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TROUBLE IN THE MELTING ARCTIC: THE EPA'S FAILURE TO IMPOSE AIR POLLUTION CONTROL MEASURES

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Abstract: In 2010, the EPA approved two permits for Shell to begin offshore exploratory drilling in the Arctic's Chukchi and Beaufort Seas with the drillship Discoverer. REDOIL, a group representing the rights of the region's indigenous peoples, contested the permits and argued that they violated the Clean Air Act by failing to require best available control technology (BACT) for emissions from the operation's associated fleet of service vessels. In *Resisting Environmental Destruction of Indigenous Lands (REDOIL) v. U.S. Environmental Protection Agency*, the U.S. Court of Appeals for the Ninth Circuit found that the Act is ambiguous on the application of BACT to the drilling operation's associated fleet and upheld the EPA's interpretation that BACT is only required for the main drillship. The court was bound to defer to the agency's reasonable interpretation under *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.* This Comment argues that the EPA could have ensured a more environmentally friendly outcome by embracing stricter applications of BACT that it has embraced in the past.

INTRODUCTION

Until recently, the Arctic was one of the last frontiers shielded from industrial development.¹ The Arctic is commonly defined as the region above the Arctic Circle, an imaginary line that circles the globe.² The region has served as a home to majestic wildlife and indigenous peoples who rely on the pristine ecosystem to support their way of life.³ In recent years, the level of Arctic sea ice has been in rapid decline and has exposed the region to a possible explosion in sea traffic from exploratory drilling operations and

* Staff Writer, BOSTON COLLEGE ENVIRONMENTAL AFFAIRS LAW REVIEW, 2013–2014.

¹ See *The Arctic*, OCEAN CONSERVANCY, <http://www.oceanconservancy.org/places/arctic/> (last visited Nov. 8, 2013), available at <http://perma.cc/T5PW-E5CK>.

² *What Is the Arctic?*, NAT'L SNOW & ICE DATA CTR., <http://nsidc.org/cryosphere/arctic-meteorology/arctic.html> (last visited Nov. 8, 2013), available at <http://perma.cc/K2WG-ZDFF>. The Arctic Circle begins at 66° 32" North, and the Sun does not set on the summer solstice nor rise on the winter solstice. *Id.*

³ See *The Arctic*, *supra* note 1.

commercial shipping vessels.⁴ The Arctic is estimated to contain some of the world's largest undiscovered reserves of oil and natural gas, which has led to a veritable arms race between nations and private corporations.⁵

The risks posed by increased Arctic drilling operations deserve serious consideration.⁶ Following the devastating Gulf Oil spill in 2010, President Barack Obama and the Department of the Interior announced plans to suspend exploratory drilling in the Arctic's Beaufort and Chukchi seas.⁷ This suspension was ordered to prevent a catastrophe similar to what happened in the Gulf and to adequately evaluate proposed drilling technologies.⁸

Increases in Arctic sea traffic and drilling have severe environmental implications for the region and those who call it home.⁹ For this reason, corporations wishing to drill in the Arctic must obtain an air permit from the EPA.¹⁰ The EPA is empowered through the Clean Air Act (CAA) to protect offshore ambient air by limiting pollution.¹¹ Ambiguities in the CAA, however, fail to effectively cover Arctic drilling on the region's Outer Continental Shelf (OCS), and have opened the floodgates to Arctic development in a way that unnecessarily threatens the environment.¹²

In 2012, the U.S. Court of Appeals for the Ninth Circuit in *Resisting Environmental Destruction of Indigenous Lands (REDOIL) v. U.S. Environmental Protection Agency* considered the ambiguities in the CAA regarding the application of best available control technology (BACT) to

⁴ Vesa Virtanen, *The Arctic Ice Is Melting—Will It Lead to Rivalry or Agreement?*, WEATHERHEAD CTR. FOR INT'L AFF. (Feb. 26, 2013), <http://programs.wcfia.harvard.edu/fellows/blog/arctic-ice-melting---will-it-lead-rivalry-or-agreement>, available at <http://perma.cc/Z4NU-YHMS>.

⁵ *Id.* See generally BOB REISS, *THE ESKIMO AND THE OIL MAN: THE BATTLE AT THE TOP OF THE WORLD FOR AMERICA'S FUTURE* (2012) (discussing the coming arms race for oil in the Arctic).

⁶ See DEP'T OF THE INTERIOR, FACT SHEET: A COMPREHENSIVE, SCIENCE-BASED OFFSHORE ENERGY PLAN 1 (2010), available at <http://www.doi.gov/deepwaterhorizon/loader.cfm?csModule=security/getfile&PageID=33566> and <http://perma.cc/7UUZ-PP2G>.

⁷ *Remarks by the President on the Gulf Oil Spill*, WHITE HOUSE (May 27, 2010), <http://www.whitehouse.gov/the-press-office/remarks-president-gulf-oil-spill> (“[W]e will suspend the planned exploration of two locations off the coast of Alaska.”), available at <http://perma.cc/H544-C9PL>; Press Release, Salazar Calls for New Safety Measures for Offshore Oil and Gas Operations; Orders Six Month Moratorium on Deepwater Drilling (May 27, 2010), <http://www.doi.gov/news/pressreleases/Salazar-Calls-for-New-Safety-Measures-for-Offshore-Oil-and-Gas-Operations-Orders-Six-Month-Moratorium-on-Deepwater-Drilling.cfm>, available at <http://perma.cc/SA6D-6HAV>.

⁸ See DEP'T OF THE INTERIOR, *supra* note 6, at 1–2.

⁹ Petitioners' Excerpts of Record Volume III of V (ER 347-604) at 572, *Resisting Envtl. Destruction on Indigenous Lands (REDOIL) v. U.S. Envtl. Prot. Agency*, 716 F.3d 1155 (9th Cir. 2013) (No. 12-70518).

¹⁰ See 42 U.S.C. §§ 7475(a)(1), 7627(a) (2006) (requiring permits for “major emitting facilities” and extending this requirement to include offshore facilities in the Arctic).

¹¹ See *id.* § 7627(a).

¹² See *infra* notes 106–134 and accompanying text.

drillship support vessels on the OCS.¹³ The court upheld the EPA's determination that the CAA is ambiguous on the application of BACT to support vessels.¹⁴ Furthermore, the court found that the EPA reasonably interpreted the statute when it decided not to require BACT for support vessels.¹⁵

This Comment argues that the court reached the correct outcome under administrative law in deferring to the agency's interpretation of ambiguous portions of the CAA.¹⁶ As a consequence, however, the EPA has unnecessarily restricted its ability to protect air quality and slow climate change in one of the world's last true frontiers.¹⁷ The decision may ultimately have disastrous effects on the Arctic's pristine ecosystem by stripping technological controls on emissions resulting from drilling activities.¹⁸ Thus, the case illustrates courts' limited ability to question agency decisions that run counter to congressional initiatives to protect the environment.¹⁹

I. FACTS AND PROCEDURAL HISTORY

Shell Gulf of Mexico, Inc. and Shell Offshore, Inc. ("Shell") leased areas in the Chukchi and Beaufort Seas for oil and gas exploration.²⁰ These areas are located in the Arctic Ocean off the North Slope of Alaska, which is part of the OCS.²¹ Shell plans to explore the region by using the drillship "Discoverer" and a fleet of support ships.²² The CAA requires Shell to apply for permits to emit pollutants in connection with exploration activities on the OCS.²³

REDOIL is a grassroots organization comprised of Alaska natives who rely upon the Beaufort and Chukchi Sea ecosystems to sustain themselves nutritionally and culturally.²⁴ Maintaining low levels of pollution is important because the Arctic is susceptible to rapid transformations due to cli-

¹³ *REDOIL*, 716 F.3d at 1163.

¹⁴ *Id.*

¹⁵ *Id.* at 1164.

¹⁶ *Infra* notes 106, 125–127 and accompanying text.

¹⁷ *Infra* notes 109, 124–128 and accompanying text.

¹⁸ *Infra* notes 25–33, 37–43 and accompanying text.

¹⁹ *Infra* notes 126–134 and accompanying text; see *REDOIL*, 716 F.3d at 1159, 1164 (noting that the purpose of the CAA is to improve air quality, but finding the EPA's decision not to apply BACT to support vessels reasonable).

²⁰ *REDOIL*, 716 F.3d at 1158–59.

²¹ *Id.* at 1158.

²² *Id.*

²³ *Id.*; see 42 U.S.C. §§ 7475, 7627(a) (2006).

²⁴ Petitioners' Excerpts of Record Volume IV of V (ER 605-842) at 650–58, *REDOIL*, 716 F.3d 1155 (No. 12-70518). The Arctic region has been home to native Alaskan cultures for thousands of years. Petitioners' Excerpts of Record Volume III of V (ER 347-604), *supra* note 9, at 603. These cultures rely on the environment's robust population of marine mammals, fish, and birds. *Id.* at 602–04. The areas that Shell will explore encompass traditional hunting areas for Alaskan indigenous peoples. *Id.*

mate change.²⁵ Drilling operations threaten the Arctic ecosystem balance by releasing greenhouse gasses into the Arctic atmosphere that contribute to climate change.²⁶

By obtaining air permits from the EPA, the Discoverer and its fleet will be allowed to drill in the Beaufort and Chukchi seas and emit hundreds of tons of harmful pollutants each year, including nitrogen oxides, carbon monoxide, and particulate matter.²⁷ These pollutants can lead to hospital admissions and emergency room visits because they can have potentially severe adverse health effects, including increases in respiratory illness, chronic respiratory disease, and even premature death.²⁸

In addition to increased health concerns, pollution from Shell's drilling operations threatens to accelerate the adverse environmental effects of Arctic warming.²⁹ The Discoverer and its associated vessels' large diesel combustion engines emit more than twenty tons of fine particulate matter annually, the majority of which is black carbon.³⁰ The EPA identifies black carbon as a substantial climate-forcing agent that has a particular effect on the Arctic region.³¹ Black carbon might be responsible for as much as fifty percent of the Arctic sea ice retreat.³² The emission of pollutants and associated climate change resulting from Arctic drilling activities will likely hasten detrimental changes to land, water, wildlife, and people's way of life.³³

The Beaufort and Chukchi seas meet National Ambient Air Quality Standards (NAAQS) and, therefore, have been designated as attainment areas by the EPA.³⁴ New major sources of pollution in attainment areas are required to comply with the CAA's Prevention of Significant Deterioration

²⁵ Petitioners' Excerpts of Record Volume III of V (ER 347-604), *supra* note 9, at 570-72.

²⁶ *See id.* at 362, 570-72.

²⁷ *Id.* at 414 tbls.2 & 3.

²⁸ Review of National Ambient Air Quality Standards for Carbon Monoxide, 76 Fed. Reg. 54,294, 54,298-301 (Aug. 31, 2011) (codified at 40 C.F.R. pt. 50, 53, 58 (2013)) (describing the health effects of carbon monoxide exposure); Primary National Ambient Air Quality Standards for Nitrogen Dioxide, 75 Fed. Reg. 6474, 6479-82 (Feb. 9, 2010) (codified at 40 C.F.R. pt. 50, 58 (2013)) (describing the health effects of exposure to nitrogen oxides); National Ambient Air Quality Standards for Particulate Matter, 71 Fed. Reg. 61,144, 61,145 (Oct. 17, 2006) (codified at 40 C.F.R. pt. 50 (2013)) (describing the health effects of exposure to particulate matter).

²⁹ *See* Petitioners' Excerpts of Record Volume III of V (ER 347-604), *supra* note 9, at 570-72 (noting that it would be irresponsible to engage in drilling because of the effects these activities have on wildlife and people).

³⁰ *Id.* at 414 tbls.2 & 3, 436.

³¹ *Id.* at 362.

³² *Id.* at 429.

³³ *See id.* at 570-72.

³⁴ 40 C.F.R. § 81.302 (2013). An attainment area is an area where levels of certain air pollutants already meet health-based air quality criteria. *Definitions of Selected Permitting Terms*, ENVTL. PROT. AGENCY (Aug. 6, 2013), <http://www.epa.gov/region09/air/permit/defn.html>, available at <http://perma.cc/6JK8-KMQZ>.

(PSD) program.³⁵ One component of the PSD program requires major emitting facilities, including OCS sources, to implement BACT.³⁶

Central to this case is an EPA determination that BACT is only required for Discoverer when located at a drill site and attached to the seabed by at least one anchor, because under those conditions it is an OCS source.³⁷ The same BACT requirements are only extended to the rest of the fleet when vessels are physically connected to Discoverer under these conditions.³⁸ Therefore, the associated fleet is generally exempt from BACT requirements because they will not be physically attached to Discoverer.³⁹

The maximum daily emissions from the seven or eight vessels in the associated fleet have the potential to account for more than ninety percent of the emissions from daily drilling operations.⁴⁰ For example, the two icebreakers are projected to emit more than forty percent of annual nitrogen oxide emissions.⁴¹ Similarly, when the supply ship uses its own engines to keep itself in place, rather than physically attaching to Discoverer, it might emit more than one ton of nitrogen oxide in a single day.⁴² These emissions would not be subject to BACT because the vessels are not physically attached to Discoverer.⁴³

EPA Region 10 issued two air permits to Shell: On March 31, 2010, the EPA issued a permit for exploratory drilling in the Chukchi Sea and on April 9, 2010, issued a second permit for the same activities in the Beaufort Sea.⁴⁴ The permits allow multi-year exploratory drilling operations between July 1 and November 30 of each year for Discoverer and its associated fleet.⁴⁵ The permits issued by Region 10 contain provisions to ensure that emissions from the associated fleet would not cause or contribute to a viola-

³⁵ 42 U.S.C. §§ 7471, 7475 (2006).

³⁶ See *id.* §§ 7475(a)(4), 7627(a)(1); *REDOIL*, 716 F.3d at 1160 (explaining the applicability of the PSD program and BACT requirements to OCS sources).

³⁷ *REDOIL*, 716 F.3d at 1158.

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ Petitioners' Excerpts of Record Volume III of V (ER 347-604), *supra* note 9, at 394 tbl.1; see Petitioners' Opening Brief at 15, *REDOIL*, 716 F.3d 1115 (No. 12-70518) (suggesting, based on data, that more than ninety percent of emissions may stem from Discoverer's associated fleet).

⁴¹ Petitioners' Excerpts of Record Volume III of V (ER 347-604), *supra* note 9, at 382-83, 414 tbls.2 & 3 (showing that the icebreakers will emit more than 140 tons per year of nitrogen oxides, which is approximately forty percent of the fleet's total nitrogen oxide emissions, equaling 336 tons per year).

⁴² *Id.* at 383, 394 tbl.1.

⁴³ *REDOIL*, 716 F.3d at 1158.

⁴⁴ Shell Gulf of Mexico, Inc., OCS Appeal Nos. 10-01 to 10-04, slip op. at 3-4 (EAB 2010).

⁴⁵ *REDOIL*, 716 F.3d at 1158.

tion of NAAQS or a PSD increment.⁴⁶ The Region did not impose any conditions related to BACT on the associated fleet.⁴⁷

After the permits were granted on March 31, 2010, REDOIL and others petitioned the Environmental Appeals Board (EAB), an adjudicatory body within the EPA.⁴⁸ REDOIL claimed that the CAA established an unambiguous mandate that BACT applies to the entire associated fleet.⁴⁹ In a December 2010 ruling, the EAB determined that there were ambiguities in § 7627 of the CAA and declined to review the permits' application of BACT to the entire fleet.⁵⁰ The EAB concluded it was permissible to apply BACT requirements to the Discoverer and not the associated fleet because the governing statute did not contain express language to include the support vessels as an OCS source.⁵¹ The EAB further concluded that the permits adequately addressed ambiguities in the statute by including emissions from the associated fleet in other permit provisions, such as Discoverer's potential to emit.⁵²

The permits became effective on January 27, 2012.⁵³ Soon after, REDOIL filed a petition with the Ninth Circuit seeking review of the December 2010 EAB ruling that the CAA's BACT requirement did not apply to the entire associated fleet of support vessels.⁵⁴ The Ninth Circuit subsequently upheld the EAB ruling by finding the statute ambiguous, and that the EPA's interpretation that excludes BACT from the associated fleet was reasonable.⁵⁵ The court stated that the statute required associated fleet emissions to count as "direct emissions" from Discoverer as an OCS source, but that fact did not make the associated vessels themselves OCS sources subject to BACT.⁵⁶

II. LEGAL BACKGROUND

Congress established the Clean Air Act (CAA) in 1970 as a comprehensive program to protect and enhance air quality by limiting emissions

⁴⁶ Shell Gulf of Mexico, Inc., OCS Appeal Nos. 10-01 to 10-04, slip op. at 20.

⁴⁷ *Id.*

⁴⁸ *Id.* at 4–5; *Environmental Appeals Board*, ENVTL. PROT. AGENCY (Nov. 15, 2013), http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf, available at <http://perma.cc/GF7Q-6T76>.

⁴⁹ Shell Gulf of Mexico, Inc., OCS Appeal Nos. 10-01 to 10-04, slip op. at 20–21.

⁵⁰ *Id.* at 2.

⁵¹ *Id.*

⁵² *Id.* at 33–34.

⁵³ *REDOIL*, 716 F.3d at 1159.

⁵⁴ *Id.*

⁵⁵ *Id.* at 1163–64. The court also upheld a separate permit provision granting an ambient air exemption. *Id.* at 1165.

⁵⁶ *See id.* at 1163–64.

from both stationary and mobile sources.⁵⁷ A goal of the CAA is to promote public health and welfare relative to such emissions.⁵⁸ Therefore, a significant component of the CAA is the imposition of National Ambient Air Quality Standards (NAAQS) set by the EPA for pollutants deemed harmful to public health, welfare, and the environment.⁵⁹ The EPA is responsible for enforcing these standards in federally managed offshore areas.⁶⁰

New major sources of pollution are required to obtain preconstruction permits through a process called “New Source Review.”⁶¹ The New Source Review program for projects in attainment areas that comply with NAAQS, such as the Outer Continental Shelf (OCS), is called the Prevention of Significant Deterioration (PSD) program.⁶² The purpose of the program is to protect the public from adverse effects to health or welfare from air pollution, and to carefully evaluate the consequences of new industrial development.⁶³ To achieve PSD program goals, Congress directed the EPA to establish requirements for OCS sources to attain and maintain ambient air quality standards and adhere to PSD guidelines.⁶⁴

To obtain a permit under the PSD program, a facility must satisfy independent requirements, such as best available control technology (BACT).⁶⁵ BACT requires the EPA to select emission control technologies that will result in the maximum reduction of specified pollutants considering the environmental, energy, and economic impacts.⁶⁶ Thus, if a polluter is designated as an OCS source, it must use BACT.⁶⁷

The EPA regulates OCS sources in the waters off the coasts of Pacific, Arctic, and Atlantic states.⁶⁸ An OCS source is defined in § 7627 of the CAA, as “any equipment, activity, or facility which—(i) emits or has the potential to emit any air pollutant, (ii) is regulated or authorized under the Outer Continental Shelf Lands Act . . . and (iii) is located on the [OCS] or in or on waters above the [OCS].”⁶⁹ Therefore, to be an OCS source the source must be regulated under Outer Continental Shelf Lands Act

⁵⁷ 42 U.S.C. §§ 7401, 7408 (2006).

⁵⁸ *Id.* § 7401.

⁵⁹ *Id.* §§ 7408–7410.

⁶⁰ *See id.* §§ 7410, 7475(a)(1), 7627(a).

⁶¹ *Resisting Envtl. Destruction on Indigenous Lands (REDOIL) v. U.S. Envtl. Prot. Agency*, 716 F.3d 1155, 1159 (9th Cir. 2013); *see* 42 U.S.C. § 7411 (describing the standards of performance for new stationary sources).

⁶² *REDOIL*, 716 F.3d at 1159–60 (citing 42 U.S.C. §§ 7470, 7471, 7627(a)(1)).

⁶³ 42 U.S.C. §§ 7470(1), (5) (2006).

⁶⁴ *Id.* § 7627(a)(1).

⁶⁵ *Id.* § 7475(a)(4).

⁶⁶ *Id.* § 7479(3).

⁶⁷ *REDOIL*, 716 F.3d at 1160 (citing 42 U.S.C. § 7627(a)(1)).

⁶⁸ 42 U.S.C. § 7627(a)(1).

⁶⁹ 42 U.S.C. § 7627(a)(4)(C) (2006).

(OCSLA), and sources are only regulated under OCSLA when temporarily or permanently attached to the seabed.⁷⁰

The definition of OCS source further states: “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 . . . [are] . . . direct emissions from the OCS source.”⁷¹ In 1992, the EPA promulgated regulations defining OCS sources to include only vessels that are attached to the seafloor or attached to an OCS facility.⁷²

If a petitioner challenges an EPA-issued permit, it is reviewed by the Environmental Appeals Board (EAB).⁷³ An EAB decision is a formal adjudication under the Administrative Procedure Act (APA).⁷⁴ When a court reviews an agency’s formal adjudication, it is bound by the Supreme Court’s 1984 decision in *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*⁷⁵ Under *Chevron*, the court must first look to the statute that governs the issue in question to determine whether Congress has expressed a clear opinion on the matter.⁷⁶ If Congress has not expressed a clear intent and the statute is ambiguous, then the court must defer to an agency’s interpretation if it is reasonable.⁷⁷ Courts will typically accept an agency interpretation of its governing statute as reasonable.⁷⁸ The EPA, however, has taken an inconsistent stance on the enforcement of PSD provisions and the CAA.⁷⁹

The EPA’s inconsistency is illustrated in *Natural Resources Defense Council, Inc. v. U.S. Environmental Protection Agency*, where the U.S. Court of Appeals for the D.C. Circuit in 1984 upheld an EPA decision to revoke the EPA’s own PSD regulation.⁸⁰ The regulation treated marine ves-

⁷⁰ *Id.*; 40 C.F.R. § 55.2 (2013).

⁷¹ 42 U.S.C. § 7627(a)(4)(C).

⁷² 40 C.F.R. § 55.2.

⁷³ *Environmental Appeals Board, supra* note 48 (noting that the EAB is the adjudicatory body with jurisdiction to hear administrative appeals of EPA decisions).

⁷⁴ *REDOIL*, 716 F.3d at 1161 (joining other circuits in concluding that an EAB proceeding is a formal adjudication under the APA).

⁷⁵ *Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842–43 (1984); see *REDOIL*, 716 F.3d at 1161 (noting that many other courts have found that an EAB adjudication warrants *Chevron* deference).

⁷⁶ *Chevron*, 467 U.S. at 842.

⁷⁷ *Id.* at 843.

⁷⁸ See Jason J. Czarnezki, *An Empirical Investigation of Judicial Decisionmaking, Statutory Interpretation, and the Chevron Doctrine in Environmental Law*, 79 U. COLO. L. REV. 767, 775 & n.35 (2008) (explaining that courts rarely strike down agency action under *Chevron* step two); Lisa Schultz Bressman, *Schechter Poultry at the Millennium: A Delegation Doctrine for the Administrative State*, 109 YALE L.J. 1399, 1400 & n.5 (2000) (explaining that with one exception, the Supreme Court has never invalidated an agency construction of a statute as unreasonable).

⁷⁹ See *infra* notes 80–91 and accompanying text.

⁸⁰ See 725 F.2d 761, 766, 772–73 (D.C. Cir. 1984).

sel emissions as secondary emissions when operating in a marine terminal, which required the marine terminal, a stationary source, to include marine vessel emissions for air quality impact purposes and programs, such as PSD.⁸¹ By first implementing the regulation and then revoking the regulation, marine terminals no longer had to account for the same level of emissions from mobile vessels.⁸²

In *Santa Barbara County Air Pollution Control District v. U.S. Environmental Protection Agency*, decided by the D.C. Circuit in 1994, a county pollution control agency challenged EPA regulations that declined to regulate in-transit maritime vessels as OCS sources.⁸³ The plaintiff argued that the EPA must regulate the vessels as OCS sources, while the EPA's rule interpreted the CAA to omit in-transit maritime vessels from the definition of OCS sources.⁸⁴ The D.C. Circuit upheld the EPA regulations and found that the EPA reasonably concluded that OCS sources did not include vessels merely traveling over the OCS that were not "servicing or associated" with OCS sources.⁸⁵ Thus, only vessels physically attached to an OCS source or the seabed are regulated and subject to BACT.⁸⁶

In contrast, the Supreme Court in 2004 upheld the EPA's hard stance on BACT application in *Alaska Department of Environmental Conservation v. Environmental Protection Agency*.⁸⁷ In that case, the EPA stopped the construction of a mining facility because the State of Alaska issued PSD permits without strictly enforcing BACT requirements.⁸⁸ The EPA argued that the CAA unambiguously requires the State to employ BACT determinations that are faithful to the statute's definition and that the EPA is empowered to check a state agency's unreasonably lax BACT standard.⁸⁹ Furthermore, the EPA argued that BACT standards should be faithfully executed, whether the statute is ambiguous on the matter or not.⁹⁰ The EPA supported its reading of the CAA by noting that Congress intended the PSD program to protect air quality in clean air areas, and without EPA surveillance that goal was unlikely to be realized.⁹¹

⁸¹ *Id.* at 766.

⁸² *See id.* (noting that marine terminals no longer have to account for emissions of vessels coming to and from the terminal).

⁸³ 31 F.3d 1179, 1179 (D.C. Cir. 1994).

⁸⁴ *Id.* at 1180.

⁸⁵ *Id.* at 1180, 1181.

⁸⁶ *Santa Barbara*, 31 F.3d at 1181; 40 C.F.R. § 55.2 (2013).

⁸⁷ *See* 540 U.S. 461, 485–86, 495 (2004) (noting and accepting the stringency of the EPA's interpretation of BACT in contrast to the less-stringent interpretation of BACT used by the state).

⁸⁸ *Id.* at 480.

⁸⁹ *Id.* at 485–86.

⁹⁰ *Id.* at 517 (Kennedy, J., dissenting) (noting that the EPA argued that the statute was unambiguous but at the same time requested deference under *Chevron* in light of statutory ambiguity).

⁹¹ *Id.* at 486.

III. ANALYSIS

In *Resisting Environmental Destruction on Indigenous Lands (REDOIL) v. U.S. Environmental Protection Agency*, the U.S. Court of Appeals for the Ninth Circuit held that the Environmental Appeals Board's (EAB) decision to apply best available control technology (BACT) requirements to Discoverer, but not its associated fleet, was consistent with statutory guidelines.⁹² The court found that the Clean Air Act (CAA) was ambiguous on whether the associated vessels constituted Outer Continental Shelf (OCS) sources and that the EPA's interpretation of the Act, which excluded the vessels from BACT requirements, was reasonable.⁹³

The court used *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.* to analyze the EPA's actions, and it examined the CAA to determine whether Congress included explicit language and a clear intent.⁹⁴ The court found the language in § 7627, which provides that emissions from vessels servicing or associated with an OCS source "shall be considered direct emissions from the OCS source," is ambiguous.⁹⁵ REDOIL argued that this language necessitated the regulation of associated vessels as OCS sources.⁹⁶ The court dismissed this argument due to insufficient indication of clear congressional intent to designate associated vessels as OCS sources.⁹⁷ For example, the court found that legislative history shows that Congress intended emissions from associated vessels to be controlled, offset, or mitigated, but not that Congress considered the use of BACT as it applies to such vessels.⁹⁸ Furthermore, the court found evidence that Congress saw associated vessels and OCS sources as distinct categories.⁹⁹ The court concluded that at the very least, the application of BACT to mobile sources was ambiguous.¹⁰⁰

Having determined that the statute was ambiguous on whether BACT applies to Discoverer's associated fleet, the court proceeded to the next step of *Chevron*, examining EAB's interpretation of the statute.¹⁰¹ The court held that the EAB's interpretation of the statute, which did not extend BACT requirements to the associated fleet, was a permissible construction of the CAA.¹⁰² The EAB provided a persuasive rationale that there is no explicit

⁹² 716 F.3d 1115, 1164 (9th Cir. 2013).

⁹³ *Id.* at 1163–64.

⁹⁴ *Id.* at 1161 (citing 467 U.S. 837, 842–43 (1984)).

⁹⁵ *Id.* at 1162 (quoting 42 U.S.C. § 7627(a)(4)(C)(iii) (2006)).

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Id.* at 1163.

⁹⁹ *Id.* at 1162.

¹⁰⁰ *Id.*

¹⁰¹ *Id.* at 1163 (citing *Chevron*, 467 U.S. at 843–44).

¹⁰² *Id.* at 1164.

evidence as to why Congress included the associated fleet in an OCS source's direct emissions, and therefore the associated fleet is not necessarily an OCS source.¹⁰³ Furthermore, the legislative history merely seeks to ensure emissions from OCS sources are offset or mitigated.¹⁰⁴ Thus, as long as the EPA attributes the associated fleet's emissions to the emissions of an OCS source it is servicing, it does not have to apply BACT to the associated fleet.¹⁰⁵

The court reached a textbook outcome under administrative law that adheres to a court's role reviewing agency interpretations of governing statutes.¹⁰⁶ Nonetheless, the true outcome of the ruling is a continuing threat to the Arctic that will linger without the maximum controls allowed by Congress.¹⁰⁷ The EPA could have extended BACT requirements to associated vessels, thus reaching a more environmentally favorable outcome within a permissible construction of the CAA.¹⁰⁸

The EPA limited its ability to regulate Arctic-drilling operations by taking a soft stance on this issue.¹⁰⁹ There is no significant legal precedent that required the EPA to grant the initial permits without BACT, and the EPA actually back-peddled on hard stances taken in the past against polluters.¹¹⁰ Because agency interpretations of governing statutes will almost always be found reasonable, the EPA should work to maintain a consistently stringent approach.¹¹¹

¹⁰³ See *id.* at 1162.

¹⁰⁴ *Id.* at 1163.

¹⁰⁵ See *id.* at 1164.

¹⁰⁶ See *Chevron*, 467 U.S. at 843 (noting that rather than the court deciding how a statute is interpreted, the agency is free to act within a permissible construction of the statute); *REDOIL*, 716 F.3d at 1161–64 (deferring, under *Chevron*, to the EPA's interpretation of the CAA regarding the application of BACT to OCS sources); *supra* note 78 and accompanying text (noting that it is extremely rare for courts using *Chevron* to find an agency interpretation unreasonable).

¹⁰⁷ See *REDOIL*, 716 F.3d at 1164 (holding that the application of BACT is not required for vessels associated with OCS sources); *supra* notes 25–33 and accompanying text (describing the environmental effects of the increased emissions due to drilling in the Arctic).

¹⁰⁸ See 42 U.S.C. § 7479(3) (2006) (defining BACT as “an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation”); *REDOIL*, 716 F.3d at 1163 (indicating that there is no clear intent either way on the application of BACT to the associated fleet for OCS sources); *supra* notes 25–33 and accompanying text (describing the environmental effects of the increased emissions due to drilling in the Arctic).

¹⁰⁹ See *REDOIL*, 716 F.3d at 1164 (agreeing with the EPA that the application of BACT is not required for vessels associated with OCS sources). If the EPA wishes to change its policy on BACT, it will need to show that there are good reasons for the new policy and that it is permissible under the statute. See *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009).

¹¹⁰ See *supra* notes 80–91 and accompanying text (notably lacking discussion of relevant precedent on BACT for OCS source support vessels); *infra* notes 112–114 and accompanying text (describing EPA's prior strict stance on BACT).

¹¹¹ See *Alaska Dep't of Env'tl. Conserv. v. Env'tl. Prot. Agency*, 540 U.S. 461, 485–86, 495 (2004) (agreeing with the EPA's position that it can check a state's unreasonably lax approach to BACT); *REDOIL*, 716 F.3d at 1164 (upholding the EPA's statutory interpretation that declined to

For example, the EPA assumed a strong stance on BACT in *Alaska Department of Environmental Conservation v. Environmental Protection Agency*.¹¹² In that case, the EPA argued that PSD programs should not be administered with lax standards, whether the statute is ambiguous on the matter or not.¹¹³ In *REDOIL*, however, the EPA seems to be backtracking on its previous conviction and failing to combat the type of lax standards it previously deplored.¹¹⁴ The EPA should be consistent with a strong stance on BACT and treat emissions from the associated fleet as emissions from an OCS source subject to every PSD control.¹¹⁵

The court in *REDOIL* relied in part on its ruling being consistent with the precedent set in *Santa Barbara County Air Pollution Control District v. U.S. Environmental Protection Agency*, but these cases are easily distinguishable.¹¹⁶ In *Santa Barbara* the court held that mobile vessels merely “in-transit” over the OCS are not OCS sources.¹¹⁷ In *REDOIL*, however, the associated vessels are not merely traveling over the OCS but are conducting significant drilling operations and are clearly “servicing or associated” with a significant OCS source of emissions.¹¹⁸ Therefore, the agency could have taken a stronger stance on associated fleets that service drill ships like *Discoverer* while leaving less harmful marine traffic that merely travels over

extend BACT to support vessels servicing OCS sources as part of the CAA direct emissions requirement); Czarnezki, *supra* note 78, at 775 (observing that it is extremely rare for a court to overturn an agency interpretation of an ambiguous statute).

¹¹² See 540 U.S. at 485–86 (noting the EPA’s position that it has the power to check unreasonable lax BACT standards that are not faithful to the CAA).

¹¹³ See *id.* (arguing that states need to implement BACT provisions that faithfully execute the statute); *id.* at 517 (Kennedy, J., dissenting) (noting that the EPA argued that the statute was unambiguous but simultaneously requested deference under *Chevron* in light of statutory ambiguity).

¹¹⁴ Compare *Alaska Dep’t of Env’tl. Conserv.*, 540 U.S. at 485 (highlighting that the EPA reads the BACT requirement to be more than just a designation and necessitates determinations of BACT faithful to the CAA’s definition), with *REDOIL*, 716 F.3d at 1158 (citing that the drilling permits issued to Shell do not extend BACT requirements to the fleet associated with Shell’s drilling operations).

¹¹⁵ See *supra* notes 25–33 and accompanying text (describing the environmental effects of the increased emissions due to drilling in the Arctic). Compare *Alaska Dep’t of Env’tl. Conserv.*, 540 U.S. at 485 (noting that the EPA argues for faithful execution of the BACT requirements), with *REDOIL*, 716 F.3d at 1158 (stating that the EPA failed to implement BACT controls on the majority of the drilling operation’s associated fleet).

¹¹⁶ *REDOIL*, 716 F.3d at 1164 (citing *Santa Barbara Air Pollution Control v. U.S. Env’tl. Prot. Agency*, 31 F.3d 1179, 1181 (D.C. Cir. 1994)); *infra* notes 117–118 and accompanying text (describing the distinction between *Santa Barbara* and *REDOIL*).

¹¹⁷ *Santa Barbara*, 31 F.3d at 1181.

¹¹⁸ See Petitioners’ Excerpts of Record Volume III of V (ER 347-604), *supra* note 9, at 382–84 (describing the role of the associated fleet in drilling operations and emissions from those operations).

the OCS unaffected.¹¹⁹ If the EPA had taken a stricter approach, it would likely have been upheld.¹²⁰

The EPA has previously taken stronger approaches regarding marine vessels and PSD requirements, but *Natural Resources Defense Council, Inc. v. U.S. Environmental Protection Agency* illustrated how it can quickly lose conviction to enforce such measures.¹²¹ The court in that case upheld the agency's decision to revoke a regulation that would have attributed marine vessel emissions to a marine terminal.¹²² The agency took this more lenient stance even though it initially displayed resolve to try to account for those emissions in PSD provisions.¹²³

When granting the permits in this case, the EPA missed an opportunity to take advantage of ambiguities in the CAA by extending BACT requirements to the associated fleet, which is a more environmentally friendly approach.¹²⁴ Section 7627 states that "emissions from any vessel servicing or associated with an OCS source . . . shall be considered direct emissions from the OCS source."¹²⁵ Congress explicitly stated that an associated fleet's emissions shall be included as direct emissions from an OCS source, but did not specify the extent of the requirements.¹²⁶ Because the statute

¹¹⁹ See *supra* notes 117–118 and accompanying text (noting the inconsistencies between *REDOIL* and *Santa Barbara*). The court in *REDOIL* found its decision consistent with *Santa Barbara* because *Santa Barbara* upheld the EPA's decision not to regulate transit maritime vessels simply traveling over the OCS. *REDOIL*, 716 F.3d at 1164 (citing *Santa Barbara*, 31 F.3d at 1181). In *Santa Barbara*, however, the court specifically noted that the language of the statute targets vessels "servicing or associated" with an OCS source. *Santa Barbara*, 31 F.3d at 1181. The court in *REDOIL* specifically referred to the support vessels in this case as an "associated" fleet, and these vessels will be providing significant support to drilling operations. *REDOIL*, 716 F.3d at 1164; Petitioners' Excerpts of Record Volume III of V (ER 347-604), *supra* note 9, at 382–84 (describing operations of the support vessels, which are beyond merely traveling over the OCS).

¹²⁰ See Czarnecki, *supra* note 78, at 775 (stating that it is extremely rare for a court to find an agency's statutory interpretation as unreasonable).

¹²¹ See 725 F.2d 761, 766 (D.C. Cir. 1984) (explaining that the EPA implemented regulations requiring marine vessel emissions to be attributed to marine terminals but subsequently revoked them).

¹²² *Id.* at 772.

¹²³ See *id.* at 766 (explaining that the EPA revoked the regulation that would have counted marine vessel emissions as secondary emissions for marine terminals operating under PSD programs).

¹²⁴ See 42 U.S.C. § 7479(3) (2006) (defining BACT as "an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation"); *REDOIL*, 716 F.3d at 1162, 1164 (declaring that the statute is at the very least ambiguous on application of BACT to the associated fleet and upholding the EPA's decision not to extend them when issuing Shell permits); Czarnecki, *supra* note 78, at 775 (noting that it is extremely unusual for a court to find an agency interpretation of a governing statute unreasonable); *supra* notes 25–33 and accompanying text (describing the environmental effects of the increased emissions due to drilling in the Arctic).

¹²⁵ 42 U.S.C. § 7627(a)(4)(C)(iii).

¹²⁶ *Id.*; *REDOIL*, 716 F.3d at 1163–64 (noting there are ambiguities on how the direct emissions requirement should be applied to the associated fleet and whether BACT is required).

was ambiguous, the court had to defer to the agency's interpretation as long as it was reasonable.¹²⁷ Therefore, the EPA can take a stricter approach when applying BACT in its regulation as long as the EPA's interpretation of the statute is reasonable.¹²⁸

Requiring the associated fleet to comply with every PSD requirement when servicing an OCS source would likely be a permissible interpretation of the statute because Congress linked the two through the direct emissions language.¹²⁹ The agency failed to take this approach and limited the tools that the statute provides to target the associated fleet when issuing the permits.¹³⁰ The purpose of the CAA is to establish a comprehensive program to protect air quality and promote public health and welfare by limiting emissions from both stationary and mobile sources of pollution.¹³¹ By failing to apply BACT requirements to the associated fleet, the EPA did not strive to fully achieve the CAA's mandate to promote public health and welfare.¹³² Up to ninety percent of emissions associated with the Discoverer fleet will be exempt from the BACT requirements, and these emissions could have severe adverse health effects and increase the effects of global warming.¹³³ The EPA was found reasonable in its interpretation of the CAA, but this does not mean it has been reasonable in its approach to protecting the environment.¹³⁴

¹²⁷ See *REDOIL*, 716 F.3d at 1161 (finding that EAB proceedings are formal adjudications and the court is bound by *Chevron* to afford agencies deference interpreting an agency's governing statute).

¹²⁸ See *Chevron*, 467 U.S. at 843 (declaring that a court should not impose its own interpretation of a statute if the statute is ambiguous, but should simply ask whether the agency's construction of the statute is permissible).

¹²⁹ See 42 U.S.C. § 7627(a)(4)(C)(iii) (emissions from a vessel associated with an OCS source shall be considered direct emissions); *REDOIL*, 716 F.3d at 1162, 1163–64 (finding ambiguities in the statute with respect to BACT requirements for the associated fleet); Czarnezki, *supra* note 78, at 755 (observing that agency interpretations of a governing statute are rarely found unreasonable).

¹³⁰ See 42 U.S.C. § 7479(3) (2006) (defining BACT as “an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation”); *REDOIL*, 716 F.3d at 1163–64 (finding that the EPA accounted for the associated fleet in the direct emissions of the OCS source Discoverer without requiring BACT).

¹³¹ 42 U.S.C. § 7401; *REDOIL*, 716 F.3d at 1159.

¹³² See 42 U.S.C. § 7401 (stating that the purpose of the CAA is to enhance the nation's air quality and protect the public health); *REDOIL*, 716 F.3d at 1158 (noting that the EPA did not apply BACT to the associated fleet); *supra* notes 25–33 and accompanying text (noting the health and environmental effects of Arctic drilling activities).

¹³³ See *supra* notes 25–33 and accompanying text.

¹³⁴ See *REDOIL*, 716 F.3d at 1164 (noting that the EPA's interpretation of the statute is reasonable). The court's analysis in *REDOIL* notably lacks discussion of the reasonableness of the EPA's decision in light of environmental concerns. See *id.* at 1163–64.

CONCLUSION

The world is at a critical juncture in the fight against global warming and the future of energy exploration. Going forward, the Arctic will be ground zero as an area increasingly affected by both. The CAA has charged the EPA with the responsibility of preserving air quality and the environment in pristine areas that humans hold sacred and to protect the public welfare from the adverse effects of ruthless industrial expansion. The EPA can only achieve this objective by using every tool that Congress has made available. The agency has not been steadfast in its approach, and its decision to allow a large portion of the emissions that will stem from Arctic drilling to be emitted without the use of BACT is an indictment of its resolve to realize the mandate set forth by the CAA.

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