. *Id.* at *14 (upholding the EPA's environmental justice review for a PSD permit for a gas-fired power plant, even though the Region did not conclude whether or not the short-term NO2 emissions would have a disproportionate impact on the surrounding populations, but the Region did provide "a thirty-one page environmental justice analysis coupled with a reasoned explanation for why it concluded that the limited information available prevented it from making a determination regarding potential disproportionate impacts caused by short-term NO2 emissions").

179. *See, e.g.*, Knauf Glass, 8 E.A.D. 121, 1999 WL 64235 at *37–38 (EAB 1999) (remanding a fiberglass manufacturing plant's PSD permit issued by the California Air Quality Management District, where "EPA Region IX took the initial responsibility for making an environmental justice determination" and determined that "it was unlikely that an Environmental Justice issue applied" but provided "no details . . . in the administrative record," giving the EAB nothing on which it could "judge the adequacy of the Region's analysis"); Shell Gulf of Mex., Inc., 15 E.A.D. 103, 2010 WL 5478647, at *28 (EAB 2010) (remanding an OCS PSD permit off the coast of Alaska, where the administrative record only contained a cursory, one-paragraph environmental justice review which was based on compliance with NAAQS standards that had since been deemed by the EPA to be inadequate to protect public health).

180. *Shell*, 2010 WL 5478647 at *32.

181. *See supra* Part I.E.

182. *Shell*, 2010 WL 5478647 at *3 n.3. For discussion of Prevention of Significant Deterioration (PSD) permits in general, see *supra* Subpart II.C.2. For discussion of air regulation on the Outer Continental Shelf, see *infra* Part III.B–D.

main drillship, but also for the use of an associated fleet of mobile support vessels, such as icebreakers and a supply ship.[183] However, both permits imposed technology-based emissions limits only on the drillship, not the mobile support vessels.[184] The plaintiffs alleged that EPA Region 10 "failed to provide a rational response to concerns [they] raised" and that the Region "neglected to conduct an environmental justice analysis, notwithstanding evidence of existing health disparities between Inupiat Eskimos and other U.S. populations."[185]

The EAB disagreed with the plaintiffs' assertion that the Region erred *per se* by "simply equat[ing] NAAQS compliance with an environmental justice analysis."[186] Instead, the EAB focused on the unusual timing of the permit issuance in this case—the Region had finalized Shell's permit after the EPA published a final rule establishing a new one-hour NO2 NAAQS, but before the new rule's effective date.[187] The EAB highlighted the fact that the EPA Administrator had, in issuing the new one-hour NO2 NAAQS rule, made an "unequivocal determination" that the old standard was "not requisite to protect public health with an adequate margin of safety against adverse respiratory effects associated with short-term exposures."[188] Moreover, it was this old, insufficient standard on which the Region had solely based its environmental justice analysis.[189] The EAB held it was insufficient for the Region to have this "singular focus on demonstrating compliance with a NAAQS standard that the Administrator had deemed no longer protective of public health."[190]

The EAB also observed that the Region had abstained from conducting additional analysis based on the fact that the closest Native Alaskans lived more than fifty kilometers away—the "radius of significant impact" used by

183. *Shell*, 2010 WL 5478647 at *3.

184. *Id.* at *1–2. The plaintiffs challenged the EPA's refusal to require mobile support vessels to use Best Available Control Technologies, but the EAB sided with the Region on this claim, and the Ninth Circuit upheld this determination in 2013. REDOIL v. U.S. E.P.A., 716 F.3d 1155 (9th Cir. 2013).

185. *Shell*, 2010 WL 5478647, at *28.

186. *Id.* at *28–30. The plaintiffs reasoned that if a NAAQS violation were a prerequisite, no PSD permit would ever require an environmental justice analysis, because PSD permits are only for areas in compliance with the NAAQS. The Board acknowledged that it has accepted NAAQS compliance in the past as "sufficient to demonstrate that emissions from a proposed facility will not have disproportionately high and adverse human health or environmental effects on a minority or low-income population." *Id.*

187. The EPA even issued its *proposed* rule before the Region issued its draft permits. The EPA Administrator published its proposed rule to revise the primary NAAQS for NO2 on July 15, 2009—five months before the Region proposed a modified draft permit and statement of basis on Jan 8, 2010. Next, on Feb 9, 2010, EPA Administrator published, in Federal Register, the final one-hour NO2 NAAQS. The Region issued the two final permits on Feb 17 and Mar 22, 2010. The final NO2 rule did not become effective until April 12, 2010. *Id.* at *30.

188. *Id.* at *32.

189. *Id.*

190. *Id.*

the Region in traditional *onshore* PSD air permits.[191] This omission, the EAB noted, was unacceptable because it failed to consider the unique impacts of offshore drilling on Native Alaskans who practice traditional subsistence fishing and hunting. Despite the fact that Shell planned to drill approximately twenty-five miles from Alaska's seaward boundary in one location and more than twenty-five miles from Alaska's seaward boundary in another location,[192] the EAB noted that Shell's drilling could harm Native Alaskans whose fishing takes them far from their local villages and places them for "extended periods of time closer to the emissions sources than suggested" by the Region.[193]

Finally, the EAB emphasized the paltry length of the Region's environmental justice analysis:

> Of the scant one-and-one-half pages the Region devotes to environmental justice in the Chukchi Response to Comments, a single paragraph . . . represents the Region's entire substantive analysis of environmental justice. The remaining paragraphs devoted to environmental justice briefly summarize the comments received and the Executive Order, and discuss the Region's efforts to satisfy its regulatory obligations with respect to public participation.[194]

Therefore, the EAB remanded the two permits to the regional EPA office "to reconsider the adequacy of its environmental justice analysis."[195]

2. Twenty Pages of EJ Analysis is Sufficient in 2012

It was a shortlived win for the Native Village of Point Hope and its coplaintiffs. After the EAB remanded Shell's Clean Air Act permit in 2010, the Region "released a twenty-page supplemental environmental justice analysis to accompany the Permits."[196] This analysis examined the impacts of Shell's stationary and mobile activities on Native Alaskans' onshore *and offshore* activities, including "traditional activities such as hunting, fishing, and whaling."[197] The EAB subsequently upheld this revised analysis in 2012, holding that:

> The Region conducted a supplemental environmental justice analysis that included and analyzed data that is germane to the environmental justice issue raised during the comment period, and the Region has demonstrated that it exercised its considered judgment when it juxtaposed the

191. *Id.* at *31 n.80.
192. *Id.* at *7.
193. *Id.* at *31 n.80.
194. *Id.* at *33 n.83.
195. *Id.* at *32.
196. Shell Gulf of Mex., Inc., 15 E.A.D. 470, 2012 WL 119962, at *18 (EAB 2012).
197. *Id.* The Board clarified that the EPA's regulations did not require the Region to analyze the impacts of mobile source emissions. *Id.* at *20. Under Section 328 of the Clean Air Act, mobile emissions supporting a drillship on the OCS count toward the determination of whether an OCS source exceeds the trigger of PSD permitting requirements. However, the EPA has interpreted Section 328 *not* to require mobile support vessels to actually implement technology-based reductions required of the main OCS source—the drillship or rig. Thus, the EAB determined that because mobile support vessels need not reduce emissions, their environmental justice impacts need not be analyzed. *Id.*

> subsistence use areas and the planned exploration areas and discussed the distances between the North Slope villages and the closest lease blocks and well sites, respectively.[198]

Specifically, the Region's analysis examined the distances between Shell's lease blocks and planned drill sites to the closest onshore communities, as well as to offshore subsistence use areas.[199] It also analyzed "demographic, health-related, and air quality data."[200] The Region also assessed compliance with the new one-hour NO2 NAAQS, a new one-hour SO2 NAAQS, and all other NAAQS. The Region concluded the NAAQS would be attained in "all areas accessible to the public, including areas both onshore and offshore where local communities engage in subsistence activities" and, therefore, "Shell's proposed OCS activities in the Chukchi and Beaufort Seas will not result in disproportionately high and adverse human health or environmental effects with respect to Alaska Natives residing on the North Slope."[201]

Shortly after the EAB's decision, Shell obtained the rest of the permits it needed to begin drilling, and it began drilling in the summer of 2012. As explained above in Part II.C, Shell's summer of drilling was "disastrous" and included running one of its drill ships aground and racking up $1.1 million in fines for violating its air permits—specifically, the NOx standard that had been the primary point of contention in *Shell* (2010).[202] Shell's disastrous venture in the Arctic OCS highlights the inadequacy of administrative avenues to completely address environmental justice harms. Nonetheless, the EAB's 2010 decision, in setting at least some floor for environmental justice analyses in OCS air permitting decisions, was a positive step from past precedent and one that could have been a gateway for environmental justice advocates to push for more. However, as the Part III will explain, Congress and President Obama removed the EPA's authority to require air permits in the Chukchi and Beaufort Seas, and replaced it with a regulatory regime under the Department of the Interior and OCSLA—a solution that is inferior for mitigating harms to Native Alaskans. Moreover, President Trump's

198. *Id.*

199. *Id.* at 18 ("The analysis catalogues the distances between the Iñupiat communities on the coast of the North Slope and Shell's lease blocks closest to shore in the Chukchi and Beaufort Seas and also includes relative distances between the specific planned drill sites in the Chukchi and Beaufort Seas . . . and the distances to the closest onshore communities. The Region also included an illustration that juxtaposes the location of Shell's lease blocks, including planned drill sites . . . with onshore and offshore subsistence use areas for the northern Iñupiat communities.").

200. *Id.* For example, "68% of residents living in the North Slope Borough classify themselves as Alaska Natives" and "nearly half of North Slope residents speak a language other than English at home." *Id.* Between 1997 and 2007, "there was a 158% increase in the prevalence of diabetes for Alaska Natives residing in the North Slope Borough," whereas there was only a 117 percent increase for Alaska Natives statewide during the same time period. *Id.*

201. *Id.* at *18–19.

202. *See* Foster, *supra* note 76; *see also* Smith, *supra* note 62.

administration has been rolling back environmental justice funding and policies in both the EPA and Department of Interior, a move that puts Native Alaskans at risk regardless of which agency oversees Arctic OCS development.

III. Regulating Air Quality on the Outer Continental Shelf—An Erratic History of Political Whims

A. *OCSLA Overview: Balancing Energy Development and Environmental Protection*

As noted above in Part II.A., OCSLA first established the jurisdiction and framework for regulating offshore oil and gas development on the OCS.[203] OCSLA incorporates competing policy goals of—first and foremost—making offshore oil and gas resources "available to meet the Nation's energy needs as rapidly as possible,"[204] while also obtaining "a proper balance between the potential for environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impact on the coastal zone."[205] OCSLA establishes four stages of offshore oil and gas development: (1) BOEM develops a five-year leasing program for the entire OCS; (2) BOEM holds lease sales for individual areas scheduled in the five-year plan; (3) lessees apply to "explore"; and (4) lessees submit an Application to Drill and a Development and Production Plan (DPP).[206] Section 18 of OCSLA requires the five-year leasing program to "best meet the national energy needs"[207] in a "manner which considers economic, social, and environmental values of the renewable and nonrenewable resources contained in the outer Continental Shelf, and the potential impact of oil and gas exploration on other resource values of the outer Continental Shelf and the marine, coastal, and human environments."[208] OCSLA also requires "consideration" of eight specific factors in determining when, where, and how to allow development of the OCS.[209] Further, selection of the "timing and location

203. 43 U.S.C. §§ 1331 et seq. (2012).

204. *Id.* § 1802(2)(A). The D.C. Circuit held that, "while the Department must consider each of the statutory factors required when making leasing decisions, including environmental considerations, these factors need not be equally weighed and 'the Act has an objective—the expeditious development of OCS resources.'" *See* Kalen, *supra* note 45, at 164 (citing California v. Watt, 668 F.2d 1290, 1317 (D.C. Cir. 1981)).

205. 43 U.S.C. § 1344(a)(3) (2012).

206. *See* Levine et al., *supra* note 53, at 235–36 (citing 43 U.S.C. § 1344(a); 1337(b)(4), 1340(c)(1), 1351(a)(1)); *see also* Kalen, *supra* note 45, at 162–63. OCSLA charges the Secretary of the Interior with the Act's implementation. The Secretary then delegated OCSLA responsibility to the Minerals Management Service in Secretarial Order 3071 (Jan. 19, 1982), and later redelegated OCSLA authority to BOEM after its establishment in 2010. Cong. Research. Serv., R45480, U.S. Department of the Interior: An Overview 9 (2019).

207. 43 U.S.C. § 1344(a) (2012).

208. *Id.* § 1344(a)(1).

209. *Id.* § 1344(a)(2). These factors include:

> (A) existing information concerning the geographical, geological, and ecological characteristics of such regions; (B) an equitable sharing of developmental bene-

of leasing, [shall] to the maximum extent practicable . . . obtain a proper balance between the potential for environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impact on the coastal zone."[210]

Although OCSLA has long governed oil and gas development on the OCS in general, OCSLA has not always governed *air emissions* on the OCS. The Parts that follow will detail how regulatory authority over air emissions on the OCS has changed hands several times over the last half-century.[211] Figure 2 also provides a summary of major regulatory changes and influential events.

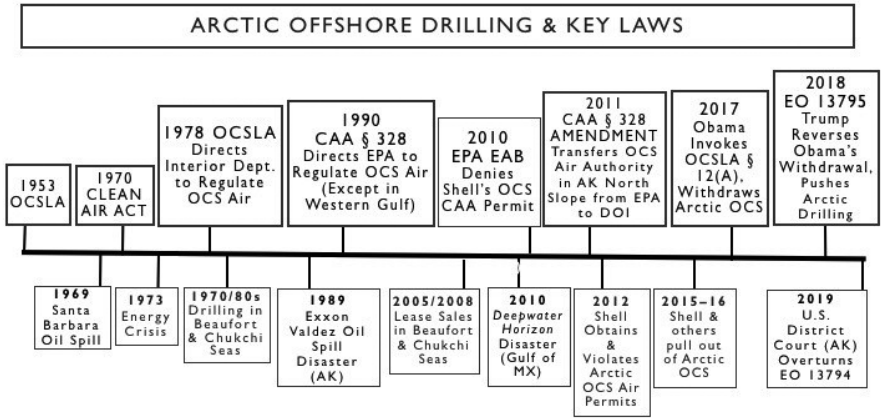

Figure 2: Timeline of Key Events and Laws Influencing Development of the Arctic OCS[212]

fits and environmental risks among the various regions; (C) the location of such regions with respect to, and the relative needs of, regional and national energy markets; (D) the location of such regions with respect to other uses of the sea and seabed, including fisheries, navigation, existing or proposed sealanes, potential sites of deepwater ports, and other anticipated uses of the resources and space of the outer Continental Shelf; (E) the interest of potential oil and gas producers in the development of oil and gas resources as indicated by exploration or nomination; (F) laws, goals, and policies of affected States which have been specifically identified by the Governors of such States as relevant matters for the Secretary's consideration; (G) the relative environmental sensitivity and marine productivity of different areas of the outer Continental Shelf; and (H) relevant environmental and predictive information for different areas of the outer Continental Shelf.

Id.

210. *Id.* § 1344(a)(3).

211. Air emissions permitting on the OCS is currently shared by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of the Interior (DOI), acting through Bureau of Ocean Energy Management (BOEM), with each having jurisdiction in different locations and each imposing requirements that vary depending on how far away from shore an operation is located. For an overview of the history of air regulation on the Outer Continental Shelf, see Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 5–7; *see also* Air Quality Control, Reporting, and Compliance, Proposed Rule, 81 Fed. Reg 19718, 19722 (Apr. 5, 2016).

212. Figure created by author.

B. *Regulating OCS Air Emissions Under OCSLA, 1953–1990*

Congress enacted OCSLA in 1953, seventeen years before it enacted the Clean Air Act's contemporary air quality regulatory regime. The 1953 version of OCSLA[213] did not specifically mention air emissions, but rather charged the Secretary of the Interior with the authority to establish "rules and regulations as he determines to be necessary and proper in order to provide for the prevention of waste and conservation of the natural resources of the outer Continental Shelf."[214] At that time, however, "conservation" referred not to the modern conception of ecological protection, but instead "referred to the desire not to waste the resource physically by destroying the oil and gas reservoir."[215]

Two years after OCSLA's enactment, Congress signaled its initial inkling of concern over the nation's air quality when it passed "the first federal legislation involving air pollution"—the Air Pollution Control Act of 1955; however, this Act was limited to funding air pollution research.[216] Congress next adopted the Clean Air Act of 1963 and the Air Quality Act of 1967, but both laws again largely focused on air quality monitoring and research.[217] It wasn't until 1970 when, concerned about the "dense, visible smog in many of the nation's cities and industrial centers," Congress adopted a major overhaul of the Clean Air Act, enacting what is still the basic structure of current law.[218] The 1970 Clean Air Act established the requirements for the EPA to adopt NAAQS for air pollutants that are harmful to human health and welfare, as well as regulate emissions from major stationary sources and mobile sources, as described in Part II. However, Congress did not specify in either the 1970 Act or in the 1977 amendments, which established the PSD program,[219] whether the Clean Air Act applied to activities on the OCS.

Congress resolved that ambiguity in 1978, when it amended OCSLA to address air quality emissions on the OCS.[220] These amendments required the Secretary of the Interior to promulgate regulations "for compliance with the national ambient air quality standards pursuant to the Clean Air Act . . . to the

213. Outer Continental Shelf Lands Act, ch. 345, 67 Stat. 462 (1953) (codified as amended at 43 U.S.C. §§ 1331 et seq. (2012)).

214. 43 U.S.C. § 1334; *see also* Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 5 n.17.

215. Deep Water, *supra* note 64, at 58.

216. *Evolution of the Clean Air Act*, U.S. Envtl. Prot. Agency, https://www.epa.gov/clean-air-act-overview/evolution-clean-air-act [https://perma.cc/GNQ7-KQTJ].

217. *See id.*

218. *Clean Air Act Requirements and History*, U.S. Envtl. Protection Agency, https://www.epa.gov/clean-air-act-overview/clean-air-act-requirements-and-history [https://perma.cc/F6ET-KPHM].

219. *Evolution of the Clean Air Act*, *supra* note 216. For additional discussion of the PSD program, see *supra* Subpart II.C.2.

220. Outer Continental Shelf Lands Act Amendments of 1978, Pub. L. No. 95–372, 92 Stat. 629, 638 (codified as amended at 43 U.S.C. § 1334 (2012)).

extent that activities . . . significantly affect the air quality of any State."[221] The legislative history of these amendments shows that concern over environmental degradation from OCS sources had been building throughout the 1970s, catalyzed by the 1969 blowout from offshore drilling near Santa Barbara, California, which resulted in the "largest oil spill in U.S. history" and caused $1.06 billion (in 1969 dollars) of damage.[222] State and local governments were concerned "their beaches, estuaries, and shoreline areas . . . could be severely damage by an OCS-related spill."[223] In addition, the House of Representatives was concerned with "the quality of air above the leasing areas of the Shelf *and* on the quality of air above adjacent on-shore coastal areas," and therefore proposed a bill in August 1977 addressing both.[224]

Nevertheless, at the same time as the environmental movement was growing, OCSLA's legislative history shows that "the shortfall of domestic energy production and the Arab oil embargo of 1973 had an equally dramatic impact" on the policies of President Nixon and Congress.[225] "President Nixon called for stepping up the OCS lease sale schedule while, at the same time, environmental and citizen organizations, commercial and recreational fishing interests, and other groups, expressed public concern over the possible effects of the proposed rapid development."[226] Therefore, the Senate's proposed OCSLA amendments focused on accelerating OCS development and omitted any language pertaining to air quality.[227]

In April 1978, however, the EPA essentially forced Congress's hand by publishing a "notice of determination that the Clean Air Act . . . appl[ies] to activities on the Outer Continental Shelf when such activities could affect the air quality of an adjacent state."[228] The House and the Senate ultimately compromised by adopting a bill that required the Secretary of the Interior, rather than the Administrator of the EPA, to regulate air emissions from OCS sources, but only as necessary to comply with onshore NAAQS.[229] Congress's report on the 1978 amendments expressly clarified that it had chosen *not* to "require that the air mass above the OCS itself be brought into compliance" with the NAAQS.[230] President Carter signed the amendments into law in Septem-

221. 43 U.S.C. § 1334(a)(8) (2012).

222. H.R. Rep. No. 95–590, at 75–87 (1977).

223. *Id.*

224. *Id.* at 133 (emphasis added).

225. *Id*. at 89.

226. *Id.*

227. S. Rep. No. 95–284 (June 21, 1977) (omitting any reference to air quality or the Clean Air Act).

228. S. Rep. No. 95–1091, at 86 (1978).

229. *See* 43 U.S.C. § 1334(a)(8) (2012) (requiring the Secretary of the Interior to promulgate regulations for "compliance with the national ambient air quality standards pursuant to the Clean Air Act . . . to the extent that activities . . . significantly affect the air quality of any State.").

230. S. Rep. No. 95–1091, at 85–86 (1978).

ber 1978.[231] The Secretary of the Interior, acting through the U.S. Geological Survey (USGS) at the time, first promulgated OCSLA air quality regulations in 1980.[232] These regulations have remained largely unchanged since then.

C. *Regulating OCS Air under the Clean Air Act, 1990–2011*

In 1990, Congress amended OCS air regulation again when it added Section 328 to the Clean Air Act, transferring authority from the Department of the Interior to the EPA to regulate air emissions in most of the OCS, with the exception of the central and western Gulf of Mexico, which remained fully under the Interior's authority.[233] The legislative history shows that Congress adopted Section 328 after becoming concerned that "construction and operation of OCS facilities emit a significant amount of air pollution which adversely impacts coastal air quality" and that OCS air pollution was "causing or contributing to the violation of Federal and State ambient air quality standards in coastal regions."[234] A Senate report noted that "OCS pollution in the Santa Barbara Channel and Santa Maria Basin for example, is expected to be equivalent to 37 percent of Santa Barbara County's onshore NOx inventory and 22 percent of its onshore reactive hydrocarbon inventory in the year 2000."[235] The report also noted that "[e]normous discrepancies exist in the regulation of air pollution from virtually identical onshore and OCS sources."[236] It rationalized that attempting to meet "national energy production goals" while maintaining national air quality standards would require "the permitting and regulation of many low-polluting facilities," and continuing to allow loosely regulated, highly polluting offshore facilities would impede this strategy.[237] One inconsistency in the legislative history, however, is that the Senate and the EPA expressed "concern about the onshore air quality impacts from OCS develo[p]ment, along the coasts of both California and the Gulf States,"[238] but the version of Section 328 that Congress ultimately adopted omitted the central and western Gulf from its requirements.[239]

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231. Outer Continental Shelf Lands Act Amendments of 1978, Pub. L. No. 95–372, 92 Stat. 629 (codified as amended at 43 U.S.C. § 1334 (2012)) (signed by President Carter on Sept. 18, 1978).

232. Oil and Gas and Sulphur Operations in the Outer Continental Shelf, 45 Fed. Reg. 15,128 (Mar. 7, 1980) (currently codified at 30 C.F.R. § 550, Subparts A, B, and C (2019)).

233. Clean Air Act Amendments of 1990, Pub. L. No. 101–549, 104 Stat. 2399 (codified as amended at 42 U.S.C. § 7401 et seq. (2012)). Section 328 is codified at 42 U.S.C. § 7627. The Clean Air Act Amendments of 1990 made many other changes that are outside of the scope of this Comment's focus.

234. S. Rep. No. 101–228, at 76–77 (1989).

235. *Id.* at 77.

236. *Id.* at 76.

237. *Id.* at 77.

238. *Id.* at 77.

239. Clean Air Act Amendments of 1990, Pub. L. No. 101–549, 104 Stat. 2399 (codified as amended at 42 U.S.C. § 7627 (2012)).

D. *2011 Through Today: OCS Air Regulation Under the CAA and OCSLA*

As explained above, under the 1990 Clean Air Act amendments, air emissions from Arctic OCS activities fell under the EPA's Clean Air Act jurisdiction. However, in the first decade of this millennium, the political climate shifted once again as energy prices and demand began to rise, climate change and melting sea ice began to open up new parts of the Arctic,[240] the presence of the United States in the Middle East increased pressure to boost domestic energy production—including from the Arctic[241]—and Republicans took control of the House midway through President Obama's first term.[242] House Republicans undertook "a war on environmental regulations" to such an extent that some dubbed them "the most anti-environment Congress ever."[243] President Obama, however, was not blameless in this nationwide push for fossil fuel development.[244] Ironically, Congress and President Obama alike grew concerned by the slowdowns in OCS permit approvals that occurred both in the immediate wake of the 2010 *Deepwater Horizon* disaster in the Gulf of Mexico[245] and as a result of the EAB's revocation of Shell's Clean Air Act permit for development in the Arctic OCS based on environmental justice concerns.[246] In 2011, Congress expressed concern that "delays in issuing [OCS] permits and lack of clarity on what is required for a permit have resulted in large losses for the businesses that contract and service rigs and unnecessary job losses for Americans in a difficult economy."[247] The House Committee on Appropriations "strongly encourage[d]" BOEM to issue more offshore

240. *See supra* notes 55–59 and accompanying text.

241. For example, during a 2011 Congressional hearing in which Representative Don Young (R-AK) urged his colleagues to vote for his appropriations bill amendment that would remove all reviewing authority of the EPA Environmental Appeals Board over CAA permits on the Arctic OCS. Rep. Young advocated for the government to issue offshore oil and gas drilling permits "so we don't have to go to war over in the Middle East over oil." 157 Cong. Rec. H1182 (daily ed. Feb. 17, 2011) (statement of Rep. Young).

242. Jeff Zeleny, *G.O.P Captures House, but Not Senate*, N.Y. Times (Nov. 2, 2010), https://nyti.ms/2JgoKQM [https://perma.cc/88T8-ZY5R].

243. Kate Sheppard, *The Most Anti-Environment Congress Ever?*, The Guardian (Sept. 13, 2011), https://www.theguardian.com/environment/2011/sep/13/anti-environment-congress-ever [https://perma.cc/2DKC-U9NS].

244. *See* Broder & Krauss, *supra* note 60 (describing how lobbying by Shell and Senator Begich won over President Obama on Arctic OCS drilling, resulting in President Obama's administration shepherding Shell's Arctic drilling approvals).

245. *See* Deep Water, *supra* note 64, at 152 (explaining how, in May 2010, Interior Secretary Salazar placed a six-month moratorium on drilling in waters deeper than 500 feet in the Gulf of Mexico and Pacific Ocean).

246. *See* Shell Gulf of Mex., Inc., 15 E.A.D. 103, 2010 WL 5478647, at *32 (EAB 2010).

247. *See* Committee on Appropriations, Report on Dep't of the Interior, Environment, and Related Agencies Appropriation Bill, Report to Accompany HR 2584, H.R. Rep. No. 112–151, at 39 (2011); *see also* 157 Cong. Rec. H5464 (daily ed. July 25, 2011) (remarks by Rep. Richmond expressing concern over the slow speed of permitting on the OCS and the need to increase funding for BOEMRE to "quicken the pace of permit approval.").

permits, and supported a bill that "set[] parameters for the approval of exploration permits by the Environmental Protection Agency," in that it required the "air quality impact of any OCS source [to] be . . . determined solely with respect to the impacts in the corresponding area" and set a six-month deadline for "final agency action on a permit application for platform or drill ship exploration on an OCS source."[248] Notably, however, that proposed bill kept OCS air permitting authority with the EPA.[249]

Those changes didn't go far enough to satisfy the Alaskan Delegation in Congress, however. Alaska Senator Lisa Murkowski vocalized her concern on multiple occasions that Shell had spent somewhere between "$2 billion" and "tens of millions of dollars trying to thread the needle through the EPA's regulatory morass" without receiving the necessary permits for drilling on the Beaufort and Chukchi Seas.[250] Murkowski complained:

> [T]he delay truly is—it's 100 percent attributable to the EPA . . . I cannot understand I just cannot understand how it can take so long for an agency to approve an air permit for a drilling rig that will operate 25 to 75 miles offshore less than one quarter of the year.[251]

Consistent with Senator Murkowski's frustration, Representative Don Young (R-AK) introduced an amendment to an appropriations bill in 2011 that would prohibit the EPA's EAB from "consider[ing], review[ing], reject[ing], remand[ing], or otherwise invalidat[ing] any permit issued for Outer Continental Shelf source located offshore of the States along the Arctic Coast under section 328(a) of the Clean Air Act."[252] In supporting his bill, Representative Young disdainfully referred multiple times to the "lawyers" on the EAB, and called the EAB "bureaucrats who don't want to issue the permits."[253] "What this amendment will do," said Representative Young, "is remove the ability for lawyers to overrule EPA permit writers."[254] The House passed Representative

248. Committee on Appropriations, Report on Dep't of the Interior, Environment, and Related Agencies Appropriation Bill, Report to Accompany HR 2584, H.R. Rep. No. 112–151, at 39, 137–38, 157 (2011); *see also* H.R. 2584, 112th Cong. § 443 (as introduced on Jul. 19, 2011).

249. H.R. Rep. No. 112–151, at 137 (2011).

250. *Department of the Interior, Environment, and Related Agencies Appropriations, Fiscal Year 2012: Hearings on H.R. 2584 Before the S. Comm. on Appropriations*, 112th Cong. 112–392, at 4–5 (2011). In addition, Representative Don Young's (R-AK) tales of Shell were even taller, claiming Shell had invested "[o]ver $4 billion . . . in trying to drill exploratory wells, and to date not a single well has been drilled because of one EPA air permit," and that Shell's leases were "80 miles from any human, other than those who work on these ships." 157 Cong. Rec. H1182 (daily ed. Feb. 17, 2011) (statement of Rep. Young).

251. *Department of the Interior, Environment, and Related Agencies Appropriations: Hearing on H.R. 2584 Before the S. Comm. on Appropriations*, 112th Cong. 112–392, at 74 (2011) (statement of Senator Lisa Murkowski).

252. *See* 157 Cong. Rec. 2464 (2011).

253. *Id.*

254. *Id.*

Young's provision in February 2011 with a vote mostly along party lines,[255] but it was not ultimately adopted in the Senate. How the two houses struck their final compromise, which exempted the Beaufort and Chukchi Seas from the Clean Air Act's Section 328 permitting requirements, is nowhere to be found in the legislative history.[256] However, Mark Begich, a freshman senator from Alaska, was a "crucial Democratic vote in a narrowly divided Senate representing a decidedly Republican state" and had been unrelenting in lobbying President Obama to push for more Arctic oil and gas development.[257] Ultimately, President Obama signed the 2012 Consolidated Appropriations Act on December 23, 2011, transferring air emissions permitting authority for activities in Alaska's North Slope OCS from the EPA back to the Department of the Interior.[258]

Since these 2011 changes, BOEM has had authority pursuant to OCSLA to regulate air emissions from OCS sources located in the Gulf of Mexico west of 87.5° longitude (offshore Texas, Louisiana, Mississippi, and Alabama) and areas offshore the North Slope of Alaska, including the Chukchi Sea and Beaufort Sea, while the EPA has had authority under Clean Air Act Section 328 to regulate air emissions in the eastern portion of the Gulf of Mexico off the coast of Florida, as well as all other remaining OCS areas (see Figure 3).[259] The result is a seriously disjointed regime of regulations over air emissions on the OCS—one that has the potential to create confusion and uncertainty for all stakeholders, but also that results in requirements for drilling activities in the Arctic OCS that differ in important and potentially harmful ways for Native Alaskans, as explained in the next Part.

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255. The vote was 243–185. 230 Republicans voted yes, 9 Republicans voted no; 13 Democrats voted yes, 176 Democrats voted no. *Final Vote Results for Roll Call 94*, Office of the Clerk: U.S. House of Representatives (Feb. 18, 2011, 2:17 PM), http://clerk.house.gov/evs/2011/roll094.xml [https://perma.cc/9QW5-MGT5].

256. I looked through every bill and resolution feeding into the Consolidated Appropriations Act, 2012, Pub. L. No. 112–74, § 432, 125 Stat. 786, 1049 (codified as amended at 42 U.S.C. § 7627 (2012) (amending Section 328 of the Clean Air Act)). The CAA exemption for the North Slope is nowhere to be found until December 2011 in H.R. 3671, 112th Cong. (2012), which was sponsored by Representative Harold Rogers (R-KY), just days before this exemption was incorporated into the Consolidated Appropriations Act, 2012.

257. Broder & Krauss, *supra* note 60.

258. *See* Consolidated Appropriations Act, 2012, Pub. L. No. 112–74, § 432, 125 Stat. 786, 1049 (codified as amended at 42 U.S.C. § 7627 (2012) (amending Section 328 of the Clean Air Act).

259. *See* Brian Cameron, Jr. & Teshara Matthews, U.S. Dep't. of the Interior, Bureau of Ocean Mgmt., Gulf of Mexico OCS Region, OCS Regulatory Framework 11–12 (2016), https://www.boem.gov/OCS-Regulatory-Framework [https://perma.cc/6CXK-TMYE]; *Outer Continental Shelf Air Permits*, Envtl. Prot. Agency, https://www.epa.gov/caa-permitting/outer-continental-shelf-air-permits [https://perma.cc/C4YZ-8NDX].

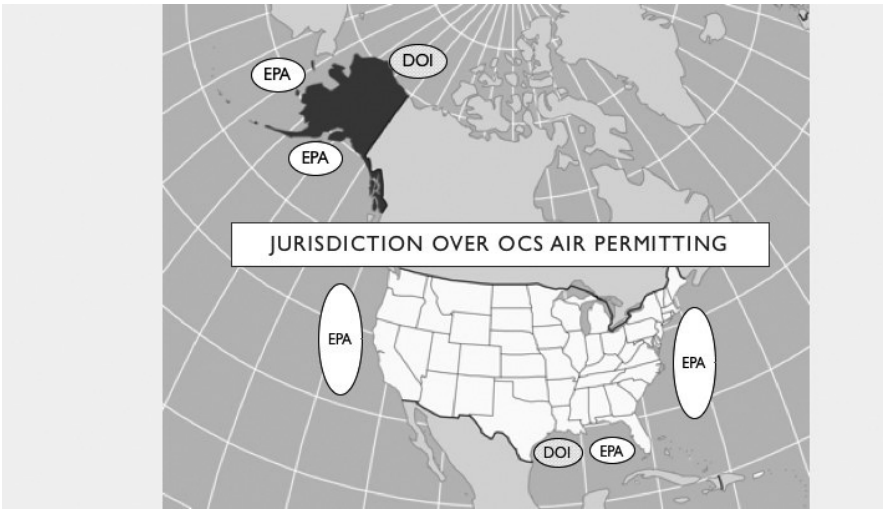

Figure 3: EPA's and DOI's Jurisdiction over Air Regulations on the OCS[260]

E. *Comparing BOEM and EPA OCS Air Regulations and Implications for Native Alaskans*

While BOEM and the EPA both regulate oil and gas activities on the OCS with the overall objective of controlling harmful air pollutants, BOEM's regulations are generally "not as stringent as EPA's for sources of similar size and type of air pollution"[261] and less effectively address impacts on Native Alaskans, as this Part will explain. BOEM's OCS air regulations have not been updated since they were first adopted in 1980, leading some to observe that BOEM's regulations "are outdated and do not reflect the best science or technology available today."[262] Further, as BOEM acknowledges, "there are differences in each agency's statutory authority and differences in the way each agency implements its statutory charge."[263] Importantly, the primary objectives of the two governing statutes—the Clean Air Act and OCSLA—are different. In short, it's "air quality versus offshore energy development," respectively.[264]

260. Underlying map source: *Restr:Map of USA AK full.svg*, Wikipedia, https://br.wikipedia.org/wiki/Restr:Map_of_USA_AK_full.svg [https://perma.cc/YH3Q-7RFZ] (labels made by author).

261. Pew Charitable Trusts, Arctic Standards: Recommendations on Oil Spill Prevention, Response, and Safety in the U.S. Arctic Ocean 29-30 (2013), https://www.pewtrusts.org/-/media/assets/2013/09/23/arcticstandardsfinal.pdf [https://perma.cc/MGQ6-FRLL] [hereinafter Pew Charitable Trusts, Arctic Standards].

262. *Id.* at 90.

263. Air Quality Control, Reporting, and Compliance, 81 Fed. Reg. 19718, 19722 (proposed Apr. 5, 2016).

264. Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 24. As courts have noted, "OCSLA's fundamental objective is the 'expeditious and

The resulting OCS air regulations promulgated by EPA and BOEM differ with respect to: (1) the locational focus of the air quality impacts (onshore only, or both offshore and onshore); (2) what pollutants are regulated; (3) what quantity of pollutants trigger regulation; (4) how emissions from mobile sources are evaluated; (5) the timing of project approvals and public participation periods; and, importantly for this Comment, (6) the opportunities for administrative appeal and the implications for environmental justice. A seventh issue not specific to the OCS but relevant to this Comment is the differences between the EPA and BOEM in their commitment to addressing environmental justice generally. Not surprisingly, the EPA's regulations tend to provide more opportunity to protect the interests of Native Alaskan communities, although there are some minor exceptions and still much room for improvement, as explained below. Table 1 summarizes these regulatory differences, which this Part explores in detail.

	EPA (Clean Air Act § 328)	BOEM (OCSLA)
Location	Offshore & Onshore (+ meet state standards if w/in 25 miles of shore)	Onshore only, and only if "significant"
Pollutant Types Regulated	Regulates Carbon Monoxide (CO); Nitrogen Dioxide (NO_2); Sulphur Dioxide (SO_2); Ozone (O_3); Particulate Matter (PM); and Lead (Pb)	Does Not Regulate Pb, O_3, $PM_{2.5}$
Quantity of Pollutants that Trigger Permitting	PSD Permit Required for "Major Sources" = + 250 tons/year	Permit Required if: Tons/Yr > (33.3 x distance from shore)
Mobile Sources	Counts Mobile Support Vessels w/in 25miles of OCS source toward BACT trigger (But no BACTs applied to Mobile Sources)	Doesn't Count Mobile Vessels at all in Regulations (Though some offices do in practice)
Timing of Approvals & Public Comments	30-day comment period on Permits	60-day comment period on Development Plan
Administrative Appeal	Environmental Appeals Board (e.g. In Re Shell)	None

Table 1: Key Differences Between EPA's and BOEM's OCS Air Regulations

1. Onshore Versus Offshore Air Quality

Section 328 of the Clean Air Act controls air quality above the OCS by directing the EPA to "establish requirements to control air pollution from Outer Continental Shelf sources . . . to attain and maintain Federal and State ambient air quality standards to comply with the provisions" of the Act's PSD

orderly' development of the Outer Continental Shelf's energy reserves, subject to appropriate environmental safeguards." Native Vill. of Point Hope v. Salazar, No. 1:08-cv-0004-RRB, 2010 WL 2943120, at *2 (D. Alaska July 21, 2010) (citing 43 U.S.C. § 1332(3)), *order clarified*, No. 1:08-CV-0004-RRB, 2010 WL 3025163 (D. Alaska Aug. 2, 2010).

program.[265] In addition, Section 328 requires OCS sources located within twenty-five miles of a state's boundary to meet all state and local air emissions requirements that would apply if the source were located onshore.[266] If federal and state or local requirements conflict, EPA regulations provide that the more environmentally stringent requirements apply.[267]

In contrast to the Clean Air Act's dual focus on offshore and onshore air quality, OCSLA requires BOEM to promulgate regulations for compliance with the Clean Air Act's NAAQS only "to the extent that activities authorized [under OCSLA] *significantly* affect the air quality of any *State*."[268] BOEM's interpretation of this phrase is important in two different ways: (1) what area the agency considers to be included in "any state;" and (2) what it deems to be "significant." First, BOEM has "historically interpreted [this] phrase . . . to limit it to considering those effects that would occur *landward* of the shoreline" and *not* effects that would occur in state waters.[269] BOEM temporarily changed its interpretation in a proposed rule in 2016, concluding that its OCS air regulations should consider effects in "the entire area of a State's jurisdiction extending to its seaward boundary (either three or nine nautical miles seaward of its shoreline)."[270] In 2017, however, President Trump ordered the Secretary of the Interior to revise or withdraw this rule.[271] Just three days later, then-Secretary Zinke ordered BOEM to "immediately cease all activities to promulgate" the proposed rule.[272] Even if BOEM had adopted its 2016 pro-

265. 42 U.S.C. § 7627(a) (2012); *see also supra* Subpart II.C.2 for an overview of Clean Air Act provisions relevant to the OCS. In addition, OCS sources beyond 25 nautical miles from the state seaward boundary may also be subject to "Title V operating permit program requirements, and are subject to New Source Performance Standards and some standards for Hazardous Air Pollutants promulgated under section 112 of the CAA." *Outer Continental Shelf Air Permits*, Envtl. Prot. Agency, https://www.epa.gov/caa-permitting/outer-continental-shelf-air-permits [https://perma.cc/6L57-HAR6].

266. 42 U.S.C. § 7627(a)(1) (2012) ("[S]uch requirements shall be the same as would be applicable if the source were located in the corresponding onshore area, and shall include, but not be limited to, State and local requirements for emission controls, emission limitations, offsets, permitting, monitoring, testing, and reporting."); *see also* Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 13.

267. 40 C.F.R. §§ 55.13–55.14 (2018).

268. 43 U.S.C. § 1334(a)(8) (2012) (emphasis added).

269. Air Quality Control, Reporting, and Compliance, 81 Fed. Reg. 19,718, 19,738–739 (proposed Apr. 5, 2016) (emphasis added).

270. *Id.* at 19,739.

271. Exec. Order No. 13,795, Implementing an America-First Offshore Energy Strategy, 82 Fed. Reg. 20,815, 20,817 (Apr. 28, 2017) ("The Secretary of the Interior shall take all steps necessary to review BOEM's Proposed Rule entitled 'Air Quality Control, Reporting, and Compliance,' 81 Fed. Reg. 19,718 (April 5, 2016), along with any related rules and guidance, and, if appropriate, shall, as soon as practicable and consistent with law, consider whether the proposed rule, and any related rules and guidance, should be revised or withdrawn.").

272. U.S. Dep't of the Interior, Secretarial Order No. 3350, America-First Offshore Energy Strategy, Secretary of the Interior, § 4(a)(5) (May 1, 2017), https://www.doi.gov/sites/doi.gov/files/press-release/secretarial-order-3350.pdf [https://perma.cc/8LCB-Y5E6]. In

posed changes, however, OCSLA still would not allow BOEM to regulate air quality beyond the state's seaward boundary and "above the OCS generally,"[273] unlike Clean Air Act Section 328.

The second notable characteristic of BOEM's interpretation of OCSLA's mandate to regulate OCS activities that "significantly affect the air quality of any State" is what the agency deems "significant"—in other words, what amount of ambient air pollution in the state triggers BOEM's regulation of the OCS source. Different observers offer potentially conflicting summaries. The Congressional Research Service explained that BOEM's measure of "significance" is the same as what the EPA uses for determining if a new major source of air pollution would significantly impact a neighboring area that is not in attainment with the NAAQS.[274] However, Pew Charitable Trust observed that, because BOEM's OCS air regulations have not been updated since 1980, the amount of ambient air pollution BOEM considers "significant" enough to trigger regulation is the same level that was "used by [the] EPA in 1980" and therefore is only about "two percent of the national ambient air quality standards" used today.[275] In simpler terms, compared to the EPA's air regulations, BOEM's air regulations tolerate a much dirtier level of ambient air pollution before its OCS regulations kick-in.

The diverging foci on solely onshore air quality (as in OCSLA's regulatory regime) and both offshore and onshore air quality (as in Clean Air Act Section 328) is critical for Native Alaskans who travel up to sixty miles offshore during their traditional fishing and whaling expeditions, closer to offshore drilling activities and hence closer to pollution sources.[276] The importance of this distinction was highlighted in the 2010 EPA EAB case that remanded Shell's Clean Air Act OCS permits in part because of the Region's failure to ade-

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November 2017, the Secretary of the Interior reported that Interior is "currently reviewing" BOEM's 2016 air quality proposed rule and is considering "promulgating final rules for certain necessary provisions and issuing a new proposed rule that may withdraw certain provisions and seek additional input on others." Final Report: Review of the Department of the Interior Actions That Potentially Burden Domestic Energy, 82 Fed. Reg. 50,532, 50,540 (Nov. 1, 2017). No activity has been posted to the docket of the 2016 air quality proposed rule since November 2017. Docket ID: BOEM-2013-0081, RIN 1010-AD82.

273. Air Quality Control, Reporting, and Compliance, 81 Fed. Reg. 19,718, 19,722 (proposed Apr. 5, 2016).

274. Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 20. Specifically, BOEM's "significance" threshold is the same as that used by the "EPA when determining whether a new major source would significantly impact the air quality of a neighboring nonattainment area." *Id.* Further, OCS sources significantly impacting onshore areas that are in attainment with NAAQS must apply Best Available Control Technologies (BACT), while OCS sources significantly impacting the air quality of nonattainment onshore areas must "fully reduce" emissions using BACTs and additional reductions or offsets from other sources. *Id.* at 21 (citing 40 CFR 52.21(c)).

275. Pew Charitable Trusts, Arctic Standards, *supra* note 261, at 91.

276. *See* Shell Gulf of Mex., Inc., 15 E.A.D. 470, 2012 WL 119962, at *18, n.32 (EAB 2012).

quately consider offshore impacts on Native fishers and hunters.[277] By contrast, consideration of solely onshore impacts can lead to harmful results for Native Alaskans. For example, BOEM's August 2018 Final Environmental Impact Statement for the Liberty Development and Production Plan in the Beaufort Sea concluded that the Plan would "not result in any degradation to the human health conditions" in the Village of Nuiqsut because Nuiqsut is "over 60 miles west of the Proposed Action Area, [and] any emissions produced as a result of the Proposed Action would be dispersed and well mixed with the ambient air to at or below normal background concentrations before reaching those communities."[278] BOEM's sole focus on *onshore* air quality ignores the Nuiqsut hunters who travel up to sixty miles offshore for hunting—the precise distance from shore of the Liberty Project's proposed location.[279]

2. Types of Pollutants Regulated

As previously noted, the EPA currently regulates six "criteria pollutants" under the Clean Air Act's NAAQS provisions: carbon monoxide (CO); nitrogen dioxide (NO_2); sulfur dioxide (SO_2); ozone (O_3); fine particulate matter ($PM_{2.5}$) and coarse particulate matter (PM_{10}); and lead (Pb).[280] Although BOEM regulates most of these criteria pollutants, as well as two ozone precursor pollutants—NO_x and VOCs—BOEM's OCS air quality regulations do not require review of lead, fine particulate matter ($PM_{2.5}$), or ozone.[281]

With respect to particulate matter, BOEM uses an outdated "total suspended particulate pollution" (TSP) standard that the EPA long ago replaced with "more detailed and health-protective" standards that separately address fine particulate patter ($PM_{2.5}$) and coarse particulate matter (PM_{10}).[282] This distinction is important for the health of Native Alaskans because, as noted in Part III.B, smaller particles can lodge deeper into the lungs and the bloodstream "and cause serious health problems."[283] The TSP standard used by BOM is therefore inadequate to address the threats posed by smaller particulate matter.

277. *See* Shell Gulf of Mex., Inc., 15 E.A.D. 103, 2010 WL 5478647, at *1 (EAB 2010); Shell Gulf of Mex., Inc., 15 E.A.D. 470, 2012 WL 119962, at *1, (EAB 2012).

278. BOEM, Liberty Development and Production Plan, FEIS, *supra* note 119, at 4–39, 4–42.

279. BOEM's conclusion also ignores the fact that the prevailing winds in the summer—the season when drilling occurs—come from the northeast. *Id.* at 4–39. These winds could blow offshore air pollutants southwest right into the Village of Nuiqsut.

280. *See Criteria Air Pollutants*, U.S. Envtl. Prot. Agency, https://www.epa.gov/criteria-air-pollutants [https://perma.cc/A874-9JL5].

281. *See* Air Quality Control, Reporting, and Compliance, 81 Fed. Reg. 19,718, 19,723–725 (proposed Apr. 5, 2016).

282. Pew Charitable Trusts, Arctic Standards, *supra* note 261, at 91.

283. *Particulate Matter (PM) Pollution*, U.S. Envtl. Prot. Agency, https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM [https://perma.cc/B5JT-VAWG].

BOEM's omission of lead from its regulations is also concerning because lead can have lasting impacts on human health, including disruption of the "nervous system, kidney function, immune system, reproductive and development systems and the cardiovascular system" in people of all ages, as well as brain development and IQ in children.[284] Thus, BOEM should include lead in an update to its OCS air regulations, if the agency remains in charge of such emissions. However, as previously noted, the volume of lead emissions from OCS sources is relatively small,[285] and therefore it may make sense to first prioritize updating other aspects of OCS air regulations.

3. Quantity of Pollutants Regulated

If an OCS polluting facility is subject to Clean Air Act Section 328, the facility qualifies as a "major emitting facility" or "major stationary source" that must comply with the emissions control requirements of the Clean Air Act's PSD program if it has the "potential to emit two hundred and fifty tons per year or more of any air pollutant."[286] The PSD program requires the facility to install the "best available control technology for each pollutant" over the threshold.[287] The 250 tons per year threshold applies irrespective of how far from shore the facility is located.[288]

In contrast, BOEM regulations apply an exemption formula that considers both the amount of projected emissions *and* the distance of the proposed facility from shore.[289] This "Emissions Exemption Threshold" (EET) exempts a facility from any further analysis or requirements if the projected emissions of a particular pollutant (in tons/year) will be less than the distance from shore (in miles) multiplied by 33.3.[290] BOEM's linear exemption equation, which

284. *Basic Information about Lead Air Pollution*, U.S. Envtl. Prot. Agency, https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution#health [https://perma.cc/6LD8-NKKS].

285. For example, BOEM voluntarily chose to examine lead emissions in its Environmental Impact Statement for the recently approved (2018) "Liberty Development" in the Beaufort Sea, and the agency concluded "lead emissions from the project would not cause nor contribute to a violation of the lead National Atmospheric Air Quality Standards" because "[n]one of the fuels used for the project contain lead additives and only trace levels of lead would originate from equipment lubricants containing lead or engine wear." BOEM, Liberty Development and Production Plan, FEIS, *supra* note 119, at 4–33.

286. 42 U.S.C. § 7479(1) (2012).

287. 42 U.S.C. § 7475(a)(4) (2012).

288. Air Quality Control, Reporting, and Compliance, 81 Fed. Reg. 19,718, 19,730 n.26 (proposed Apr. 5, 2016).

289. Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 20.

290. *See* 30 C.F.R. § 550.303(d) (2018); *see also* Air Quality Control, Reporting, and Compliance, 81 Fed. Reg. 19,718, 19,730 (proposed Apr. 5, 2016) (explaining that "[i]f a proposed plan would not cause emissions of criteria or precursor air pollutants in excess of the EET, the plan is not required to include a detailed air quality analysis."). BOEM rationalizes the its formula by citing its "distinct mandate to focus on State impacts from OCS facilities." *Id.*

was developed in 1979–1980, results in "most offshore sources receiving an exemption from air quality analysis and control requirements at the very first step."[291] Further, in comparison to EPA's regulations, BOEM's formula results in a higher (i.e. more lenient) trigger for emissions control obligations for any source located further than 7.5 miles from shore.[292] The Pew Charitable Trust illustrated why BOEM's exemption threshold is a more lenient standard than the EPA's PSD requirements:

> Under [BOEM]'s regulations, a large source of air pollution—for example, one that emits 300 tons per year of each of four pollutants: sulfur dioxide, or SO_2; nitrogen dioxide, or NO2; particulate matter, or PM; and carbon monoxide, or CO; located in close proximity to the shoreline (for example, just under 10 miles from shore)—would be completely exempt from any analysis of its air quality impacts as well as any obligation to install pollution controls. The same source, if regulated by EPA, would be categorized as a "'major'" source, required to conduct a full air quality impact analysis demonstrating compliance with all applicable air quality standards, and would be required—at a minimum—to apply the "best available control technology" for each pollutant and may also be required to install additional controls depending on the pollution source type.[293]

Or, as the Congressional Research Service put it, "if an OCS source would be located 30 miles from shore, it would be exempt from further air emission requirements as long as the projected emissions for each pollutant (SO_2, PM, NO_x, and VOC) were below its exemption threshold of 990 [tons per year]," while the same source under EPA standards would trigger Clean Air Act PSD requirements if it emitted more than 250 tons per year, "and states may have even lower thresholds that would apply to inner OCS sources [i.e. within 25 miles of shore]."[294]

Needless to say, because the EPA's OCS air regulations impose a more stringent quantitative trigger for emissions controls than do BOEM's OCS air regulations, the EPA regulations are more protective of human health and are therefore preferable for protecting any community. BOEM's formula should be of particular concern to Native Alaskans, however. Because BOEM's formula becomes even more lenient the further away from shore the facility is located, BOEM's formula is disproportionately harmful to Native Alaskans who travel far offshore during their traditional fishing and whaling ventures.

4. Mobile Source Emissions

Neither BOEM nor the EPA requires mobile sources on the OCS to implement emissions controls. EPA regulations interpret the Clean Air Act's

291. Pew Charitable Trusts, Arctic Standards, *supra* note 261, at 90.

292. EPA's "major source" threshold (250 tons/year) divided by BOEM's multiplier (33.3) = 7.5 miles.

293. Pew Charitable Trusts, Arctic Standards, *supra* note 261, at 90.

294. Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 20.

statutory definition of "OCS source" to allow emissions control requirements to apply to vessels only when they are permanently or physically attached to the seabed or physically attached to an OCS facility.[295] BOEM takes the same position with respect to its own authority over mobile source emissions on the OCS.[296]

The two agencies diverge, however, on the issue of whether mobile source emissions count for the purpose of triggering emissions control requirements for the stationary source. The EPA counts the emissions from mobile support vessels operating within twenty-five miles of a stationary OCS facility toward the calculation of whether the facility's "potential to emit" exceeds the 250 tons per year threshold and therefore is a "major source."[297] However, if the combined emissions from the stationary facility and its mobile support vessels qualify as a "major source," the EPA applies PSD emissions controls to the stationary source, not the mobile vessels.

BOEM's current guidance and practice is generally consistent with the EPA's approach in counting mobile support vessels toward the emissions exemption threshold[298]—although, again, BOEM's threshold is more lenient than EPA's. Notably, however, BOEM's regulations do not require counting mobile support vessels toward the regulatory threshold,[299] and BOEM's predecessors did not adopt this practice in Alaska.[300]

Accounting for mobile source emissions everywhere on the OCS is important, but it is especially important on the Arctic OCS, where eighty percent of emissions come from mobile sources.[301] BOEM acknowledged this point in 2016, noting that because mobile support vessels in the Arctic

295. *See* 40 C.F.R. 55.2 (2018). Because Section 328 of the Clean Air Act makes the OCS subject to the Clean Air Act's PSD Program in Title I, the EPA claims it does not have authority under Title I to regulate mobile sources on the OCS: "EPA is prohibited from directly regulating mobile sources under [the NSR and PSD provisions of the CAA]." Outer Continental Shelf Air Regulations, 57 Fed. Reg. 40,792, 40,793–94 (Sept. 4, 1992) (codified at 40 C.F.R. Part 55). Rather, the EPA has explained that, if EPA were to regulate mobile source emissions on the OCS, it would need to do so under Title II of the Clean Air Act. *Id.*

296. Air Quality Control, Reporting, and Compliance, 81 Fed. Reg. 19,718, 19,735–736 (proposed Apr. 5, 2016).

297. Section 328 of the CAA, specifies that "emissions from any vessel servicing or associated with an OCS source, including emissions while at the OCS source or *en route* to or from the OCS source within 25 miles of the OCS source, shall be considered direct emissions from the OCS source." 42 U.S.C. § 7627(a)(4)(C) (2012) (emphasis added); *see also* Outer Continental Shelf Air Regulations, 57 Fed. Reg. 40,792, 40,794 (Sept. 4, 1992) (codified at 40 C.F.R. pt. 55) (explaining that "[a]ll vessel emissions related to OCS activity will be accounted for by including vessel emissions in the 'potential to emit' of an OCS source.").

298. *See* Air Quality Control, Reporting, and Compliance, 81 Fed. Reg. 19,718, 19,736 (proposed Apr. 5, 2016).

299. Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 22.

300. *See* Air Quality Control, Reporting, and Compliance, 81 Fed. Reg. 19,718, 19,736 (proposed Apr. 5, 2016).

301. *Id.*

"generate far more emissions than the facilities they support, not accounting for their emissions makes it impossible to appropriately avoid authorizing activity causing or contributing to a violation of the NAAQS."[302] BOEM therefore proposed regulations that would codify its practice of "attributing [mobile support vessel] emissions to the approved facilities that the [mobile support vessels] support."[303] BOEM's proposed regulations even went a step further than the EPA's by proposing to count all mobile support vessels while they are "actually providing operational support, regardless of [their] distance from the facility."[304] BOEM explained that the EPA's "blanket 25-mile radius" "does not capture most of the attributed emissions that occur between a port and the facility," because increasing numbers of OCS facilities in recent years have been located further than 25 miles from shore.[305] Further, excluding mobile source emissions that occur on the landward side of a 25-mile radius around a distant OCS facility would fail to account for emissions that have the greatest near-shore impacts.[306] BOEM's 2016 proposed rule also recognized that the EPA's blanket 25-mile radius for counting mobile sources is particularly inadequate in the Arctic, where more polluting support vessels such as ice breakers are likely to operate more than twenty-five miles from the stationary facility, sometimes landward of the facility.[307] However, as noted above, in 2017, President Trump and then-Department of the Interior Secretary Zinke ordered BOEM to cease all activity toward finalizing these proposed regulations.[308]

Although BOEM has abandoned its 2016 proposed rule, the proposal highlighted issues of import to Arctic OCS communities that should be incorporated into any OCS air quality regulations, regardless of whether BOEM or EPA is the responsible agency. Specifically, the EPA should eliminate its 25-mile radius rule. Mobile source emissions should be accounted for, and they should be counted regardless of how far they are operating from a stationary facility. Moreover, mobile support vessels on the OCS should be required to actually *control* their emissions. Controlling such emissions is of particular import to Native Alaskans who spend significant amounts of time on the ocean, close to the emissions sources, during their traditional fishing and whaling expeditions. In addition, particular attention should be paid to controlling emissions from vessels like ice breakers that are unique to the Arctic and are more polluting. Neither the EPA's nor BOEM's current regulations adequately address these issues today. Such mobile source regulation might require a statutory

302. *Id.*
303. *Id.*
304. *Id.* at 19,737.
305. *Id.* at 19,736.
306. *See id.*
307. *Id.*
308. *See supra* Subpart III.E.1, at notes 271–72.

amendment, but a creative combination of Clean Air Act Titles I, II, and III arguably provide the EPA with sufficient statutory authority.[309]

5. Timing of Project Approvals and Public Participation

The timeframe for project approvals and public participation is rushed both under OCSLA and under the EPA's Clean Air Act OCS regulations, but in different ways. The EPA's regulations require it to provide only a 30-day comment period for OCS PSD permit reviews, though the EPA has discretion to extend or reopen comments if that would help expedite the decision process.[310] In addition, the EPA must grant a party's request for a public hearing if the Administrator "finds on the basis of requests, a significant degree of public interest in a draft permit."[311]

In contrast, BOEM examines the impact on ambient air quality as one of many factors considered during of its review and approval of an exploration plan or development and production plan.[312] OCSLA allows for a 60-day period for comments by the Governor of any affected state and "any interested person" during the approval process for "Development and Production Plans."[313] BOEM's regulations reflect this 60-day deadline.[314]

While BOEM's 60-day comment period may appear more generous than the EPA's 30-day comment period, OCS air quality is the *only* issue considered during the EPA's OCS permitting process, while air quality is but one factor considered under OCSLA in approving development and production plans. Further, the EPA's 30-day period is a floor, with the option for extension, while OCSLA's 60-day comment period is an express statutory deadline. Therefore, while the EPA's baseline requirement of a 30-day comment period is likely insufficient in many cases to allow for meaningful public participation, its flexibility and singular focus on air quality make it likely a better avenue for public participation than OCSLA's regulatory regime. Allowing a robust opportunity for public participation is important for Native Alaskans and other environmental justice communities because "meaningful participation of affected communities is one of the cornerstones of environmental justice," and dialogue can help produce outcomes acceptable to the agency and stakeholders

309. Title I of the Clean Air Act generally addresses stationary sources of air pollution; Title II addresses Mobile Sources; and Title III addresses multiple issues, including OCS air emissions.

310. 40 C.F.R. §§ 71.11, 124.13; *see also* Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 18.

311. 40 C.F.R. § 71.11(f)(1).

312. BOEM explains that it conducts its air quality analysis "whenever a lessee or operator proposes new exploration, development, or production operations on the OCS," but that air quality is just "one factor that BOEM considers in making a determination on the overall plan." Air Quality Control, Reporting, and Compliance, 81 Fed. Reg. 19,717, 19,723 (proposed Apr. 5, 2016) (to be codified at 30 C.F.R. pt. 500).

313. 43 U.S.C. § 1351(g) (2012).

314. 30 C.F.R. § 550.267(b) (2018).

alike and avoid litigation or administrative review.[315] Further, to the extent that stakeholders find litigation or administrative review necessary, establishing a community's concerns as a part of the official record is critical to success in court or before the EPA's EAB, particularly for environmental justice concerns, as was explained in Part II.

6. Opportunity for Administrative Appeal and Implications for Environmental Justice

Both the Clean Air Act and OCSLA provide for judicial review of an agency action alleged to be in violation of the statute, its implementing regulations, or the terms of any permit or lease.[316] Only the Clean Air Act, however, provides for administrative review via the EPA's EAB, which "offers parties a powerful tool to compel agency review."[317] The Department of the Interior (BOEM's parent agency) provides "no analogous process" to the EPA's EAB.[318]

As explained in Part II.C, the availability of administrative review is important for parties seeking to address environmental justice concerns because President Clinton's Environmental Justice Executive Order expressly does not "create any right to judicial review involving compliance or noncompliance."[319] Further, the EPA's EAB had developed positive precedent for including environmental justice in OCS air quality permitting. Specifically, in 2010 the EAB required the EPA to consider the impacts of air emissions from Shell's Arctic OCS activities on Native Alaskans both onshore and during their offshore fishing and hunting activities.[320]

BOEM, on the other hand, recently demonstrated the inadequacy of its commitment to environmental justice and the inadequacy of OCSLA's regulatory framework for considering impacts on Native Alaskans in an August 2018 Final Environmental Impact Statement (EIS) for an oil and gas Development and Production Plan in the Beaufort Sea. As explained in Part III.E.1, BOEM failed in that EIS to consider the impacts of offshore oil and gas

315. *See* U.S. Commission on Civil Rights 2013 EJ Report *supra* note 99, at 105 ("Meaningful participation of affected communities is one of the cornerstones of environmental justice and should be used to prevent conflicts before the need for [Alternate Dispute Resolution] or litigation arises."); *see also id.* at iv (explaining that "the input of communities of color and low-income communities is integral to decision-making, planning, monitoring, problem-solving, and implementation and evaluation of environmental policies and practices. Low-income and minority communities, however, still do not fully participate in the process because of language and cultural barriers and lack of access to information. Federal agencies must make early and meaningful public participation in siting and permitting decisions a reality for overburdened communities of color and poor communities.").

316. *See* 43 U.S.C. § 1349 (2012) (OCSLA "Citizens suits, jurisdiction and judicial review"); *see also* 42 U.S.C. § 7604(a) (2012) (Clean Air Act citizen suit provision).

317. Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 25.

318. *Id.* at 28.

319. Exec. Order No. 12,898, § 6–609, 59 Fed. Reg. 7629 (Feb. 16, 1994).

320. *See supra* Part II.D.

activities on Native fishers and hunters while they are at sea and near the emissions sources.[321] BOEM also failed to consider how the prevailing winds in the summer—the season when drilling occurs—would blow offshore air pollutants southwest, right into the Village of Nuiqsut.[322] The legal barriers for the Native Village of Nuiqsut to redress these problems are threefold. First, OCSLA provides them no avenue to require BOEM to consider offshore air quality.[323] Second, Executive Order 12898 provides them no judicial review of environmental justice impacts[324] and BOEM provides no administrative review equivalent to the EPA's process.[325] Third, NEPA might allow for judicial review of offshore and environmental justice concerns if such concerns were raised in public comments, but agencies win in the overwhelming majority of NEPA challenges,[326] and a court might find such concerns to be in conflict with OCSLA's focus on onshore, rather than offshore, air quality.

7. Comparing the EJ Commitments of BOEM versus EPA

Even if BOEM and the Department of the Interior had an administrative appeals process equivalent to that of the EPA's EAB, the EPA's commitment to environmental justice is more robust than that of BOEM or the Interior Department. The EPA has a comprehensive set of plans, guidance documents, strategic collaboration initiatives, and grant-giving programs to support environmental justice both as a part of and outside of regulatory action.[327] In comparison, the Department of the Interior and BOEM have a relatively simple approach to environmental justice.[328] Since 1995,[329] the Department of the Interior has had an environmental justice strategic plan that outlines broad goals for including environmental justice communities in the agency's

321. BOEM, Liberty Development and Production Plan, FEIS, *supra* note 119, at 4-39, 4-42.

322. *Id.*

323. *See supra* Subpart III.E.1.

324. Exec. Order No. 12,898, § 6–609 59 Fed. Reg. 7629 (Feb. 16, 1994).

325. Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 28.

326. *See supra* Subpart II.C.3.

327. *See generally Environmental Justice*, U.S. Envtl. Prot. Agency, https://www.epa.gov/environmentaljustice [https://perma.cc/JDT9-QZXV]; *see also supra* note 173 (listing EPA environmental justice plans and policy documents); U.S. Envtl. Prot. Agency, Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses (Apr. 1998); U.S. Envt'l Protection Agency, Final Guidance for Consideration of Environmental Justice in Clear Air Act 309 Reviews (Jul. 1999).

328. *See generally Environmental Justice*, Dep't of the Interior https://www.doi.gov/oepc/resources/environmental-justice [https://perma.cc/ZS3A-8GBW] (providing one paragraph of text, followed by links to the Department's Environmental Justice Memorandum with the United States Environmental Protection Agency, the Department's Environmental Justice Strategic Plan, and the Department's Environmental Justice Annual Implementation Report(s)).

329. *See* U.S. Dep't of the Interior, Strategic Plan Environmental Justice (1995).

decisionmaking, and the Department published updates to these plans in 2012[330] and November 2016.[331] However, the Department of the Interior's plans do not go to the same level of detail, depth, or breadth as the EPA's. Moreover, although the Department of the Interior's plan includes BOEM by reference,[332] BOEM lacks its own tailored environmental justice plan, which can and has led to disjointed implementation by BOEM. The disconnect between the Department of the Interior's environmental justice plan and BOEM's OCS actions was evidenced in a 2016 BOEM report on its OCS regulatory framework, which relied on BOEM's existing public participation processes under NEPA to fulfill the mandate of Executive Order 12898.[333] Reliance solely on existing NEPA processes to achieve environmental justice is inadequate because NEPA's environmental review is not a truly substantive or proactive action and BOEM's OCS permitting processes provide minimal opportunity for public participation.[334] Further, BOEM's reliance on the fact that the NEPA process is an "open process that provides opportunities for all participants"[335] ignores barriers that environmental justice communities face in meaningfully participating in government decisionmaking.[336] As the U.S. Commission on Civil Rights has recognized, "Meaningful participation of affected communities is one of the cornerstones of environmental justice," and Executive Order 12,898 was meant to broaden public participation beyond that already mandated by NEPA and "provide[] environmental justice communities with another mechanism to use concurrently with the NEPA requirement of public participation."[337]

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330. *See* U.S. Dep't of the Interior, Environmental Justice Strategic Plan 2012–2017 (Mar. 27, 2012).

331. *See* U.S. Dep't of the Interior, Environmental Justice Strategic Plan (Nov. 2016).

332. *See id.* at 2.

333. Cameron & Matthews, BOEM, *supra* note 259, at 38, Section 3.37 ("BOEM's existing NEPA process invites participation by all groups and communities in the development of its proposed actions, alternatives, and potential mitigating measures. Scoping and review for NEPA document are an open process that provides opportunities for all participants, including minority and low-income populations, to raise new expressions of concern that can be addressed in the documents. Impacts to socioeconomic conditions, commercial fisheries, air quality, and water quality are considered in the analysis of effects of the proposed actions on local populations or resources used by local groups, including minority and low-income groups.").

334. Cong. Research Serv., Controlling Air Emissions from the OCS, *supra* note 34, at 24 (describing the limited opportunities for public participation in OCS oil and gas approvals); *see also supra* Subpart III.E.5.

335. Cameron & Matthews, BOEM, *supra* note 259, at 38, Section 3.37.

336. U.S. Comm'n on Civil Rights 2013 EJ Report *supra* note 99, at iv ("Low-income and minority communities, however, do not fully participate in the process [of developing and implementing environmental policies and practices] because of language and cultural barriers and lack of access to information.").

337. U.S. Comm'n on Civil Rights 2013 EJ Report *supra* note 99, at 105–106.

Notwithstanding the above evidence that the EPA appears to be the superior agency for addressing the environmental justice impacts of Arctic OCS development on Native Alaskans, the EPA still has room for improvement. For example, only about one-third of the EPA's administrative compliance orders, administrative penalty orders, and judicial consent decrees were issued in areas of potential environmental justice concern.[338] In addition, although the EPA reported in 2018 that low-income people are increasingly living in areas in attainment with NAAQS for fine particulate matter, the EPA also reported that the areas remaining in nonattainment are disproportionately low-income.[339] The EPA should focus air quality enforcement efforts, policies, and programs in environmental justice communities.

Moreover, regardless of whether the EPA or BOEM oversees Arctic OCS air regulations, both agencies' environmental justice programs and policies are threatened by the defunding and deregulation efforts of the Trump Administration. For example, in 2018, President Trump proposed to cut the EPA's Environmental Justice Grants budget to less than one-third of its previous level, from "$6.74 million enacted for FY2018 to $2.0 million for FY2019."[340] In addition, both the Department of the Interior and the EPA have taken steps to "walk back already anemic federal environmental-justice work."[341] The EPA, for example, has been "putting a stop to some civil-rights investigations and replacing or firing many of the scientists with deep technical knowledge of the subject."[342] In addition, "changes to move the offices of environmental justice into a policy office . . . promise to further reduce the autonomy of life-long environmental-justice staffers and reduce the effectiveness of their work."[343] Likewise, the Department of the Interior in September 2018 "quietly rescinded two memos that provided guidance on protecting vulnerable communities and Native Americans."[344] Hence, both agencies' environmental justice programs will need to be rebuilt by future administrations and by Congressional efforts

Conclusion

This Comment highlighted the unique and pressing threat imposed on Native Alaskans by air pollution from oil and gas development on the Arctic

338. Specifically, only 33 percent of Administrative Compliance Orders, 36 percent of Final Administrative Penalty Orders, 32 percent of Judicial Consent Decrees, and 35 percent of pollutants reduced were issued in Areas with Potential EJ Concern. EPA Environmental Justice FY2017 Progress Report, 240-R1–8001, at 33–34 (Apr. 2018).

339. *Id.* at 10.

340. Cong. Research Serv., Role of the U.S. Environmental Protection Agency in Environmental Justice, IF 10529, at 2 (Aug. 2, 2018).

341. *See* Newkirk II, *supra* note 105.

342. *Id.*

343. *Id.*

344. Adam Federman, *The Interior Department is Sidelining Environmental Justice*, The Nation (Nov. 13, 2018), https://www.thenation.com/article/interior-department-environmental-justice-arctic-drilling-energy-dominance [https://perma.cc/7HK6-WY3P].

OCS. More importantly, this Comment shed light on the inadequacies of the legal tools currently available for Native Alaskans to redress this environmental justice issue and protect their air, health, and way of life. The need to correct these inadequacies is urgent, both because of President Trump's proposals to drill in the Arctic and because climate change is melting Arctic sea ice and opening up previously inaccessible areas of the Arctic OCS.

This Comment has demonstrated that a three-pronged statutory and regulatory reform would help address the environmental justice impacts of air emissions from OCS development: (1) Congress should return all OCS air regulation to the Clean Air Act and the EPA; (2) the EPA should update its OCS air regulations; and (3) Congress should adopt a comprehensive and enforceable environmental justice statute.

First, Congress should return all OCS air regulation to the Clean Air Act and the EPA. The Clean Air Act is a better statute than OCSLA to address air pollution on the OCS in general, but the Clean Air Act and the EPA are particularly better for addressing environmental justice issues exacerbated by air pollution from OCS oil and gas development. The EPA's commitment to environmental justice and the internal administrative remedies available through the EAB—in contrast to the remedies available through BOEM and the Department of Interior—at least allows aggrieved parties to raise environmental justice claims and sometimes receive relief. Moreover, housing air quality permitting with BOEM creates a potential conflict of interest that President Obama and the Department of the Interior sought to eliminate with a reorganization after the *Deepwater Horizon* disaster, when they assigned BSEE to address health and safety regulation, while BOEM was to focus on promotion of OCS development.[345]

Second, notwithstanding the fact that the EPA and its regulations are better than BOEM for addressing air quality and environmental justice issues on the OCS, the EPA's regulations and its enforcement thereof still need improvement. As evidenced by Shell's disastrous development near Alaska's North Slope in 2012 and the company's noncompliance with its OCS air quality permit,[346] the EPA has room to improve its enforcement efforts on the Alaska OCS. Further, the EPA should target its environmental enforcement efforts in areas with potential environmental justice concerns, as discussed in Subpart IV.E.7.[347] In addition, as discussed in Subpart IV.E.4, the EPA should update how its OCS air regulations address mobile sources. Specifically, the EPA should eliminate its 25-mile radius rule and instead regulate mobile support vessels anywhere on the OCS, and it should require mobile sources on the OCS to actually control emissions.

345. *See supra* Part I.B. DOI split MMS into three agencies in 2011, after recognizing that it is unwise to put the same agency in charge of both leasing (now lodged with BOEM) and environmental and safety checks (now generally lodged with BSEE).

346. *See supra* Part II.D.

347. EPA, *supra* note 338.

Third and finally, in order to permanently achieve environmental justice for all overburdened communities, Congress should do what countless advocates have previously called for—adopt an enforceable environmental justice statute with appropriate funding attached, rather than relying on an unenforceable executive order that is subject to the whims of each president.[348] Environmental justice issues will only become more acute for Native Alaskans and environmental justice communities everywhere as a result of the Trump Administration's energy policies and environmental justice rollbacks. As discussed in Subpart IV.E.7, the Trump Administration has been quietly defunding and rescinding the environmental justice programs and policies of both the EPA and the Department of Interior. These environmental justice rollbacks are occurring just as the Trump Administration is pursuing energy policies that will put more Native Alaskans at risk from the air pollution that OCS development—and especially OCS development in the Arctic Ocean—creates. Native Alaskans, and all environmental justice communities in the United States, deserve effective legal avenues for protecting their individual and community health and welfare. Codifying environmental justice policies and funding in an enforceable statute, on top of making the above recommended changes to OCS air regulations, would be a major step forward for Native Alaskans and other environmental justice communities.

348. *See, e.g.*, U.S. Comm'n on Civil Rights 2013 EJ Report *supra* note 99, at 169 ("Congress should pass a Civil Rights Restoration Act to clearly and unambiguously provide for a private right of action for disparate impact claims under § 602 of Title VI and § 1983.").