

CASES AND MATERIALS ON

ENVIRONMENTAL LAW

2021-22 Supplement



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CHAPTER 1

INTRODUCING ENVIRONMENTAL LAW

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A. ENVIRONMENTAL PROTECTION: AN OVERVIEW

As promised, we begin with a general overview of environmental law, focusing on some of the main themes throughout the course. We also provide a brief history of the field. Today's environmental regulations are the product of several decades of political development, rather than a deliberately designed and completely coherent system.

1. MAJOR THEMES

2. THE HISTORY OF ENVIRONMENTAL LAW

Page 18, insert the following at the end of the Note:

The Biden Administration has placed renewed emphasis on environmental justice. Shortly after taking office, President Biden issued Executive Order 14008, 86 Fed. Reg. 7619 (Jan. 27, 2021). Section 219 of EO 14008 sets the following goals:

To secure an equitable economic future, the United States must ensure that environmental and economic justice are key considerations in how we govern. That means investing and building a clean energy economy that creates well-paying union jobs, turning disadvantaged communities—historically marginalized and overburdened—into healthy, thriving communities, and undertaking robust actions to mitigate climate change while preparing for the impacts of climate change across rural, urban, and Tribal areas. . . . It is therefore the policy of my Administration to secure environmental justice and spur economic opportunity for disadvantaged communities that have been historically marginalized and overburdened by pollution and underinvestment in housing, transportation, water and wastewater infrastructure, and health care.

Section 219 makes environmental justice a part of agency mandates: “Agencies shall make achieving environmental justice part of their missions by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the

accompanying economic challenges of such impacts.” To ensure implementation, sections 220-221 establish two oversight bodies, one an advisory group and the other an interagency working group. Section 222 assigns responsibilities to existing agencies such as EPA and the environmental division within Justice Department. We discuss environmental justice issues in more detail in Chapter 2.

Pages 23-25, replace the Note with the following:

NOTE ON U.S. ENVIRONMENTAL LAW SINCE 2000

One of the most important shifts in environmental policymaking in the years since Lazarus’s account, which extends through the Clinton Administration, is that virtually all of it is taking place in the executive branch rather than in Congress. Each administration has a different focus, of course, and the policy swings between Republican and Democratic presidents can be quite jarring.

Environmental policy took a sharp turn away from the Clinton agenda when George W. Bush took office in 2001. Much of President Bush’s environmental policy centered on energy issues. His energy plan came from a working group chaired by Vice President Cheney. The plan concluded that the United States would need about a third more oil by 2020. It called for building 1,000 to 2,000 additional power plants, expanding oil production on federal lands such as the Arctic National Wildlife Reserve, and streamlining the regulatory process for power plants. See Gary C. Bryner, *The National Energy Policy: Assessing Energy Policy Choices*, 73 U. COLO. L. REV. 341, 345–348 (2002). The Administration also disavowed the Kyoto agreement to control greenhouse gases, which would have required limitations on American use of fossil fuels. *Id.* at 388. At the same time, President Bush’s rhetoric centered on the stewardship obligations of individual landowners. See Jonathan Cannon & Jonathan Riehl, *Presidential Greenspeak: How Presidents Talk About the Environment and What It Means*, 23 STAN. ENV. L. J. 195, 262–263 (2004).

Bush’s approach to environmental policy centered on positive incentives and market mechanisms, along with efforts to emphasize environmental federalism. Barton H. Thompson, Jr., *The Bush Administration and Environmental Policy*, 32 ECOLOGY L. Q. 307, 335–347 (2005). He supported a congressional effort to replace much of the current Clean Air Act with an environmental trading mechanism. When this effort failed to advance in Congress, the EPA attempted to use its statutory authority under existing law to implement an ambitious trading system. EPA also encouraged trading in the area of water pollution. We will discuss these issues in detail later. While attempting to increase state regulatory authority in some areas, the Bush Administration also challenged state tort laws and environmental regulations that were deemed too burdensome on industry.

The election of Barack Obama marked yet another turn in environmental policy. The Obama Administration under EPA Administrators Lisa Jackson and Gina McCarthy issued important new rules to reduce mercury and other

toxic pollutants from electric power plants, regulate greenhouse gas emissions that cause climate change, raise fuel efficiency requirements for cars, impose the first carbon limitations on new sources, and adopt a massive program to regulate greenhouse gases from existing power plants. The Administration also emphasized the benefits of renewable energy. See Jody Freeman, *Climate and Energy Policy in the Obama Administration*, 30 PACE ENV. L. REV. 375 (2012); Ann E. Carlson, *An Ode to the Clean Air Act*, 30 J LAND USE & ENV. LAW (2014) (describing use of Obama Administration's use of Clean Air Act to regulate greenhouse gases). But the Administration was also closely attuned to economic matters and heavily emphasized cost-benefit analysis, sometimes to the dismay of environmentalists. See, e.g., Lisa Heinzerling, *Who Will Run the EPA?* 30 YALE J REG 39 (2013).

Donald Trump's election as President swung the pendulum to the anti-regulatory end perhaps further than any other modern President. His Administration rolled back over a hundred environmental rules and regulations, many of them adopted by the Obama Administration. These include rolling back virtually all of the Obama climate regulations, changing rules governing the federal government's jurisdiction over wetlands, and dramatically reducing the size of some created national monuments. The Trump Administration's efforts faced strong headwinds in the courts, largely caused by the Administration's inattention to statutory text and scientific evidence. See Lisa Heinzerling, *Unreasonable Delays: The Legal Problems (So Far) of Trump's Deregulatory Binge*, 12 HARV. L & POL REV 13 (2018). Besides outright repeals of existing rules, Trump used a variety of other strategies, including reducing agencies' scientific capacity, limiting transparency and public participation, and adopting narrow interpretations of agency authority. See Hannah Perls, *Deconstructing Environmental Deregulation under the Trump Administration*, 45 Vt. L. Rev. 591 (2021). In addition, agency staffs shrunk due to budget cuts and a hostile work environment. Trump also sought draconian budget cuts for EPA and other agencies, which failed to receive congressional support even when the Republicans controlled Congress.

President Biden entered office determined to undo the rollbacks and build on Obama's regulatory legacy. At present, he seems to be roughly a third of the way through that process. Undoing rollbacks is as time-consuming and complicated as issuing a new regulation. For an up-to-date account of the state of Biden's efforts, see <https://grist.org/project/accountability/trump-rollbacks-biden-climate-tracker/>.

During the current century, the major source of policy changes has been the White House, not Congress. Congress has passed only one major piece of environmental legislation—an overhaul of chemical regulation explored in Chapter 9—since the Clean Air Act amendments passed in 1990. Since then, a legislative logjam has largely prevented new regulatory legislation, although there have been some important funding and tax measures. Increasingly acrid partisan politics and starkly different views of environmental regulation may be part of the reason, along with the reality that most Republican members of Congress deny that human-caused climate change is occurring.

The significance of U.S. environmental law is obvious if we measure it by pages of statutes, regulations, and court decisions. But, of course, that's not the point. The real question involves the impact of this legislation on improving the environment. At least in terms of air pollution, the results have been dramatic, as shown by the following table.

	1980 vs 2021	1990 vs 2021	2000 vs 2021	2010 vs 2021
Carbon Monoxide	-75	-70	-57	-29
Lead*	-99	-87	-76	-30
Nitrogen Oxides (NO _x)	-72	-70	-66	-48
Volatile Organic Compounds (VOC)	-61	-49	-30	-21
Direct PM ₁₀	-65	-33	-30	-22
Direct PM _{2.5}	---	-40	-46	-25
Sulfur Dioxide	-93	-92	-89	-76

As EPA points out, these reductions took place despite an expanding population and economy:

[B]etween 1980 and 2021, gross domestic product increased 187 percent, vehicle miles traveled increased 111 percent, energy consumption increased 25 percent, and U.S. population grew by 46 percent. During the same time period, total emissions of the six principal air pollutants dropped by 73 percent. . . . CO₂ emissions in 2020 were back down to the same level as they were in 1980.

EPA, Air Quality Trends, <http://www.epa.gov/airtrends/aqtrrends.html>

B. THE ENVIRONMENT AS COMMONS

One of the principal reasons government steps in to regulate environmental problems is because of the nature of many environment resources.

1. ENVIRONMENTAL PROTECTION AND THE DYNAMICS OF COLLECTIVE ACTION

2. APPLYING COMMONS ANALYSIS: FISHERIES

Page 35, insert after note 2:

3. Quota systems inevitably raise questions about how to distribute the quotas. If only a few firms receive the quotas, they may be able to exercise monopoly power. If too many are given quotas, it may be impossible for any of them to catch enough fish to earn reasonable profits. In *Pac. Choice Seafood Co. v. Ross*, 976 F.3d 932 (9th Cir. 2020), the court upheld the National Marine Fisheries Service's decision to adopt a 2.7% quota share limit, based on the

recommendations of the Pacific fisheries council. The court rejected the argument that the NMFS can only consider market power in limiting ownership of quotas:

Pacific Choice suggests that the Service erred in interpreting the Act to permit consideration of whether vessels would have a “chance at generating a reasonable profit.” We disagree. The Act requires the Service to “include measures to assist, when necessary and appropriate, entry-level and small vessel owner-operators, captains, crew, and fishing communities.” 16 U.S.C. § 1853a(c)(5)(C). While Congress noted that those measures might “includ[e] ... set-asides of harvesting allocations” or “economic assistance,” it did not say that those actions were the only such measures the Service could adopt. Instead, Congress left it to the Service to determine when and how assisting small vessel owner-operators might be “necessary and appropriate.” Giving weight to the chance of generating a profit was a reasonable way to implement Congress’s directive.

Thus, beyond conservation of fisheries, the NMFS has some power to pursue other social goals such as supporting fishing communities.

4. Aquaculture (“fish farming”) has the potential to damage wild fisheries by spreading parasite and diseases, causing water pollution, and causing interbreeding with escaped fish that could under some circumstances weaken the wild stock genetically. On the other hand, aquaculture also can help preserve wild fisheries by reducing fishing pressure on the wild stock. This aquaculture raises the question of the usefulness of preserving nature through non-natural activities. Similar questions arise in other areas, such as whether we should preserve endangered species from climate change by moving them to cooler locations, at the possible cost of disturbing ecosystems in the destination area.

Not surprisingly, aquaculture is a controversial subject. In *Gulf Fishermen’s Ass’n v. Nat’l Marine Fisheries Serv.*, 968 F.3d 454, 456 (5th Cir. 2020), the court rejected an effort by the NMFS to extend its jurisdiction to aquaculture, which in that case would have meant approval of an expansive aquaculture plan in the Gulf of Mexico. The court concluded that the NMFS lacked statutory authority:

We consider whether a federal agency may create an “aquaculture,” or fish farming, regime in the Gulf of Mexico pursuant to the Magnuson-Stevens Fishery Conservation and Management Act of 1976 (“Magnuson-Stevens Act” or “Act”), 16 U.S.C. §§ 1801–83. The answer is no. The Act neither says nor suggests that the agency may regulate aquaculture. The agency interprets this silence as an invitation, but our precedent says the opposite: Congress does not delegate authority merely by not withholding it. Undaunted, the agency seeks authority in the Act’s definition of “fishing”—the “catching, taking, or harvesting of fish.” 16 U.S.C. § 1802(16) (emphasis added). “Harvesting,” we are told, implies gathering crops, and in aquaculture the fish are the crop. That is a slippery basis for empowering an agency to create an entire industry the statute does not

even mention. We will not bite. If anyone is to expand the forty-year-old Magnuson-Stevens Act to reach aquaculture for the first time, it must be Congress.

A dissenter argued that the statute was at least ambiguous, and that the court should defer to NWFS's interpretation rather than "invalidating over a decade of state and federal officials' efforts, along with private experts, to draft a 'fishery management' plan that reconciles myriad commercial, environmental, and recreational interests." The result of this case was to leave marine aquaculture open to regulation only by EPA and the Army Corps of Engineers, requiring permits due to its potential discharges of pollutants and interference with navigation.

In the meantime, President Trump issued Executive Order 13921, *Promoting American Seafood and Competitiveness and Economic Growth* (May 7, 2020), 85 Fed. Reg. 28,471. The order directed the Army Corps to develop and propose a "nationwide permit authorizing finfish aquaculture activities in marine and coastal waters out to the limit of the territorial sea and in ocean waters beyond the territorial sea within the exclusive economic zone of the United States." At the time of this writing, this order has not been repealed by President Biden. In an opinion that was not designated for the official reporter, the Ninth Circuit held that a prior general permit was invalid because of its failure to take environmental impacts into account. The court noted that a revised version of the permit had recently been issued but had not gone into effect. NWP 48, Reissuance and Modification of Nationwide Permits, 86 Fed. Reg. 2744 (Jan. 13, 2021). The new general permit was slated to go into effect in March 2021, but may not have done so due to the change in administrations.

3. THE CASE OF GLOBAL CLIMATE CHANGE

Pages 39-45, Replace the two notes on climate change with the following:

CLIMATE SCIENCE AND IMPACTS OF CLIMATE CHANGE

The court's opinion refers to the IPCC as a source of evidence. The IPCC consists of the IPCC Plenary (often referred to as "the Panel"), and three Working Groups with clearly defined mandates.¹ The drafting process involves the input of many leading experts, followed by successive rounds of peer and government comments.

Here are some of the key takeaways from the IPCC's most recent summary of its findings for policymakers. First, as to the present situation:

- It is unequivocal that human influence has warmed the atmosphere, ocean, and land.

¹ Intergovernmental Panel on Climate Change, *About IPCC: How the IPCC is Organized*, <http://www.ipcc.ch/organization/organization.shtml>.

- Widespread and rapid changes in the atmosphere, ocean, cryosphere, and biosphere have occurred. Each of the last four decades has been successively warmer than any decade that preceded it since 1850.
- The scale of recent changes across the climate system as a whole . . . are unprecedented over many centuries to many thousands of years. It is virtually certain that hot extremes (including heatwaves) have become more frequent and more intense across most land regions since the 1950s. Projected changes in extremes are larger in frequency and intensity with every additional increment of global warming.

The report also provides sobering news about the future and the need for stringent emission reductions:

- Global surface temperature will continue to increase until at least mid-century under all emissions scenarios considered. Global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in CO₂ and other greenhouse gas emissions occur in the coming decades.
- Many changes due to past and future greenhouse gas emissions are irreversible for centuries to millennia, especially changes in the ocean, ice sheets and global sea level.
- Over the next 2000 years, global mean sea level will rise by about 2 to 3 m if warming is limited to 1.5°C, 2 to 6 m if limited to 2°C and 19 to 22 m with 5°C of warming, and it will continue to rise over subsequent millennia.
- Achieving global net zero CO₂ emissions. . . is a requirement for stabilizing CO₂-induced global surface temperature increase.²

The IPCC findings rely heavily on climate modeling, so a basic understanding of modeling is helpful. Elizabeth Kolbert, an award-winning science journalist, gives a particularly clear explanation of the basics of climate modeling, discussing a particular model called GISS:

Like all climate models, GISS's divides the world into a series of boxes. . . [I]n the world of the model, features such as lakes and forests and, indeed, whole mountain ranges are reduced to a limited set of properties, which are then expressed as numerical approximations. Time in this grid-world moves ahead for the most part in discrete, half-hour intervals, meaning that a new set of

² IPCC, *Summary for Policymakers* in CLIMATE CHANGE 2021: THE PHYSICAL SCIENCE BASIS. CONTRIBUTION OF WORKING GROUP I TO THE SIXTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.) (2021). The statements in the text are verbatim from the report, with the indicated deletions and with some rearrangement to combine findings in more readable form.

calculations is performed for each box for every thirty minutes that is supposed to have elapsed in actuality. . . A single run of the GISS model, done on a supercomputer, usually takes about a month.

The model calculates changes in each block based on fundamental laws and on “parameterizations.” These parameterizations approximate complex physical processes with simpler equations that capture the physical results but without all the details of the process. See, ELIZABETH KOLBERT, *FIELD NOTES FROM A CATASTROPHE: MAN, NATURE, AND CLIMATE CHANGE* 99–101 (2006). Due to advances in computing capabilities and greatly improved data about current and historic climate conditions, the models have become much more sophisticated since the first IPCC report. The models are also checked in a variety of ways, including their fit with historical climate evidence.

Although it is possible that the IPCC analysis overstates the likely warming effect, it is at least equally possible that the Report understates it. The high-end risks relating to climate change, while not considered to be likely, would impose extraordinary costs.

Nevertheless, understatement of the risks of climate change is the more likely possibility for a number of reasons. Indeed, since the release of the 5th Assessment, scientists believe that the low end of predictions of average temperature increases seems less likely than it did when the 5th Assessment was released. See The Royal Society, *Climate Updates: What Have We Learnt Since the IPCC 5th Assessment Report?* <https://royalsociety.org/~media/policy/Publications/2017/27-11-2017-Climate-change-updates-report.pdf>. In addition, there remains the possibility of “tipping points” or “threshold effects” that could dramatically increase the concentration of GHGs in the atmosphere, and other events like unexpected collapses of major glaciers that could have abrupt and irreversible impacts.

The empirical record to date of climate change effects also shows that surprises about climate change have often been in the “wrong” direction. For example, it now appears that the Arctic Sea will be seasonally free of sea ice thirty years ahead of expectations. See National Snow & Ice Data Center, *Arctic Sea Ice News & Analysis*, <http://nsidc.org/arcticseaicenews/2018/09/no-endless-summer-in-the-arctic/> (showing steady declines). The arctic permafrost too appears to be melting faster than scientists had predicted, and because the permafrost contains both carbon dioxide and methane, its melting can have very serious amplifying effects on warming. All of these data points suggest, then, that the effects of increasing temperatures may well be on the more serious end of predictions.

THE GLOBAL RESPONSE TO CLIMATE CHANGE

From the UNFCCC to Kyoto. In an ideal world, the response to climate change might be a firm, prompt, coordinated legal effort. As the theory of the tragedy of the commons suggests, however, progress is likely to be difficult given the individual incentives countries face to limit action to address the problem. And, indeed, international progress has been halting, though not

insignificant. Though our focus in this book is on U.S. domestic rather than international law, the international global response is obviously important and has also influenced the U.S. response both positively and negatively. Future chapters address the domestic response, especially under the Clean Air Act, covered in Chapter 6. Here, we briefly describe the main international developments.

In 1992, the international community agreed to the United Nations Framework Convention on Climate Change (UNFCCC). The United States signed and ratified this agreement along with the other 196 countries that are members of the United Nations. The UNFCCC acknowledges the seriousness of climate change, calls for a joint effort to address the problem, and establishes the process that the global community has subsequently used to negotiate future agreements. Although developed countries such as the U.S. agreed in general terms to limit their emissions in order to prevent dangerous levels of carbon in the atmosphere, the UNFCCC did not contain specific measures to implement this commitment.

In 1997, the global community adopted the first (and only) international treaty to establish binding commitments by some countries to limit greenhouse gas emissions. The Kyoto Protocol required developed countries (also known as Annex I countries) to reduce their emissions, using 1990 levels of greenhouse gases as a baseline. Developing countries, including China and India, had no such commitments. The Kyoto Protocol also embraced market mechanisms (like the fishing quotas we saw earlier) as a way to reach the treaty's emissions goals. The U.S. had insisted on the inclusion of these mechanisms but then failed to ratify the agreement because of concerns about the expense of limiting emissions and about the fact that the treaty did not require rapidly developing countries like China to commit to emissions reductions.

The Kyoto Protocol was adopted in Kyoto, Japan, in 1997 and entered into force in 2005. The Protocol's first commitment period started in 2008 and ended in 2012. Most, but not all, of the parties to the Protocol agreed to take on commitments in a second commitment period from 2013 to 2020.

Although the Protocol covers too few of the world's major emitters to be considered a solution to the problem, it did lead some important developed countries—most notably those of the European Union—to develop programs to reduce their emissions, including by establishing the European Trading System. The ETS, as it is known, is the first and largest trading program for greenhouse gases in the world. Though it has had problems, it has been strengthened, remains in effect, and covers almost half of the EU's emissions. See European Commission, *EU Emissions Trading System (EU ETS)*, https://ec.europa.eu/clima/policies/ets_en.

The Paris Agreement. Efforts to enter into a new international agreement upon the expiration of the Kyoto Protocol sputtered along with little success until December of 2015. In that month, the countries of the world gathered in Paris, France and collectively ratified the Paris Agreement. The 2015 agreement commits the global community to attempt to keep global

temperature increase under 2° through a series of individual country commitments to limit their emissions.

The Paris Agreement differs from many international treaties in that it does not contain binding commitments or numerical limits to which individual countries are subject. Instead, each country that is a party to the agreement makes its own “Nationally Determined Contribution,” which outlines the emissions reductions to which the country commits. These are voluntary commitments—there is no real mechanism to bind any country to its NDC. Collectively, the more than 160 countries that submitted NDCs committed to emissions reductions that would not achieve the temperature target of below 2°C; nevertheless, the NDCs are designed to get the global community on a trajectory to first halt the increase in emissions and then cut them dramatically by mid-century.

The U.S. NDC committed the country to cuts of between 26 and 28 percent below 2005 levels by 2025; see The White House, *Fact Sheet: U.S. Reports Its 2025 Emissions Target to the UNFCCC*, <https://obamawhitehouse.archives.gov/the-press-office/2015/03/31/fact-sheet-us-reports-its-2025-emissions-target-unfccc>. Two of the central components of the NDC established by Obama, the Clean Power Plan and fuel efficiency standards for vehicles, are explored in more detail in Chapter 6, along with later developments.

The Trump Administration repudiated the Obama Administration’s climate change commitments and withdrew from the Paris Agreement. On his first day in office, President Biden rejoined the agreement. The U.S. then issued an NDC setting an economy-wide target of reducing its net greenhouse gas emissions by 50–52 percent below 2005 levels in 2030.

Federal policy. The federal response to climate change has been centered on the Clean Air Act and is discussed in detail in Chapter 6. EPA has been involved in the climate issue, in one way or another, for fifty years. This history is recounted in Jody Freeman, *The Environmental Protection Agency's Role in U.S. Climate Policy – A Fifty Year Appraisal*, 31 DUKE ENVTL. L. & POL'Y F. 1 (2020). The turning point was *Massachusetts v. EPA*, 549 U.S. 497 (2007), in which the Supreme Court held that EPA was obligated to determine whether greenhouse gases pose a risk to human health and welfare. Given the clarity of the science, there was little doubt as to the result of EPA’s analysis. EPA then proceeded, without much difficulty, to set limits on greenhouse gas emissions from cars. Those limits were tightened under the Obama Administration, frozen under Trump, and then tightened again under Biden.

Stationary sources like power plants and factories posed a more difficult challenge. The core provision of the statute governing these provisions relies on states to achieve emission reductions in order to meet national air quality standards. Since greenhouse gases are well-mixed globally, it is impossible for a single jurisdiction to change their level even over its own territory. Thus, this mechanism seems like a mismatch for the problem of climate change. EPA has turned to other, less central provisions of the Clean Air Act instead. These

efforts have gotten a mixed response from a conservative Supreme Court that is suspicious of regulatory innovations.

Outside of the Clean Air Act, there have been other federal initiatives that are also outside the scope of this book. These include efforts to modify agriculture and forestry practices to limit emissions of carbon and methane, many of which take place under the aegis of the Agriculture Department. The Interior Department has also made efforts to reduce emissions from mining and production of oil and gas on federally owned lands. Finally, funding following the 2008 financial crisis and the 2019-2021 COVID peak was devoted in various ways to renewables, electric vehicles, clean energy research, and improvements in the electrical grid. At this writing, another major climate funding bill is being considered by the Senate.

State policy. Partly because climate policy has been so unsettled at the national level, American state governments have actively engaged with the issue of climate change on many fronts. California began to pursue its own climate policies as early as the presidency of George W. Bush, when the federal government steadfastly refused to take any action at all to reduce emissions, and seemed dedicated to increasing them through expanded production of fossil fuels. The Trump Era was similar in this regard to this earlier period. For instance, as soon as Trump announced his intent to withdraw from the Paris Agreement, the governors of New York and California announced the formation of the U.S. Climate Alliance along with their intentions to comply with the U.S.'s emissions reduction commitment.

Many states have adopted renewable portfolio standards (RPSs), which require that a certain percentage of electricity sold by each utility come from renewable sources. By forcing utilities to buy renewable energy, an RPS promotes the development of more solar and wind energy. Currently twenty-nine states have an RPS, and another eight have voluntary standards or non-binding targets.

In addition, more than twenty states have adopted climate-related targets of some kind, twenty-six had some type of energy efficiency program, and over half were engaged in some form of adaptation planning. Among the states that are addressing climate change in meaningful ways, California has played a leading role. In 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act, usually referred to as AB 32, which requires California to reduce emissions to the 1990 level by 2020. That goal has been achieved, and a new mandate requires a forty percent cut below that 1990 level by 2030. Elsewhere in the United States, the Regional Greenhouse Gas Initiative (RGGI) created a multistate trading system for power plant emissions. Another multistate venture was launched in late 2020 to establish a trading system for transportation emissions, with three states joining immediately and eight more states considering joining later. We will discuss climate action by U.S. states, along with emissions trading systems, in more detail later in the book.

Transnational efforts. Climate initiatives at the state and local level are not limited to the United States. For instance, the Local People’s Congress in the city of Shenzhen adopted China’s first citywide carbon trading program. Operating in a very different setting in Japan, eighty-nine local governments, including Tokyo, Kanagawa Prefecture, and Yokohama City, have endorsed a 2050 goal of net-zero carbon emissions. These local governments include about half of Japan’s population, and a combined GDP of about \$2.8 trillion. The Tokyo metropolitan government has also established an emissions trading scheme. See Daniel A. Farber, Yuichiro Tsuji, and Shiyuan Jing, *Thinking Globally, Acting Locally: Lessons from the U.S., Japan, and China*, 82 OHIO ST. LJ 953 (2021).

There are also strong international linkages between state and local efforts globally. The Under2 coalition of state and regional governments crosses international borders, with members in the United States along with areas as diverse as Canada, Brazil, and Indonesia. The coalition’s Memorandum of Understanding (MOU) states that the “guiding principle for reduction of greenhouse gas (GHG) emissions by 2050 must be to limit global warming to less than 2°C,” a goal that it then translates into specific emissions targets. The C40 coalition is a similar network composed of cities rather than states around the world. Austin and Houston are members, as are Tokyo, Beijing, Chengdu, Shenzhen and other Chinese cities. *Id.*

CHAPTER 2

APPROACHES TO RISK REGULATION



A. RISK-BASED APPROACHES

Page 54, insert the following after Note 4:

5. At the beginning of the Trump Administration, EPA Administrator Scott Pruitt proposed a new cross-cutting “transparency in science” initiative that would restrict the data and models that EPA may rely upon in its rulemakings. The rule was formally proposed by EPA Administrator Andrew Wheeler in April 2018. *See Strengthening Transparency in Regulatory Science* (83 FR 18768, April 30, 2018). In March 2020, EPA released a supplemental notice on the 2018 proposal. *See Supplemental Notice of Proposed Rulemaking—Strengthening Transparency in Regulatory Science* (85 FR 15396, Mar. 18, 2020). The proposal was substantially similar to the legislative changes that proposed in the HONEST Act, a bill introduced many times in Congress but never enacted. *See* <https://www.congress.gov/bill/115th-congress/house-bill/1430>. Just before the end of the Trump Administration, on January 6, 2021, the EPA published the final rule in the Federal Register, effective immediately. *See Strengthening Transparency in Pivotal Science Underlying Significant Regulatory Actions and Influential Scientific Information* (86 FR 469, January 6, 2021). Among other things, the Final Rule provided that “when promulgating significant regulatory actions or developing influential scientific information, [EPA] will determine which studies constitute pivotal science and give greater consideration to those studies determined to be pivotal science for which the underlying dose-response data are available in a manner sufficient for independent validation.” *Id.* at 470. In contrast to the proposed rule, EPA limited the Final Rule to apply only to dose-response data rather than all underlying data. *Id.* at 474–75. The Final Rule defines “pivotal science” as those studies “that are integral to characterizing dose-response relationships” and that “drive the requirements or quantitative analyses of EPA significant regulatory actions or influential scientific information.” *Id.* at 480. The Trump EPA argued that the rule was permissible under the Agency’s general “housekeeping authority” because it was intended to govern “internal agency procedures.” Numerous scientists, scientific organizations, public health and environmental groups, and even some industry groups argued that the rule would have far-reaching, substantive impacts across virtually all of EPA’s major regulatory programs. Among other things, the rule would restrict EPA’s ability to rely upon public health studies

for which the underlying data and models are not “publicly available.” This could have the effect of precluding from consideration significant public health studies that are based on confidential medical information, including, for example, the famous Six Cities Study that documented the increased premature mortality associated with exposure to fine particulates (PM 2.5) that has been a driver of significant air pollution regulations over the last two decades. See Douglas Dockery et al., *An Association between Air Pollution and Mortality in Six U.S. Cities*, 329 *New Eng. J. Med.* 1753 (1993). Critics also argued that the rule would conflict with the APA as well as EPA's substantive and procedural mandates under various environmental statutes, where those statutes require decisionmaking to be based on scientific criteria and the evidence presented to the agency. On January 27, 2021, the Federal District Court for the District of Montana granted summary judgment to a group of environmental plaintiffs arguing the rule was unlawful because, among other things, it was a substantive rather than a procedural rule allowed under the housekeeping authority. See *Environmental Defense Fund et al. v. EPA*, No. 21-cv-00003 (D. Mon. Feb. 1, 2021). On May 24, 2021, EPA Administrator Michael Regan signed a final rule that effectuated the vacatur of the Trump transparency in science rule, effective immediately. See *Strengthening Transparency in Pivotal Science Underlying Significant Regulatory Actions and Influential Scientific Information; Implementation of Vacatur*, (86 FR 29515, May 24, 2021).

B. ECONOMIC APPROACHES

Page 87, insert the following after Note 3 (and relabel existing Note 4 as Note 5):

4. Conservative and industry critics have long challenged EPA's inclusion of co-benefits in various cost-benefit analyses, particularly in the context of air pollution regulations. As discussed in Chapter 6, *infra*, this has been a major issue in the Mercury and Air Toxics Standards (MATS) under the Clean Air Act, where the co-benefits from reduced PM2.5 pollution were significantly larger than the direct benefits of reducing mercury emissions from power plants. In May 2020, the EPA issued a final rule on the revisions to the MATS rule that precluded consideration of co-benefits in making the “appropriate and necessary” determination required under the statute. See *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units—Reconsideration of Supplemental Finding and Residual Risk and Technology Review* (85 FR 31286 May 22, 2020). More generally, in June 2018, the EPA also issued an Advance Notice of Proposed Rulemaking, *Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process* (83 FR 27524, June 13, 2018), to solicit public input on potential approaches for conducting cost-benefit analysis in the rulemaking process. Based on the comments received, the EPA Administrator issued a memorandum to EPA's Assistant Administrators in May 2020 announcing his intention to propose statute-specific rules outlining how consistency and transparency concepts will be implemented in future

rulemakings. In December 2020, EPA finalized its first statute-specific rulemaking on cost-benefit analysis under the Clean Air Act. *See Increasing Consistency and Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process* (85 FR 84130, December 23, 2020). The goal was to codify a set of practices for preparing cost-benefit analyses for all future significant proposed and final regulations under the Clean Air Act. As proposed, the new rule called for a reporting of total costs, benefits, and net benefits as well as a separate reporting of the public health and welfare benefits that are specific to the objective of the CAA provision under which the rule is promulgated. More generally, the rule sought to extend the use of cost-benefit analysis to other regulatory actions under the CAA, including those for which the statute precludes consideration of costs, and to restrict the types of studies and methods that EPA could use for its risk assessments to inform regulations. In May 2021, the EPA formally rescinded the rule. *See Rescinding the Rule on Increasing Consistency and Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process* (86 FR 26406, May 14, 2021).

C. EQUITY-BASED APPROACHES

2. THE LEGAL IMPLEMENTATION OF ENVIRONMENTAL JUSTICE

Page 111, insert the following before the heading:

The Black Lives Matter protests during the spring and summer of 2020 across the United States and around the world have focused attention on structural inequality and systemic racism, including the substantial environmental pollution and public health burdens that disproportionately affect frontline communities. Black people in the United States continue to suffer from significantly higher exposure to air and water pollution, toxics, and hazardous waste, all of which has been further compounded by Covid-19, which is killing Black people at much higher rates than white people. In the wake of the protests, several major U.S. environmental groups have signaled a new commitment to environmental justice, but for many frontline communities the proof will be in the actions that they take.

During the Trump Administration, EPA worked to dismantle previous commitments to environmental justice within the Agency, while also pursuing various efforts to roll back and weaken major pollution regulations that would disproportionately harm Black communities and other communities of color.

The Biden-Harris campaign put justice and equity at the center of their environmental and climate agendas. Since taking office, the new Administration has taken multiple actions to translate these commitments into action based on a “whole-of-government” approach, including the appointment of environmental justice leaders and advocates to important

positions throughout the government. In addition, President Biden signed an Executive Order on Tackling the Climate Crisis at Home that includes multiple actions to advance environmental justice. Among other things, it directs 40 percent of all federal clean energy and climate investments to disadvantaged communities (the Justice40 Initiative). It also establishes a new White House Environmental Justice Advisory Council, composed of leaders from environmental justice groups around the country, and strengthens the White House Environmental Justice Interagency Council. Together, these two councils are responsible for ensuring the all-of-government approach to addressing environmental injustice, strengthening President Clinton's prior Executive Order (EO 12989) on environmental justice, and developing a system for measuring its effectiveness, including a yearly score card. Budgets for environmental justice have been increased at EPA and other agencies and environmental justice concerns are being integrated into agency planning efforts across the government. And, of course, efforts to rescind or roll back the Trump Era roll backs of environmental regulations are an important part of the overall effort to ensure that the benefits of environmental protection are enjoyed equally by all communities.

3. EQUITY ISSUES AND GLOBAL CLIMATE CHANGE

Page 117, replace Note 4 with the following:

4. In 2017, President Trump followed through on a campaign promise and announced that the United States was abandoning the Paris Agreement on Climate Change, which was completed in 2015 under the United Nations Framework Convention on Climate Change and went into effect in 2016. The Paris Agreement includes 191 countries as parties. Under the rules of the Agreement, the United States' withdrawal did not formally take effect until November 4, 2020, the day after the Presidential election. On the first day of his Presidency, President Biden fulfilled his own campaign pledge to formally rejoin the Paris Agreement. On April 22, 2021, the President convened a Climate Leaders Summit and announced that the United States would strengthen its commitments under the Paris Agreement, pledging to reduce U.S. emissions by 50% below 2005 levels by 2030. *See Fact Sheet: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies*, (April 22, 2021), available at: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>.

CHAPTER 3

ENDANGERED SPECIES

■ ■ ■

A. INTRODUCTION TO THE ENDANGERED SPECIES ACT

B. LISTING: SECTION 4

1. LISTING ENDANGERED AND THREATENED SPECIES

Page 154, insert at the end of Note 1:

In 2019, the Trump Administration issued new regulations on listing. The regulations addressed the future time span that the agency must consider in determining a species' status as endangered or threatened:

The term foreseeable future extends only so far into the future as the Services can reasonably determine that both the future threats and the species' responses to those threats are likely. The Services will describe the foreseeable future on a case-by-case basis, using the best available data and taking into account considerations such as the species' life history characteristics, threat-projection timeframes, and environmental variability. The Services need not identify the foreseeable future in terms of a specific period of time.

§ 424.11(d), 85 Fed. Reg. 45052 (Aug. 27, 2019). This was a particularly controversial issue during the comment period. Do you read this language as changing the approach adopted in *In re Polar Bear Listing*?

On June 4, 2021, the Fish and Wildlife Service and NOAA jointly announced that they intended to review a series of the Trump Administration ESA's regulations. The agencies did not specifically list the provision dealing with the foreseeable future, but did speak of possible revisions to the regulation issued on August 27, 2019. See Press Release: U.S. Fish and Wildlife Service and NOAA Fisheries to Propose Regulatory Revisions to Endangered Species Act (June 4, 2021), https://www.fws.gov/news/ShowNews.cfm?ref=u.s.-fish-and-wildlife-service-and-noaa-fisheries-to-propose-regulatory-&_ID=36925.

As yet, however, a formal proposal to revisit the “foreseeable future” requirement has not been released.

Page 156, insert at the end of Note 5:

In 2007, the FWS proposed to delist Yellowstone grizzlies. After protracted litigation, the FWS published a conservation plan for the grizzlies, including reliance on a state management plan, while concluding that the grizzlies were no longer threatened. In *Crow Indian Tribe v. United States*, 965 F.3d 662 (2020), the court faulted the state management plan for relying on relisting as the solution if the Yellowstone grizzlies failed to continue thriving. It also held that the FWS had failed to properly consider the possibility that decline in the Yellowstone grizzlies would deprive the “remnant population” (grizzlies elsewhere still listed) of necessary genetic diversity. The court concluded:

The FWS may be correct that it need not adopt the identical regulatory mechanisms that it adopted in the 2007 Rule, but because a lack of genetic diversity continues to threaten the Yellowstone grizzly, it must adopt regulatory mechanisms that ensure long-term genetic health. See 16 U.S.C. § 1533(a)(1)(D) (requiring the FWS to consider the inadequacy of existing regulatory mechanisms). It failed to do so here.

Page 156, delete the second paragraph of Note 6 and replace it with the following:

A 2005 FWS regulation gave threatened species the same protections under § 9 as endangered species, unless otherwise noted in the listing decision. A 2019 regulation issued by the Trump Administration eliminated this default assumption. 84 Fed. Reg. 44754 (Aug. 27, 2019). Thus, the § 9 protections for threatened species will in the future be determined on a case-by-case basis as they are listed.

The Biden Administration announced its intention to restore the pre-Trump regulation in the June 4, 2021 press release referenced above. As yet, however, a formal proposal to do so has not yet been released.

Page 161, add after the last sentence before the heading:

The Biden Administration has not, at this point, revisited the foreseeability requirement.

The FWS has framed at least one proposed new rule as an effort to respond to the challenges of climate change. A bit of quick background is needed to understand the proposal. Section 10(a) of the ESA allows the Secretary to “(A) any act otherwise prohibited by section 1538 of this title for scientific purposes

or to enhance the propagation or survival of the affected species, including, but not limited to, acts necessary for the establishment and maintenance of experimental populations pursuant to subsection (j) of this section.” In turn, Section 10(j) relates to experimental populations. Section 10(j)(A) provides that the Secretary “may authorize the release (and the related transportation) of any population (including eggs, propagules, or individuals) of an endangered species or a threatened species outside the current range of such species if the Secretary determines that such release will further the conservation of such species.”

In past, release of experimental populations has only been allowed within a species’ historic range. The FWS has given the following explanation for why it intends to change that rule:

At the time the Service adopted these regulations, it did not anticipate the impact of climate change on species and their habitats. We have since learned that climate change is causing, or is anticipated to cause, many species’ suitable habitat to shift outside of their historical range. . . . Therefore, it may be necessary and appropriate to establish experimental populations outside of the species’ historical range to provide for their conservation and adapt to the habitat-related impacts of climate change and other threats.

Notably, an “an essential experimental population” is treated as threatened for purposes of assigning critical habitat and in terms of the section 7 interagency cooperation process. *Endangered and Threatened Wildlife and Plants; Designation of Experimental Populations*, 87 Fed. Reg. 34625 (June 7, 2022).

Page 162, add the following before Subsection 2:

The final version of the rule was somewhat modified. It replaced “probable” with the statutory term, “likely.” It also emphasized that the agency would determine the foreseeable future “on a case-by-case basis, using the best available data and taking into account considerations such as the species’ life history characteristics, threat-projection timeframes, and environmental variability.” Finally, the final rule made it clear that the Service does not need to designate a specific period of time as the foreseeable future: the question is whether it can conclude that a foreseeable threat will likely place the species in jeopardy. The June 4, 2021 press release referenced above promised to revisit the definition of the “effects of the action” in the Trump regulation. So far, however, no formal proposal to do so has been published.

2. CRITICAL HABITAT

Page 169, add the following before the Note heading:

4. The final version of the rule provided that in addition to the possibility that designation of critical habitat could lead to human actions

threatening the species, the following are grounds for declining to designate critical habitat:

(ii) The present or threatened destruction, modification, or curtailment of a species' habitat or range is not a threat to the species, or threats to the species' habitat stem solely from causes that cannot be addressed through management actions resulting from consultations under section 7(a)(2) of the Act;

(iii) Areas within the jurisdiction of the United States provide no more than negligible conservation value, if any, for a species occurring primarily outside the jurisdiction of the United States;

(iv) No areas meet the definition of critical habitat; or

(v) The Secretary otherwise determines that designation of critical habitat would not be prudent based on the best scientific data available.

§ 424.12(a)(1), 84 Fed. Reg. 85053 (Aug. 27, 2019).

In the June 4, 2021 press release cited above, FWS and NOAA announced their intention to rescind the definition of habitat. A formal proposal to rescind the rule was issued in October. 86 Fed. Reg. 59346 (Oct. 27, 2021). The rescission became final in July 2022. 87 Fed. Reg. 43433 (July 21, 2022).

Page 169, insert before the heading:

4. Under § 4(b)(2) of the ESA, the agency must consider cost before designating critical habitat. In *Building Industry Ass'n v. U.S. Dep. of Commerce*, 792 F.3d 1027 (D.C. Cir. 2017), the court held that this provision does not require the agency to balance the economic impacts against the environmental benefits of designation, although the agency has discretion to exclude areas on this basis.

The Trump Administration adopted a regulation prescribing a set process for considering cost. Endangered and Threatened Wildlife and Plants; Regulations for Designating Critical Habitat, 85 Fed. Reg. 82376 (Dec. 20, 2020). The regulation defines economic impacts as including, but not limited to, "the economy of a particular area, productivity, jobs, and any opportunity costs arising from the critical habitat designation (such as those anticipated from reasonable and prudent alternatives that may be identified through a section 7 consultation) as well as possible benefits and transfers (such as outdoor recreation and ecosystem services)." The regulation then calls for a balancing test: "When analyzing the benefit of including or excluding any particular area based on economic impacts or other relevant impacts described in paragraph (b) of this section, the Secretary will weigh such impacts relative to the conservation value of that particular area."

The Biden Administration has proposed rescinding this rule. 86 Fed. Reg. 59346 (Oct. 27, 2021).

The proposal gives the following rationale for rescinding the rule:

Although the preamble and response to comments in the Final Rule refers to using the best available information and based on the case-specific information to support exclusions analyses, the regulatory text mandates a rigid process for when the Secretary will enter into an exclusion analysis, how weights are assigned to impacts, and when an area is excluded. Therefore, implementing the Final Rule undermines the Service's ability to further the conservation of the species because the ruleset applies in all situations regardless of the specific facts at issue or the conservation outcomes. We now recognize that keeping the Final Rule would result in competing and potentially legal conflicting requirements when we undertake an exclusion analysis and could increase our legal vulnerability.

The rescission became final in July 2022. 87 Fed. Reg. 43433 (July 21, 2022).

Page 171, insert at the end of the page:

In a more recent case relating to the spotted owl, the Ninth Circuit upheld an experimental program to eliminate barred owls. *Friends of Animals v. United States Fish & Wildlife Serv.*, 28 F.4th 19 (9th Cir. 2022). The decision sheds light on the role of experimentation in implementing the ESA in the light of ecological uncertainties. It also highlights a new challenge that threatens the spotted owl.

As the court explained:

This case is a tale of two owls. For the northern spotted owl, it has been the worst of times: It remains a threatened species, and its population continues to dwindle in the Pacific Northwest and Northern California. But it has been the best of times for the barred owl: Its abundant population burgeoning, the barred owl has expanded westward and encroached on the spotted owl's habitat. And barred owls have even been spotted attacking their brethren bird.

In response, the government “proposed lethally removing barred owls from certain areas to measure their environmental and demographic effect on the northern spotted owls.”

This action was challenged by an environmental group that complained about the potential negative effects of the experiment on spotted owls, which might be harmed as scientists entered their habitat. The group also questioned whether any benefit to the spotted owl was sufficiently clear and direct. The court rejected these challenges:

The “informational benefit” from the experiment may constitute a “net conservation benefit” under ESA regulations. “Net conservation benefit” includes informational and research benefit contemplated by the

barred owl removal experiment. Whether this informational benefit outweighs the harm done from any incidental take is an expert judgment that we generally defer to the agency.

One particularly controversial area has been the designation of areas not currently occupied by the species as critical habitat. That issue is addressed in the following case.

WEYERHAEUSER CO. V. U.S. FISH & WILDLIFE SERV.

Supreme Court of the United States, 2018.

___ U.S. ___, 139 S.Ct. 361, 202 L.Ed.2d 269.

CHIEF JUSTICE ROBERTS delivered the opinion of the Court.

The Endangered Species Act directs the Secretary of the Interior, upon listing a species as endangered, to also designate the “critical habitat” of the species. A group of landowners whose property was designated as critical habitat for an endangered frog challenged the designation. The landowners urge that their land cannot be critical habitat because it is not habitat, which they contend refers only to areas where the frog could currently survive. The court below ruled that the Act imposed no such limitation on the scope of critical habitat.

The Act also authorizes the Secretary to exclude an area that would otherwise be included as critical habitat, if the benefits of exclusion outweigh the benefits of designation. The landowners challenged the decision of the Secretary not to exclude their property, but the court below held that the Secretary’s action was not subject to judicial review. * * *

The amphibian *Rana sevosa* is popularly known as the “dusky gopher frog”—“dusky” because of its dark coloring and “gopher” because it lives underground. The dusky gopher frog is about three inches long, with a large head, plump body, and short legs. Warts dot its back, and dark spots cover its entire body. It is noted for covering its eyes with its front legs when it feels threatened, peeking out periodically until danger passes. Less endearingly, it also secretes a bitter, milky substance to deter would-be diners.

The frog spends most of its time in burrows and stump holes located in upland longleaf pine forests. In such forests, frequent fires help maintain an open canopy, which in turn allows vegetation to grow on the forest floor. The vegetation supports the small insects that the frog eats and provides a place for the frog’s eggs to attach when it breeds. The frog breeds in “ephemeral” ponds that are dry for part of the year. Such ponds are safe for tadpoles because predatory fish cannot live in them.

The dusky gopher frog once lived throughout coastal Alabama, Louisiana, and Mississippi, in the longleaf pine forests that used to cover the southeast. But more than 98% of those forests have been removed to

make way for urban development, agriculture, and timber plantations. The timber plantations consist of fast-growing loblolly pines planted as close together as possible, resulting in a closed-canopy forest inhospitable to the frog. The near eradication of the frog's habitat sent the species into severe decline. By 2001, the known wild population of the dusky gopher frog had dwindled to a group of 100 at a single pond in southern Mississippi. That year, the Fish and Wildlife Service, which administers the Endangered Species Act of 1973 on behalf of the Secretary of the Interior, listed the dusky gopher frog as an endangered species.* * *

A critical-habitat designation does not directly limit the rights of private landowners. It instead places conditions on the Federal Government's authority to effect any physical changes to the designated area, whether through activities of its own or by facilitating private development. Section 7 of the ESA requires all federal agencies to consult with the Secretary to "[e]nsure that any action authorized, funded, or carried out by such agency" is not likely to adversely affect a listed species' critical habitat. If the Secretary determines that an agency action, such as issuing a permit, would harm critical habitat, then the agency must terminate the action, implement an alternative proposed by the Secretary, or seek an exemption from the Cabinet-level Endangered Species Committee.

Due to resource constraints, the Service did not designate the frog's critical habitat in 2001, when it listed the frog as endangered.* * * In 2010, in response to litigation by the Center for Biological Diversity, the Service published a proposed critical-habitat designation. The Service proposed to designate as occupied critical habitat all four areas with existing dusky gopher frog populations. The Service found that each of those areas possessed the three features that the Service considered "essential to the conservation" of the frog and that required special protection: ephemeral ponds; upland open-canopy forest containing the holes and burrows in which the frog could live; and open-canopy forest connecting the two. But the Service also determined that designating only those four sites would not adequately ensure the frog's conservation. Because the existing dusky gopher frog populations were all located in two adjacent counties on the Gulf Coast of Mississippi, local events such as extreme weather or an outbreak of an infectious disease could jeopardize the entire species.

To protect against that risk, the Service proposed to designate as unoccupied critical habitat a 1,544-acre site in St. Tammany Parish, Louisiana. The site, dubbed "Unit 1" by the Service, had been home to the last known population of dusky gopher frogs outside of Mississippi. The frog had not been seen in Unit 1 since 1965, and a closed-canopy timber plantation occupied much of the site. But the Service found that the site retained five ephemeral ponds "of remarkable quality," and determined that an open-canopy forest could be restored on the surrounding uplands

“with reasonable effort.” Although the uplands in Unit 1 lacked the open-canopy forests (and, of course, the frogs) necessary for designation as occupied critical habitat, the Service concluded that the site met the statutory definition of unoccupied critical habitat because its rare, high-quality breeding ponds and its distance from existing frog populations made it essential for the conservation of the species.

After issuing its proposal, the Service commissioned a report on the probable economic impact of designating each area, including Unit 1, as critical habitat for the dusky gopher frog. Petitioner Weyerhaeuser Company, a timber company, owns part of Unit 1 and leases the remainder from a group of family landowners. While the critical-habitat designation has no direct effect on the timber operations, St. Tammany Parish is a fast-growing part of the New Orleans metropolitan area, and the landowners have already invested in plans to more profitably develop the site. The report recognized that anyone developing the area may need to obtain Clean Water Act permits from the Army Corps of Engineers before filling any wetlands on Unit 1. Because Unit 1 is designated as critical habitat, Section 7 of the ESA would require the Corps to consult with the Service before issuing any permits.

According to the report, that consultation process could result in one of three outcomes. First, it could turn out that the wetlands in Unit 1 are not subject to the Clean Water Act permitting requirements, in which case the landowners could proceed with their plans unimpeded. Second, the Service could ask the Corps not to issue permits to the landowners to fill some of the wetlands on the site, in effect prohibiting development on 60% of Unit 1. The report estimated that this would deprive the owners of \$20.4 million in development value. Third, by asking the Corps to deny even more of the permit requests, the Service could bar all development of Unit 1, costing the owners \$33.9 million. The Service concluded that those potential costs were not “disproportionate” to the conservation benefits of designation. “Consequently,” the Service announced, it would not “exercis[e][its] discretion to exclude” Unit 1 from the dusky gopher frog’s critical habitat. * * *

The Center for Biological Diversity contends that the statutory definition of critical habitat is complete in itself and does not require any independent inquiry into the meaning of the term “habitat,” which the statute leaves undefined. But the statutory definition of “critical habitat” tells us what makes habitat “critical,” not what makes it “habitat.” Under the statutory definition, critical habitat comprises areas occupied by the species “on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection,” as well as unoccupied areas that the Secretary determines to be “essential for the conservation of the species.” That is no baseline definition of habitat—it identifies only

certain areas that are indispensable to the conservation of the endangered species. The definition allows the Secretary to identify the subset of habitat that is critical, but leaves the larger category of habitat undefined.

The Service does not now dispute that critical habitat must be habitat, although it made no such concession below. Instead, the Service argues that habitat includes areas that, like Unit 1, would require some degree of modification to support a sustainable population of a given species. Weyerhaeuser, for its part, urges that habitat cannot include areas where the species could not currently survive. (Habitat can, of course, include areas where the species does not currently live, given that the statute defines critical habitat to include unoccupied areas.) The Service in turn disputes Weyerhaeuser's premise that the administrative record shows that the frog could not survive in Unit 1.

The Court of Appeals concluded that "critical habitat" designations under the statute were not limited to areas that qualified as habitat. The court therefore had no occasion to interpret the term "habitat" in Section 4(a)(3)(A)(i) or to assess the Service's administrative findings regarding Unit 1. Accordingly, we vacate the judgment below and remand to the Court of Appeals to consider these questions in the first instance. [The Court also held that the Service's refusal to exclude the lands in question from critical habitat under § 4(b)(2) was subject to judicial review, and remanded on that question as well. Section 4(b)(2) allows land to be excluded if "the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat."]

NOTES

1. Recall that the statute defines critical habitat to include "specific areas outside the geographical area occupied by the species at the time it was listed . . . upon a determination by the Secretary that such areas are essential for the conservation of the species." Does the requirement that land be "habitat" add anything? Note that, as the statute is written, the Secretary can include *occupied* areas only when they contain physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection. Are these requirements for land to be considered habitat? Or do these go only to whether land is essential, and not to whether it is habitat?

2. The Trump Administration addressed the issue of unoccupied habitat in its 2019 revision of the ESA regulations. The revised provision reads as follows:

The Secretary will designate as critical habitat, at a scale determined by the Secretary to be appropriate, specific areas outside the geographical area occupied by the species only upon a determination that such areas are essential for the conservation of the species. When designating critical habitat, the Secretary will first evaluate

areas occupied by the species. The Secretary will only consider unoccupied areas to be essential where a critical habitat designation limited to geographical areas occupied would be inadequate to ensure the conservation of the species.

The Tenth Circuit more recently held that a pre-Obama version of the regulation also required this two-step process, in which unoccupied habitat can be designated only if occupied habitat is found to be inadequate. See *New Mexico Farm and Livestock Bureau v. Department of Interior*, 952 F.3d 1216 (2020). In addition to this requirement, the Trump regulation required the agency to make two additional findings in order to designate unoccupied habitat:

In addition, for an unoccupied area to be considered essential, the Secretary must determine that there is a reasonable certainty both that the area will contribute to the conservation of the species and that the area contains one or more of those physical or biological features essential to the conservation of the species.

§ 424.12(b)(2), 84 Fed. Reg. 85053 (Aug. 27, 2019). According to the Service, the two additional findings were added in response to *Weyerhaeuser*.

In the June 4, 2021 press release cited above, FWS and NOAA proposed to rescind the definition of critical habitat, saying that a definition was not required in order for the agencies to comply with *Weyerhaeuser*. A formal proposal was published that October. 86 Fed. Reg. 59353 (Oct. 21, 2021). The rescission became final in July 2022. 87 Fed. Reg. 43433 (July 21, 2022).

C. CONSULTATION: SECTION 7

Page 172, delete the final paragraph and replace it with the following:

The Trump Administration adopted changes in the regulations governing the consultation process. The new regulations encourage the use of consultation about programs rather than specific proposed actions, and limit the requirement of reconsultation when a new species is listed in an area covered by an existing land management plan. 84 Fed. Reg. 44976 (2019).

One concern about the amendments relates to the causation requirement. The prior regulation made it clear that the agency should consider the direct, indirect, and cumulative effects of its action on the endangered species. The new regulation eliminates these terms. Instead, it defines effects to include all “consequences,” and then defines consequences to include any event that “is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur.” Commentators on the proposed change were concerned that the

language narrowed the definition of effects and raised the burden of proof to show harm to the species. The agency insisted, however, that the changes were merely clarifications of existing language. Presumably, then, the agency did not intend to modify existing caselaw on the subject.

Page 176, delete the last paragraph on the page and the top paragraph on p. 177, and replace with the following:

A recent case emphasizes the importance of considering the context of an action in a Biological Opinion. In *Appalachian Voices v. Department of the Interior*, 25 F.4th 259 (4th Cir. 2022), the issue was the impact of a proposed natural gas pipeline on two fish, the Roanoke logperch and the candy darter. In particular, the FWS must consider the projected effects of climate change on a species:

Though climate change could be considered a cumulative effect, it does not fit neatly into just this category. We take no position on whether climate change is best addressed as a baseline factor, cumulative effect, some mixture of the two, or something else entirely. It is clear, however, that climate change typically must form part of the analysis in some way. [citing *S. Yuba River Citizens League v. Nat'l Marine Fisheries Serv.*, 723 F. Supp. 2d 1247, 1274 (E.D. Cal. 2010) (reviewing cases finding that the “failure to discuss the impacts of climate change rendered BiOps arbitrary and capricious”)]. The BiOp was deficient, among other reasons, because it devoted only a sentence to the effects of climate change.

More generally, the court said, the agency had failed to explain the baseline and to consider how the pipeline might add to existing stressors. The court made clear its displeasure in instructing the agency:

Put differently, if a species is already speeding toward the extinction cliff, an agency may not press on the gas. We urge the Fish and Wildlife Service to consider this directive carefully while reassessing impacts to the two endangered fish at issue, especially the apparently not-long-for-this-world candy darter.

Page 178, add at the end of Note 5:

The 2019 regulation adopted by the Trump Administration appeared to change the definition of when an action adversely modifies critical habitat. 84 Fed. Reg. 44976 (2019). The regulation provided that “Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species.” § 402.02. This language may open the door to piecemeal destruction of critical habitat so long as no individual action qualifies as causing appreciable harm to the “habitat as a whole.” This could be a particular problem where the critical habitat is large. Would a single logging lease be enough to “appreciable harm” the entire area designed as critical for the Spotted Owl?

In the June 4, 2021 press release mentioned above, the FWS and NOAA indicated an intention to revise the Trump Administration's regulations on interagency consultation but did not specifically mention this provision. The recission became final in July 2022. 87 Fed. Reg. 43433 (July 21, 2022).

D. THE TAKE PROHIBITION: SECTION 9

E. INCIDENTAL TAKE STATEMENTS

Page 195, add at the end of Note 2:

Similarly, in *Center for Biological Diversity v. Bernhardt*, 982 F.3d 723 (9th Cir. 2020), the court held that FWS's mitigation measures were too vague to enforce. A biological opinion that relies upon indefinite "background cumulative effects" and uses those effects as a basis for determining the likely effects of the proposed project renders the agency's reliance on that opinion arbitrary and capricious; to be enforceable, those effects should properly have been part of the project itself. One measure referenced possible strategies without selecting a mitigation measure from the incorporated list or committing Bureau of Ocean Energy Management (BOEM) or energy management company to carrying out any specific number of measures, and the few concrete strategies provided in another measure were offered only as examples of possible strategies that could be taken.

3. Once it determines that an action will not jeopardize an endangered species, the FWS may propose reasonable and prudent changes to reduce the impact on the species. An FWS regulation provides that the "reasonable and prudent measures" in an Incidental Take Statement "cannot alter the basic design, location, scope, duration, or timing of the action and may involve only minor changes" to the proposed federal agency action. 50 C.F.R. § 402.14(i)(2). *Shafer & Freeman Lakes Environmental Corp. v. FERC*, 992 F.3d 1071 (2021), involved a proposal by a dam owner to release more water during drought periods to help protect an endangered species downstream. The dam operator has agreed to this measure after discussion with the FWS. In order to protect recreational interests, FERC proposed to reject that proposal and substitute a staff recommendation, which would maintain the dam reservoir's level but cease using water for hydropower during droughts. The FWS found that the FERC plan would not endanger the species but proposed returning to the applicant's proposal as a reasonable and prudent alternative. The D.C. Circuit remanded because the FWS had not determined whether the change from the FERC plan to the applicant's plan would qualify as a minor change.

F. RECOVERY OF LISTED SPECIES: SECTION 4(f)

Page 200, add at the end of Note 3:

In a later round of the litigation, the Ninth Circuit again faulted the decision to delist the Yellowstone grizzly. In the court’s view, the FWS had not adequately taken into account the risk that the grizzlies might suffer from a lack of genetic diversity if cut off from the remnant populations outside of Yellowstone. As the court explained, “because there are no concrete, enforceable mechanisms in place to ensure long-term genetic health of the Yellowstone grizzly, the district court correctly concluded that the 2017 Rule is arbitrary and capricious in that regard.” *Crow Indian Tribe v. United States*, 965 F.3d 662 (9th Cir. 2020).

G. HABITAT CONSERVATION PLANS: SECTION 10

Page 206, insert at the end of note 2:

Two recent articles further flesh out our understanding of how HCPs function in practice. The first article is based on an examination of provisions in almost two hundred regulations adopted for specific lands as part of agreements with affected parties. Based on the findings, “contrary to conventional wisdom, we find that the ESA embraces conservation collaboration.” L. Fischman, Vicky J. Meretsky and Matthew P. Castelli, *Collaborative Governance Under the Endangered Species Act: An Empirical Analysis of Protective Regulations*, 38 Yale J. on Reg. 976 (2021). They find that some regulations involve “manifest collaborative tailoring that allows harm to individual animals in exchange for larger contributions to species recovery.” Other regulations seem designed only to placate stakeholders. Few of the rules go beyond restating the statutory requirements regarding take, except sometimes by requiring compliance with state law as well. But the authors conclude that even so the rules are beneficial to the species to the extent they avoid the enforcement difficulties of the “take” prohibition by substituting clear conduct-based rules for the outcome-based approach of section 9.

CHAPTER 4

ENVIRONMENTAL PROTECTION AND THE CONSTITUTION



C. COMMERCE CLAUSE RESTRICTIONS ON STATE POWER

Page 252, insert before the heading:

NOTE ON OTHER CONSTITUTIONAL RESTRICTIONS ON STATES

Although less frequently invoked in environmental cases than the dormant commerce clause, there are two other constitutional restrictions that sometimes crop up. The first is known as implied foreign affairs preemption. The other restriction is based on the Compact Clause of the Constitution.

Foreign Affairs Preemption. Like the extraterritoriality doctrine, foreign affairs preemption is not based on any explicit constitutional prohibition on state laws. Also like extraterritoriality, it rests in part on the view that states are properly concerned only with matters within their borders. Rather than being concerned about a state intruding on the affairs of another state, however, foreign affairs preemption is based on a concern that the state may interfere with the federal government's authority over relationships with foreign nations.

In the past two decades, the Supreme Court has issued several opinions dealing directly with implied restrictions on state regulatory authority affecting foreign affairs. The first case was *Crosby v. National Foreign Trade Council*, 530 U.S. 363 (2000). Massachusetts passed a law requiring state and local governments to boycott companies that were themselves doing business with Burma (now Myanmar). The Court concluded that the state law interfered with a federal law that gave the President discretion over economic sanctions against Burma. Three years later, the Court returned to the preemption issue in *American Insurance Ass'n v. Garamendi*, 539 U.S. 396 (2003). California had passed legislation dealing with property confiscated by the Nazis or dishonored by insurers after World War II. Years later, the U.S. government entered into negotiations to try to resolve remaining disputes about the policies. The Court held that California unduly interfered with the President's approach to negotiations. The import of these cases remains unclear. So far, courts have not found state climate legislation preempted by the federal government's foreign affairs powers.

The Compact Clause. When states try to pursue their policy goals through cooperation with foreign governments, they may encounter additional constitutional problems. The Constitution forbids states to enter into treaties with foreign governments. In addition, the compact clause provides that no state can enter into an “Agreement or Compact with another State, or with a foreign Power” without the approval of Congress. The Supreme Court has made it clear, however, that the term Agreement does not include all cooperative arrangements. The Supreme Court cases involve alleged cooperation with other states rather than foreign governments. In general, the Court has upheld cooperative schemes when states are not legally bound to implement the scheme and where the scheme does not transfer regulatory authority to an interstate body.

For instance, in *Northeast Bancorp, Inc. v. Bd. of Governors of the Federal Res. Sys.*, 472 U.S. 159 (1985), the Court found that no compact existed despite deliberately parallel state laws and informal agreements between state officers regarding acquisition of local banks by out-of-state banks. Although the parallel state laws were adopted by state governments in concert, the Court found other circumstances more important: that no joint regulatory body was established, the statutes were not conditional on each other, and states were not legally bound. The Court held that that the statutes did not “either enhance the political power of the New England States at the expense of other States or have an ‘impact on our federal structure.’”

Challenges to Cross-Border Emissions Trading. East Coast states have created a multi-state carbon trading system covering electricity generators. Does this system violate the Compact Clause? The answer seems to be no. The states are free to leave the trading system at any time, and this has actually occurred. They did not transfer any of their regulatory authority to an interstate body. Thus, the arrangement seems to comply with the Supreme Court’s guidelines.

Moreover, the multi-state trading scheme may also have statutory support. Greenhouse gases are classified as air pollutants under the Clean Air Act. Section 102(c) of the Act provides:

The consent of the Congress is hereby given to two or more States to negotiate and enter into agreements or compacts, not in conflict with any law or treaty of the United States, for (1) cooperative effort and mutual assistance for the prevention and control of air pollution and the enforcement of their respective laws relating thereto, and (2) the establishment of such agencies, joint or otherwise, as they may deem desirable for making effective such agreements or compacts. No such agreement or compact shall be binding or obligatory upon any State a party thereto unless and until it has been approved by Congress.

California’s carbon trading scheme was originally intended to link with other western states. Due to political changes, that linkage has not taken place. In the meantime, however, California has linked its scheme with the Canadian

province of Quebec. The Trump Administration filed a lawsuit challenging this linkage. The district court rejected the argument that the linkage violated the Compact Clause. The court found that all of the traditional features that require congressional approval of interstate agreements were missing: “(1) provisions that required reciprocal action for the agreement's effectiveness; (2) a regional limitation; (3) a joint organization or body for regulatory purposes; and (4) a prohibition on the agreement's unilateral modification or termination.” *United States v. California*, 444 F. Supp. 3d 1181, 1184 (E.D. Cal. 2020)

A July 17 opinion in the same case also rejected the federal government's argument based on foreign affairs preemption. The court ruled that the linkage did not conflict with a 1987 appropriations bill funding some federal efforts to deal with climate change. Nor did it conflict with President Trump's withdrawal from the Paris Agreement. Finally, there was no evidence that the agreement interfered with President Trump's efforts to obtain a better deal than the Paris Agreement — perhaps, though the court was too tactful to say so, because no such efforts existed. The court's opinion on foreign affairs preemption can be found at *United States v. California*, No. 219CV02142WBSEFB, 2020 WL 4043034, at *1 (E.D. Cal. July 17, 2020). The Trump Administration appealed, but the Biden Administration announced in April 2021 that it was dropping the appeal.

D. STATUTORY PREEMPTION OF STATE LAW

Page 257, insert after note 3:

4. In *re Volkswagen "Clean Diesel" Mktg., Sales Pracs., & Prod. Liab. Litig.*, 959 F.3d 1201, (9th Cir. 2020), involved lawsuits against Volkswagen for tampering with the emissions control systems of diesel vehicles, allowing them to get higher mileage but worse emissions in practice than they had in federal emissions tests. The Court held that claims based on tampering at the time of sale were preempted by the Clean Air Act. It reached a different conclusion, however, about post-sale tampering:

We acknowledge that our conclusion. . . may result in the imposition of unexpected (and enormous) liability on Volkswagen. But that result is caused by the unusual and perhaps unprecedented situation before us. In drafting the Clean Air Act, Congress apparently did not contemplate that a manufacturer would intentionally tamper with the emission control systems of its vehicles after sale in order to improve the functioning of a device intended to deceive the regulators. . . . We may not strain to give Volkswagen the equivalent of a release from state and local liability (which it did not secure for itself) by engaging in a “freewheeling judicial inquiry into whether a state statute is in tension with federal objectives; such an endeavor would undercut the principle that it is Congress rather than the courts that preempts state law.”

Id. at 1206.

Page 261, insert at the end of note 5:

6. When faced with a threat of federal preemption of its carbon emission standards for new vehicles, California adopted a novel approach to reducing emissions. The state reached an agreement with the four major carmakers who wished to avoid the uncertainty of prolonged litigation:

The compromise between the California Air Resources Board and Ford, Honda, Volkswagen and BMW of North America came after weeks of secret negotiations and could shape future U.S. vehicle production, even as White House officials aim to relax gas-mileage standards for the nation's cars, pickups and SUVs. * * *

Under the new accord, the four companies, which represent about 30 percent of the U.S. auto market, have agreed to produce fleets averaging nearly 50 mpg by model year 2026. That is one year later than the target set under the Obama administration, which said that requiring vehicles to be more fuel-efficient would improve public health, combat climate change and save consumers money at the gas pump without compromising safety. * * *

As part of the new deal, California pledged to certify vehicles from the four automakers and provide the companies additional flexibility in meeting each year's emissions goal: They will improve their fleet's average efficiency by 3.7 percent a year, as opposed to 4.7 percent dictated under the Obama-era rules.

Juliet Eilperin and Brady Dennis, "Major Automakers Strike Climate Deal with California, Rebuffing Trump on Proposed Mileage Freeze," *Wash. Post* (July 25, 2019). The Trump Administration threatened an antitrust investigation into the agreement, which was later dropped.

E. REGULATION AND PROPERTY RIGHTS

2. THE PUBLIC TRUST DOCTRINE

Page 288, insert before the final paragraph on the page:

A panel of the Ninth Circuit rejected the lawsuits on standing grounds. The majority expressed considerable sympathy, however, for the merits of the plaintiffs' claims. In the majority's view,

The plaintiffs have made a compelling case that action is needed; it will be increasingly difficult in light of that record for the political branches to deny that climate change is occurring, that the government has had a role in causing it, and that our elected officials have a moral responsibility to seek solutions. We do not dispute that the broad judicial relief the plaintiffs seek could well goad the political branches into action. We reluctantly conclude, however, that the plaintiffs' case must be made to the political branches or to the electorate at large, the latter of which can

change the composition of the political branches through the ballot box. That the other branches may have abdicated their responsibility to remediate the problem does not confer on Article III courts, no matter how well-intentioned, the ability to step into their shoes.

The dissenter would have ruled in favor the plaintiffs, citing the urgent threat posed by the climate crisis to Americans. *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020).

On remand, the plaintiffs moved to amend their complaint to focus on declaratory relief, arguing that the Ninth Circuit's ruling did not foreclose their argument that they had standing to obtain declaratory relief. https://www.documentcloud.org/documents/20508750-doc_462_motion_for_leave_to_amend. The federal district judge then requested that the parties meet to discuss settlement possibilities while that motion was pending. Several conservative state attorneys general then filed motions to intervene, arguing that the Biden Administration could not be counted on to represent their interests in any settlement negotiations. At this writing, there has been no resolution of any of these matters.

Page 292, insert at the end of note 1 on p. 292:

For an update on the Blumm and Ritchie article, concluding that the same trends continued to hold in the early 21st Century, see Michael C. Blumm & Rachel G. Wolfard, *Revisiting Background Principles in Takings Litigation*, 71 FLA. L. REV. 1165 (2019). Blumm and Wolfard stress the extent to which statutes, in addition to state common law, can function as background principles:

Justice Kennedy's concurrence in *Lucas* maintained that background principles could include statutes, something Justice Scalia's majority opinion did not acknowledge. Over the last quarter-century, both the Supreme Court and lower courts have largely embraced Justice Kennedy's perspective, although they have not agreed with how long a statute must exist for it to become a background principle.

A wide variety of recent case law has recognized statutes as background principles. These decisions have considered whether wetland regulations, setback requirements, public ownership of wildlife and water, homestead exemptions, flood control limits, state environmental impact assessment requirements, public mining rights, and zoning restrictions qualify as background principles. Some of these measures have proved not to be background principles because of their relatively recent vintage.

Id. at 1193.

Between the expanding use of background rules as an exception and other developments in takings law, there seems to be little left at present of the Lucas total takings rule. See S Robert L. Glicksman, *Swallowing the Rule: The Lucas Background Principles Exception to Takings Liability*, 71 FLA. L. REV. F. 121 (2020); Daniel A. Farber, *Requiem for a Heavyweight: The Decline and Fall of Lucas v. South Carolina Coastal Council*, 71 FLA. L. REV. F. 212 (2020).

CHAPTER 5

JUDICIAL REVIEW AND ADMINISTRATIVE PROCESS

■ ■ ■

F. STANDING

1. INJURY-IN-FACT

Page 325, Insert the following before *Summers*:

In *Juliana v. United States*, 947 F.3d 1159 (2020), a group of young people sued the federal government, arguing that the government had violated the public trust doctrine and their right to substantive due process by encouraging higher carbon emissions. The Ninth Circuit held that they had satisfied the first two elements of standing. In terms of injury-in-fact, the injuries were sufficiently particularized. One plaintiff, for instance, “alleged she was forced to leave her home because of water scarcity, separating her from relatives on the Navajo Reservation.” The court also found that the plaintiffs had satisfied the causation element of standing:

The plaintiffs’ alleged injuries are caused by carbon emissions from fossil fuel production, extraction, and transportation. A significant portion of those emissions occur in this country; the United States accounted for over 25% of worldwide emissions from 1850 to 2012, and currently accounts for about 15%. And, the plaintiffs’ evidence shows that federal subsidies and leases have increased those emissions. About 25% of fossil fuels extracted in the United States come from federal waters and lands, an activity that requires authorization from the federal government.

Moreover, the plaintiffs were not challenging a few isolated government actions. Instead, they challenged “a host of federal policies, from subsidies to drilling permits, spanning ‘over 50 years,’ and direct actions by the government,” creating “a genuine factual dispute as to whether those policies were a ‘substantial factor’ in causing the plaintiffs’ injuries.” The plaintiffs had failed, however, to show that their injury was redressable by a court. Their effort to force a general overhaul of government policies, the court said, intruded too deeply on the prerogatives of Congress and the executive branch. On remand, the plaintiffs moved to

amend their complaint to request only declaratory relief, and the judge ordered a settlement conference. As of this writing, there has been no final resolution of the dispute.

Page 337, insert before the Heading to Part C:

8. Two recent articles, both coauthored by Professor David Adelman, call for a reevaluation of citizen suits. The first article draws on an empirical study of suits by citizens under the Endangered Species Act and NEPA, the authors find that only about one percent of actions taken under these statutes are ever subject to litigation. Plaintiffs prevailed in about a third of cases. The authors also found that roughly half of cases were filed in the D.C. Circuit (where federally owned land is prevalent) and the D.C. Circuit (the seat of government agencies). Cases are overwhelmingly filed in politically liberal states. They also note the existence of chains of citizen cases repeatedly returning to a single issue such as protection of old growth forests. David E. Adelman & Robert L. Glicksman, “Reevaluating Environmental Citizen Suits in Theory and Practice,” 91 *U. Colo. L. Rev.* 385 387 (2020).

The second article both expands the focus to include other statutes and hones into geographic factors. David E. Adelman & Jori Reilly-Diakun, “Environmental Citizen Suits and the Inequities of Races to the Top,” 92 *U. Colo. L. Rev.* 377, 378 (2021). In terms of the use of citizen suits for enforcement against individual violators, the study found relatively sparse activity:

Combining the DOJ and Westlaw data provides a comprehensive picture of environmental litigation. Extrapolating from the Westlaw sample, we predict that, on average, about six environmental justice lawsuits are filed each year, roughly 36 “NIMBY” cases, and 49 general permit challenges — volumes that, by any reasonable measure, are shockingly low. Conventional third-party citizen suits, defined here as environmental justice and general permit challenges, would account for about 18 percent of all environmental citizen suits filed annually based on this extrapolation.

411–12 (2021). The study found much more use of citizen suits against the government.

Overall, the article concludes that both the critics and defenders of citizen suits are off base. In terms of the critics:

Critics focus on the disruptive impact and unaccountability of citizen suits. Yet, both the volume and geographic distribution of citizen suits mitigate these concerns. The low number of citizen suits in most jurisdictions negates the potential for significant

disruptions. Similarly, the concentration of cases in states with larger numbers of environmental organizations and the lack of associations with state politics mitigate the potential for substantial divergences between citizen suits and local values. To the contrary, environmental litigation tends either to be parochial or to gravitate to states in which interest and support are highest. This is especially true of the private third-party suits that are of greatest concern among critics.

Id. at 429. The study also suggests that some of the arguments in favor of citizen suits are also misguided:

Our results are also inconsistent with the common narrative that citizen suits operate as a backstop to weak state enforcement of environmental laws. If this were true, one would expect citizen suits to be associated with the rigor of enforcement activities in a state, but we find no association whatsoever. In fact, the skewed geographic distribution of citizen suits suggests that they may exacerbate disparities in enforcement and implementation more than they mitigate them.

Id.

These studies have their limits. They do not consider whether how much impact lawsuits may have, as opposed to their numbers. They also cannot account for the possible deterrent effect of suits on the underlying conduct, or cases where the threat of a citizen suit is enough to lead to a negotiated settlement. The geographic distribution may partly reflect the distribution of environmental problems. Despite these limitations, the studies clearly shed important light on how citizen suits operate in the real world.

Based on these findings, what reforms would you suggest to make citizen suits against polluters more effective when government enforcement is law? Are there different reforms that might be helpful to ensure that citizens have access to court to challenge actions by the federal government?

C. LEGAL BASES FOR CHALLENGING AGENCY ACTION

1. CONSTITUTIONAL CHALLENGES

Page 341, add the following before Subsection 2:

NOTE ON THE POSSIBLE REVIVAL OF THE NONDELEGATION DOCTRINE

A 2019 decision indicated that at least four Justices were considering adoption of a much more robust version of the non-delegation doctrine, which could have major consequences for environmental law. *Gundy v. United States*, 139 S. Ct. 2116 (2019), involved a fairly obscure statute regulating sex offenders, but some have seen it as a harbinger of the destruction of the modern administrative state. The statute establishes a national system for registering sex offenders. Congress was apparently unsure about whether to require registration for sex offenders who were convicted before the law was passed and left that decision to the Attorney General. The statute does not specify what standard the Attorney General should use in making that decision.

In a 4–1–3 split, the Court rejected the argument that the law gave the Attorney General too much discretion in deciding whether to require people like him to register. Justice Kavanaugh did not participate in the case. Four of the Justices joined in a plurality opinion by Justice Elena Kagan upholding the statute under the intelligible principle test. The plurality opinion interpreted the law to require inclusion of pre-Act offenders to the extent feasible, and found this to be an intelligible principle, but the other four Justices expressed an interest in using a stricter constitutional standard.

Justice Alito voted to uphold the statute but said he was open to reconsidering the intelligible-principle standard in a case if there was a majority on the Court for changing it. Writing for himself, Chief Justice Roberts, and Justice Thomas, Justice Neil Gorsuch called for a dramatic rethinking of the Court’s approach to regulatory statutes.

Justice Gorsuch began by noting that different Attorneys General had taken very different approaches to the statute. He viewed the statute as leaving the treatment of pre-enactment offenders completely at the will of the Attorney General. He decried the statute for investing the Attorney General with the power to make “unbounded policy choices” with “profound consequences for the people they affect.” Gorsuch characterized the “intelligible principle” standard as a New Deal-era innovation that opened the door to wide-open delegations. He called for a return to earlier legal doctrine that he viewed as more stringent in limiting delegations to agencies.

Gorsuch identified several circumstances in which Congress can delegate authority to agencies. First, when Congress has “made the policy decisions,” it may leave it to an agency to “fill in the details.” Second, once Congress has

made the policy decisions, it can delegate fact-finding to the executive branch. For instance, it could make a trade embargo contingent on a presidential finding about whether a country had stopped interfering with American shipping. In another part of the opinion, he added that Congress has to set the criteria and facts that the agency could consider. Third, Congress can broadly delegate authority in areas where the President has his own inherent authority, such as foreign affairs or national security.

How would Justice Gorsuch's test apply in other cases? Consider the national air quality standards that were upheld by Justice Scalia. On the one hand, the level of the air quality standards is a highly consequential decision, not easily described as a "detail." Many other parts of the Clean Air Act regulating industry are keyed to achieving these air quality standards. Much of what EPA does could be considered fact-finding regarding public health risks, but there are also judgment calls about when a risk is too uncertain or too minor. The statute involves a policy decision about how ample the margin of safety should be. The statute does limit EPA to considering a single factor, health risks. And it does make what is probably the crucial policy judgment, that risks to public health must be avoided without regard to cost. On the other hand, the federal courts have found it possible to engage in meaningful judicial review, satisfying the concern that courts and the public be able to decide whether the boundaries of the law were crossed.

Apart from the merits of Gorsuch's position, there's the question of whether it will command a majority on the Supreme Court. Justice Kavanaugh did not participate in the sex offender case. In connection with a later case, he provided his own interpretation of Gorsuch's approach. Kavanaugh pointed to a statutory interpretation rule called the major questions doctrine. As he explained, that doctrine involves the question of how to interpret agency regulations involving "a major policy question of great economic and political importance." In that situation, the Supreme Court has said that Congress either has to explicitly decide the question itself or specifically give the agency the power to decide it. Otherwise, the law will not be interpreted to allow agency regulation on the subject. For example, when the Food and Drug Administration first decided to regulate cigarettes, the Court refused to defer to EPA's interpretation of its statutory power to do so because of the importance of the issue. Kavanaugh read Gorsuch's opinion as in effect eliminating the second option, so that Congress would have to "expressly and specifically decide the major policy question itself and delegate to the agency the authority to regulate and enforce." That's what eventually happened in the cigarette case after Congress amended the law to give the FDA power to act.

One problem with Kavanaugh's formulation is that the Court has found it very difficult to agree in statutory interpretation cases on what constitutes a "major question." But it is not completely clear whether Kavanaugh was ready to make a major change in delegation doctrine anyway. In the end, he equivocated, saying only that Gorsuch's scholarly and thoughtful opinion "raised important points that may warrant further consideration in future

cases.” Kavanaugh made the statement in the context of the Court’s decision not to hear a case. Those decisions aren’t considered precedents, so Justices generally feel no need to speak. The fact that he took the occasion to discuss Gorsuch’s opinion at all, when he could just as easily have remained silent, was widely seen as siding with Gorsuch’s approach. But perhaps that is reading too much into it. We also do not know the views of Justice Amy Coney Barrett, who replaced Justice Ginsburg (one of the Justices joining Kagan’s opinion in the *Gundy* case.)

The possible revival of the nondelegation doctrine has already begun to make an appearance in environmental litigation. As discussed in more detail in Chapter 6, *American Lung Ass’n v. EPA*, 985 F.3d 914 (D.C. Cir. 2021), involved the Trump Administration’s roll back of the Clean Power Plan, which had been the Obama Administration’s signature climate initiative. The Clean Power Plan had required state-by-state plans to shift generation from power plants with high carbon emissions to plans with lower or zero emissions. The Trump Administration argued that Obama rule exceeded EPA’s authority under the Clean Air Act. According to the Trump EPA, the statute only allowed EPA to consider measures that could be entirely implemented at a coal or natural gas power plant itself. The majority rejected that argument after a meticulous examination of the statutory text.

In dissent, Judge Walker took issue with the majority’s textual analysis. He also argued that, if construed to give EPA broader authority, the statute might well be unconstitutional:

Moreover, if Congress merely allowed generation shifting (it didn’t), but did not clearly require it, I doubt doing so was constitutional. For example, imagine a Congress that says, “The EPA may choose to consider off-site solutions for its best system of emission reduction, but the EPA may choose not to consider off-site solutions.” In that instance, Congress has clearly delegated to the EPA its legislative power to determine whether generation shifting should be part of the best system of emission reduction—a “decision[] of vast economic and political significance.”

...

Congress decides what major rules make good sense. The Constitution’s First Article begins, “All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.” And every “law” must “pass[] the House of Representatives and the Senate” and “be presented to the President.” Thus, whatever multi-billion-dollar regulatory power the federal government might enjoy, it’s found on the open floor of an accountable Congress, not in the impenetrable halls of an administrative agency—even if that agency is an overflowing font of good sense.

The Supreme Court reviewed the case and agreed with Judge Walker that the EPA rule was invalid, though it did not follow his reasoning. Instead, it relied on a doctrine of statutory interpretation that is loosely related to the nondelegation doctrine. *West Virginia v. EPA*, 597 U.S. — (2022). The major questions doctrine, like nondelegation, reflects a desire to give Congress the leading role in the policy realm. Because it is a direct of statutory interpretation rather than a constitutional rule, however, it gives Congress a greater role in deciding the scope of delegations.

Where the major questions doctrine applies, it requires that a regulation be supported by a clear grant of regulatory authority from Congress. The clear statement requirement may be difficult to meet, so the key threshold question is whether a regulation raises a “major question.” The *West Virginia* case sheds some light on the relevant factors. In determining that the case presented a major question, the Court said:

In arguing that Section 111(d) [a section of the Clean Air Act] empowers it to substantially restructure the American energy market, EPA “claim[ed] to discover in a long-extant statute an unheralded power” representing a “transformative expansion in [its] regulatory authority.” It located that newfound power in the vague language of an “ancillary provision[]” of the Act, , one that was designed to function as a gap filler and had rarely been used in the preceding decades. And the Agency's discovery allowed it to adopt a regulatory program that Congress had conspicuously and repeatedly declined to enact itself.

In applying the major questions doctrine, the Court identified four key factors applying to the Clean Power Plan:

1. *Stark departure from past practice and regulatory norms.* The agency’s interpretation of the statute was “not only unprecedented; it also effected a ‘fundamental revision of the statute, changing it from [one sort of] scheme of ... regulation’ into an entirely different kind.” Moreover, EPA had relied on an obscure and little-used portion of the statute.
2. *Breadth of the claimed authority.* Under EPA’s view of the statute, “Congress implicitly tasked it, and it alone, with balancing the many vital considerations of national policy implicated in deciding how Americans will get their energy.”
3. *Lack of relevant expertise.* EPA lacked expertise on running the electricity system.
4. *Congressional consideration and rejection.* Congress considered and rejected multiple efforts to create a cap-and-trade scheme for carbon.

Notably, the majority opinion did not rely on the projected expense of the regulation nor on the political controversy that it aroused. A concurring opinion by Justice Gorsuch emphasized his objections to agency delegations. Gorsuch also identified four factors as relevant: (1) whether the agency was trying to “work around” opposition from Congress; (2) the proportion of the

economy that would be impacted; (3) whether the issue involved a traditional domain of state law. Notably, only Justice Alito joined this opinion.

Justice Gorsuch also portrayed the major questions doctrine as an effort to ensure that a law does not “inadvertently cross constitutional lines,” meaning in this case the nondelegation doctrine. The majority, however, said only that the doctrine is based on “both separation of powers principles and a practical understanding of legislative intent.”

As you consider important statutory cases in the remainder of this book, consider whether any of them involved regulations that would be considered “major questions” under the *West Virginia* test, and if so, whether any of them would be decided differently today.

2. STATUTE-BASED CHALLENGES

Page 348, add at the end of note 5:

A 2020 decision on a non-environmental matter seems to strengthen the degree of judicial scrutiny under “arbitrary and capricious” review, or at least, emphasizes the duty of courts to exercise care in examining regulations. The case involved a decision by the Trump Administration to eliminate the DACA program for people who were brought to the United States by their parents in violation of immigration laws. In an opinion by Chief Justice Roberts, the Court reversed the Trump Administration’s action on two grounds. First, the agency had misunderstood the scope of its discretion and failed to realize that it had authority to retain part of the program. Second, it had failed to take into account the degree to which affected individuals had relied on the program. Although the agency was not required to protect that reliance interest, “it was required to assess the existence and strength of any reliance interests, and weigh them against competing policy concerns.” Its failure to do so was arbitrary and capricious. *Dep’t of Homeland Sec. v. Regents of the Univ. of California*, 140 S. Ct. 1891 (2020). Industry and conservative states may well argue that they relied on some Trump-era environmental rollbacks in making other decisions and that they consequently would be injured by Biden Administration reversals.

Page 357, add before Section D:

4. The present status of the *Chevron* doctrine is unclear. The doctrine has been strongly criticized by conservatives such as Justice Gorsuch. The Supreme Court has conspicuously failed to rely on it or even cite it in recent statutory cases. Yet the case has not been overruled and is still applied in lower courts. It is clear, in any event, that *Chevron* deference does not apply in cases involving the major question doctrine. That doctrine is described above in connection with the constitutional nondelegation doctrine.

D. THE NATIONAL ENVIRONMENTAL POLICY ACT

1. THRESHOLD REQUIREMENTS

Page 364, insert after Note 2 and renumber Note 3 as Note 4:

3. Amendments in 2020 to the CEQ rules gave a different treatment of the “significance” requirement. Section 1501.3 states:

(b) In considering whether the effects of the proposed action are significant, agencies shall analyze the potentially affected environment and degree of the effects of the action. Agencies should consider connected actions consistent with § 1501.9(e)(1).

(1) In considering the potentially affected environment, agencies should consider, as appropriate to the specific action, the affected area (national, regional, or local) and its resources, such as listed species and designated critical habitat under the Endangered Species Act. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend only upon the effects in the local area.

(2) In considering the degree of the effects, agencies should consider the following, as appropriate to the specific action:

- (i) Both short- and long-term effects.
- (ii) Both beneficial and adverse effects.
- (iii) Effects on public health and safety.
- (iv) Effects that would violate Federal, State, Tribal, or local law protecting the environment.

Note that the amended version omits any mention of the unique characteristics of the site, the uncertainty or uniqueness of risks, and the degree to which the action was controversial. Those factors were supported in prior caselaw, and it is unclear whether courts will be willing to retreat from those precedents in light of the new regulation.

Other aspects of the 2020 amendments are discussed below. The current status of these amendments, however, is unclear. On his first day in office, President Biden’s Executive Order 13990 included the 2020 CEQ amendments on a list of directives to agencies to reconsider Trump Administration actions. The government requested stays to all pending lawsuits against the 2020 amendments while it reconsidered them. All but one trial court agreed to impose a stay. Judge James Jones of the Western District of Virginia initially indicated his intention to continue consideration of the merits of the case, but later concluded that there was too much uncertainty about if and how the amendments would be followed by agencies. In the meantime, Secretary of

Interior Deb Haaland rescinded the departmental directive implementing the 2020 amendments.

A further source of confusion concerns the legal force of the CEQ regulations themselves. CEQ are often spoken of as if they were legally binding, but this may be a mistake. Although courts have often deferred to the regulations, but NEPA does not actually appear to give CEQ rulemaking authority. Thus, the regulations do not seem to have the force of law, and if so, they probably should be considered to be internal guidelines rather than binding regulations. To the extent that agencies are obligated to follow the guidelines, it may be only because of presidential orders or their own regulations requiring them to do so. (Agencies do often adopt the CEQ regulations through their own rulemaking processes.) In the end, the governing law is NEPA, rather than the CEQ's interpretation.

Based on extensive new research into the creation of NEPA, recent scholars have argued that, “[p]ut simply, as long as the changes Trump introduced remain on the books, NEPA is greatly weakened, and weakened in ways that contradict the meaning of the statute that an accurate view of the legislative history makes clear.” Brigham Daniels, Andrew P. Follett, and James Salzman, “Reconsidering NEPA,” 96 *Ind. L.J.* 865, 875 (2021).

Agency compliance with the 2020 CEQ amendments has been put on pause. CEQ has extended for two years the deadline to align agency procedures with the amendment, so in the meantime the agency regulations will track the 1978 version of the CEQ regulations. CEQ, “Deadline for Agencies To Propose Updates to National Environmental Policy Act Procedures,” 87 Fed. Reg. 34154 (June 29, 2021). More recently, CEQ modified the regulations to provide that its regulations constitute a floor for agency procedures and do not limit the agency’s discretion to adopt more rigorous rules for implementing NEPA. See CEQ, “National Environmental Policy Act Implementing Regulations Revisions,” 87 Fed. Reg. 23453, 23460. (April 2022).

This action was part of the Biden Administration’s Phase I revision to the CEQ rules, which have now gone into effect. The more comprehensive Phase II revisions are still in the pipeline.

Page 364, add after renumbered note 4:

**STANDING ROCK SIOUX TRIBE V. U.S. ARMY CORPS OF
ENGINEERS**

985 F.3d 1032 (9th Cir. 2012)

Tatel, Circuit Judge:

Lake Oahe, created when the United States Army Corps of Engineers flooded thousands of acres of Sioux lands in the Dakotas by constructing the

Oahe Dam on the Missouri River, provides several successor tribes of the Great Sioux Nation with water for drinking, industry, and sacred cultural practices. Passing beneath Lake Oahe's waters, the Dakota Access Pipeline transports crude oil from North Dakota to Illinois. Under the Mineral Leasing Act, 30 U.S.C. § 185, the pipeline could not traverse the federally owned land at the Oahe crossing site without an easement from the Corps. The question presented here is whether the Corps violated the National Environmental Policy Act by issuing that easement without preparing an environmental impact statement despite substantial criticisms from the Tribes and, if so, what should be done about that failure. We agree with the district court that the Corps acted unlawfully, and we affirm the court's order vacating the easement while the Corps prepares an environmental impact statement. But we reverse the court's order to the extent it directed that the pipeline be shut down and emptied of oil. * * *

The Dakota Access Pipeline (DAPL), nearly 1,200 miles long, is designed to move more than half a million gallons of crude oil from North Dakota to Illinois each day. DAPL crosses many waterways, including Lake Oahe, an artificial reservoir in the Missouri River created when the Corps constructed a dam in 1958. The dam's construction and Lake Oahe's creation flooded 56,000 acres of the Standing Rock Reservation and 104,420 acres of the Cheyenne River Sioux Tribe's trust lands. The Tribes now rely on Lake Oahe's water for drinking, agriculture, industry, and sacred religious and medicinal practices.

Oil pipelines crossing federally regulated waters like Lake Oahe require federal approval. In June 2014, Dakota Access, formed to construct and own DAPL, notified the Corps that it intended to construct a portion of DAPL under Lake Oahe, just half a mile north of the Standing Rock Reservation. To do so, Dakota Access needed, among other things, a real-estate easement from the Corps under the Mineral Leasing Act (MLA), 30 U.S.C. § 185.

In December 2015, the Corps published and sought public comment on a Draft Environmental Assessment (EA) finding that the construction would have no significant environmental impact. The Tribes submitted comments voicing a range of concerns. Relevant here, the Tribes contended that the Corps had insufficiently analyzed the risks and consequences of an oil spill.

Two federal agencies also raised concerns. The Department of the Interior requested that the Corps prepare an EIS given the pipeline's potential impact on trust resources, criticizing the Corps for "not adequately justify[ing] or otherwise support[ing] its conclusion that there would be no significant impacts upon the surrounding environment and community." The Environmental Protection Agency (EPA) registered its concern that the Draft EA "lack[ed] sufficient analysis of direct and indirect impacts to water resources," though it requested additional information and mitigation in the EA rather than preparation of an EIS. But after becoming aware of the pipeline's proximity to the Standing Rock reservation, EPA supplemented its comments to note that, while it agreed with the Corps that there was "minimal

risk of an oil spill,” it worried, based on its “experience in spill response,” that a break or leak could nonetheless significantly affect water resources.

On July 25, 2016, the Corps published its Final EA and a “Mitigated Finding of No Significant Impact” (Mitigated FONSI). The Mitigated FONSI explained that, given the Corps’s adoption of various mitigation measures, including horizontal directional drilling, the Lake Oahe crossing would not “significantly affect the quality of the human environment” and that an EIS was therefore unnecessary.

Shortly after the Final EA’s release, Standing Rock sued the Corps for declaratory and injunctive relief under NEPA (and several other federal laws not at issue in this appeal). Dakota Access and the Cheyenne River Sioux Tribe intervened on opposing sides, and Cheyenne River filed a separate complaint adding additional claims. Though the district court denied the Tribes’ request for a preliminary injunction on September 9, 2016, the Departments of Justice, Interior, and the Army immediately issued a joint statement explaining that the Corps would not issue an MLA easement and that construction would not move forward until the Army could determine whether reconsideration of any of its previous decisions was necessary.

Following that statement, Standing Rock submitted several letters to the Assistant Secretary of the Army for Civil Works, who oversees the portion of the Corps’s mission that includes issuing permits for pipelines like DAPL. Those letters raised concerns about the EA’s spill risk analysis. The tribe also submitted an expert review of the EA from an experienced pipeline consultant who concluded that the assessment was “seriously deficient and [could not] support the finding of no significant impact, even with the proposed mitigations.” * * *

During the ensuing review, both Standing Rock and the Oglala Sioux Tribe submitted additional comments and analysis. The Corps solicited Interior’s opinion on the pipeline, Interior’s Solicitor responded with a recommendation that the Corps prepare an EIS, and the Secretary of the Army for Civil Works issued a memorandum directing the Army not to grant an easement prior to preparation of an EIS. On January 18, 2017, the Assistant Secretary of the Army for Civil Works published in the Federal Register a notice of intent to prepare an EIS.

Two days later, a new administration took office, and the government’s position changed significantly. In a January 24 memorandum, the President directed the Secretary of the Army to instruct the Corps and the Assistant Secretary for Civil Works to expedite DAPL approvals and consider whether to rescind or modify the Notice of Intent to Prepare an EIS. The Army in turn concluded that the record supported granting an easement and that no EIS or further supplementation was necessary.

The Corps granted the easement on February 8, 2017, and after the district court denied Cheyenne River’s motion for a preliminary injunction and temporary restraining order, both the Tribes and the Corps moved for partial

summary judgment on several claims. The district court concluded that the Corps's decision not to issue an EIS violated NEPA by failing to adequately consider three issues: whether the project's effects were likely to be "highly controversial," the impact of a hypothetical oil spill on the Tribes' fishing and hunting rights, and the environmental-justice effects of the project. It accordingly remanded the matter to the agency to address those three issues.

After the Corps completed its remand analysis in February 2019, the parties again moved for summary judgment, with the Tribes arguing that the Corps failed to remedy its NEPA violations and pressing several other non-NEPA claims. * * * Following additional briefing, the court concluded that vacatur was warranted, and ordered that "Dakota Access shall shut down the pipeline and empty it of oil by August 5, 2020."

The Corps, together with Dakota Access, challenges the district court's conclusion that the effects of the Corps's easement decision were "likely to be highly controversial" under NEPA. A decision is "highly controversial" * * * if a "substantial dispute exists as to the size, nature, or effect of the major federal action." But not just any criticism renders the effects of agency action "highly controversial." Rather, "something more is required for a highly controversial finding besides the fact that some people may be highly agitated and be willing to go to court over the matter."

[T]he Corps emphasizes that the "opposition here has come from the Tribes and their consultants, not from disinterested public officials." But the Tribes are not, as Dakota Access suggested at oral argument, "quintessential ... not-in-my-backyard neighbors." They are sovereign nations with at least some stewardship responsibility over the precise natural resources implicated by the Corps's analysis. "Indian tribes within Indian country are," the Supreme Court has declared, "a good deal more than private, voluntary organizations." Rather, they are "domestic dependent nations that exercise inherent sovereign authority over their members and territories" and the resources therein. * * *

The Tribes' unique role and their government-to-government relationship with the United States demand that their criticisms be treated with appropriate solicitude. Of course, as the Corps points out, the Tribes are not the federal government. But [a prior ruling] emphasized the important role played by entities other than the federal government. There, criticism came from "highly specialized governmental agencies and organizations," including the Virginia Department of Historic Resources and several conservation groups. The Tribes are of at least equivalent status.

With the proper legal framework in mind, we turn to the four disputed facets of the Corps's analysis that the district court found involved unresolved scientific controversies for purposes of NEPA's "highly controversial" factor. * * *

Having determined that several serious scientific disputes mean that the effects of the Corps's easement decision are likely to be "highly controversial," we turn to one other issue before considering the appropriate remedy. The

Corps and Dakota Access repeatedly urge that, whatever the merits of the Tribes' criticisms, the Corps's easement decision cannot be highly controversial because the risk of a spill is exceedingly low and because the pipeline's location deep underground provides protection against the consequences of any spill. That argument faces two major hurdles.

First, the claimed low risk of a spill rests, in part, on the Corps's use of generalized industry safety data and its optimism concerning its ability to respond to small leaks before they worsen—precisely what the Tribes' unresolved criticisms address. Second, * * * “[u]nder NEPA, an agency must look at both the probabilities of potentially harmful events and the consequences if those events come to pass.” A finding of no significant impact is appropriate only if a grave harm’s “probability is so low as to be remote and speculative, or if the combination of probability and harm is sufficiently minimal.” Doing away with the obligation to prepare an EIS whenever a project presents a low-probability risk of very significant consequences would wall off a vast category of major projects from NEPA’s EIS requirement. After all, the government is not in the business of approving pipelines, offshore oil wells, nuclear power plants, or spent fuel rod storage facilities that have any material prospect of catastrophic failure. In this case, although the risk of a pipeline leak may be low, that risk is sufficient “that a person of ordinary prudence would take it into account in reaching a decision” to approve the pipeline’s placement, and its potential consequences are therefore properly considered here.

This brings us to the Corps's challenge to the district court's remedy, and specifically to its orders (1) requiring that the Corps prepare an EIS, (2) vacating the easement pending preparation of an EIS, and (3) ordering that the pipeline be shut down and emptied of oil. [The court first concluded that an order to prepare an EIS was called for given that it had found four distinct controversies involving the possibility of a leak, and the project's impacts remained uncertain and controversial. Furthermore, “the ‘context’ of this case—a place of extraordinary importance to the Tribes, a landscape of profound cultural importance, and the water supply for the Tribes and millions of others”—weighs in favor of requiring an EIS.” The court then turned to the question of whether it was appropriate to vacate the easement for the pipeline.]

Consider the consequences of Dakota Access's contrary approach. If, when an agency declined to prepare an EIS before approving a project, courts considered only whether the agency was likely to ultimately justify the approval, it would subvert NEPA's purpose by giving substantial ammunition to agencies seeking to build first and conduct comprehensive reviews later. If an agency were reasonably confident that its EIS would ultimately counsel in favor of approval, there would be little reason to bear the economic consequences of additional delay. For similar reasons, an agency that bypassed required notice and comment rulemaking obviously could not ordinarily keep in place a regulation while it completed that fundamental procedural prerequisite. When an agency bypasses a fundamental procedural step, the

vacatur inquiry asks not whether the ultimate action could be justified, but whether the agency could, with further explanation, justify its decision to skip that procedural step. Otherwise, our cases explaining that vacatur is the default response to a fundamental procedural failure would make little sense.

[W]e affirm the vacatur of an easement authorizing the pipeline to cross federal lands. With or without oil flowing, the pipeline will remain an encroachment, leaving the precise consequences of vacatur uncertain. In fact, the parties have identified no other instance—and we have found none—in which the sole issue before a court was whether an easement already in use (rather than a construction or operating permit) must be vacated on NEPA grounds. That makes this case quite unusual and cabins our decision to the facts before us.

It may well be—though we have no occasion to consider the matter here—that the law or the Corps’s regulations oblige the Corps to vindicate its property rights by requiring the pipeline to cease operation and that the Tribes or others could seek judicial relief under the APA should the Corps fail to do so. But how and on what terms the Corps will enforce its property rights is, absent a properly issued injunction, a matter for the Corps to consider in the first instance, though we would expect it to decide promptly. Although the district court was attuned to the discretion owed the Corps, we nonetheless conclude that it could not order the pipeline to be shut down without * * * making the findings necessary for injunctive relief. [Those finding would include a consideration of the impact of a shutdown on third parties as well as the pipeline company.]

NOTES

1. *Standing Rock Sioux* is not the only recent case to rely on the “controversial” nature of a project as a basis for requiring an EIA. In *Bark v. United States Forest Serv. (USFS)*, 958 F.3d 865 (9th Cir. 2020), the USFS proposed to allow logging in order to thin a forest in the interest of reducing wildfire risks. The court held that the decision was arbitrary and capricious because of the Corps’ failure to address a key issue:

Throughout the USFS’s investigative process, Appellants pointed to numerous expert sources concluding that thinning activities do not improve fire outcomes. In its responses to these comments and in its finding of no significant impact, the USFS reiterated its conclusions about vegetation management but did not engage with the substantial body of research cited by Appellants. This dispute is of substantial consequence because variable density thinning is planned in the entire Project area, and fire management is a crucial issue that has wide-ranging ecological impacts and affects human life.

The court concluded that “the effects of the Project are highly controversial and uncertain, thus mandating the creation of an EIS.” The court

also found that the Corps had failed to adequately consider the cumulative effects of thinning projects.

2. *Standing Rock Sioux* illustrates the importance to the plaintiffs of getting a preliminary injunction to prevent a project from being completed during the litigation. Failure to obtain that relief made the issue of a final remedy far more difficult. The general standard involved in granting relief was established by the Supreme Court in *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139 (2010):

Before a court may grant a permanent injunction, the plaintiff must satisfy a four-factor test, demonstrating: “(1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.” Thus, the existence of a NEPA violation does not create a presumption that injunctive relief is available and should be granted absent unusual circumstances.

Under this test, should use of DAPL be enjoined until the Corps has completed an EIS? Should the trial judge have issued a preliminary injunction earlier in the case, given the difficulty of undoing the project’s impacts at a later time?

2. SCOPE AND TIMING OF THE EIS

Page 374, add at the end of Note 2:

The 2020 amendments to the CEQ regulation deleted the portion of the scope rule after the first two sentences. Thus, the rule no longer contains any discussion of connected, cumulative, or similar actions. The Preamble to the provisions stated that the CEQ considered the consideration of cumulative effects to be time-consuming and distracting. Note, however, the Biden Administration restored the requirement to consider cumulative effects. CEQ, “National Environmental Policy Act Implementing Regulations Revisions,” 87 Fed. Reg/ 23453, 23460 (April 2022).

Page 382, insert before the *Notes*:

CENTER FOR BIOLOGICAL DIVERSITY [CBD] v. BERNHARDT

982 F.3d 723 (9th Cir. 2020)

Paez, Circuit Judge:

Hilcorp Alaska, LLC, is an energy management company seeking to produce crude oil from Foggy Island Bay, along the coast of Alaska in the

Beaufort Sea. To extract the oil from under the Beaufort Sea, Hilcorp will need to construct an offshore drilling and production facility. The facility—referred to as “the Liberty project,” or “the Liberty prospect”—will be the first oil development project fully submerged in federal waters. Hilcorp estimates that the site contains about 120 million barrels of recoverable oil, which it hopes to extract over the course of fifteen to twenty years.

* * *

CBD argues that BOEM [the Bureau of Ocean Energy Management] arbitrarily failed to include emissions estimates resulting from foreign oil consumption in its analysis of the no-action alternative. In its EIS, BOEM concluded that the Proposed Action and the action alternatives would each produce about 64,570,000 metric tons of carbon dioxide equivalents. It then estimated that the no-action alternative would produce—somewhat perplexingly—89,940,000 metric tons of carbon dioxide equivalents, 25,370,000 more metric tons than if the land were leased under any scenario. The EIS explains that the no-action alternative will result in more emissions because the oil substituted for the oil not produced at Liberty will come from places with “comparatively weaker environmental protection standards associated with exploration and development of the imported product and increased emissions from transportation.” CBD explains that BOEM reached this counterintuitive result by omitting a key variable in its analysis: foreign oil consumption.

Understanding why foreign oil consumption is critical to BOEM’s alternatives analysis requires some basic economics principles. If oil is produced from Liberty, the total supply of oil in the world will rise. Increasing global supply will reduce prices. Once prices drop, foreign consumers will buy and consume more oil. The model used by BOEM assumes that foreign oil consumption will remain static, whether or not oil is produced at Liberty.

This omission, according to CBD, makes BOEM’s analysis “misleading” because it fails to capture the emissions caused by increased global consumption in its estimate of Liberty’s downstream emissions. BOEM acknowledges that the no-action alternative will cause foreign oil consumption to decline; the EIS estimates that the no-action alternative will result in a reduction in oil consumption of one, four, or six billion barrels of oil, depending on the market price of oil. But the impacts on greenhouse gas resulting from such reductions in oil consumption “are not captured” in the EIS because BOEM determined it did not have sufficiently “reliable information on foreign emissions factors and consumption patterns.” CBD replies that BOEM was both required and able to estimate the variable and include its effect. We agree.

* * *

Emissions resulting from the foreign consumption of oil are surely a “reasonably foreseeable” indirect effect of drilling at Liberty, just as foreseeable as the emissions resulting from the consumption of oil produced at sites other than Liberty, which the market-simulation model already considers. Even if the extent of the emissions resulting from increased foreign consumption is not foreseeable, the nature of the effect is. This is sufficient to require estimation or explanation under NEPA.

The record belies BOEM’s contention that it could not have summarized or estimated foreign emissions with accurate or credible scientific evidence. Various studies provided by CBD in the administrative record confirm the effect of increasing domestic oil supply on foreign consumption and the feasibility of its estimation. In one study, the Stockholm Environment Institute—noting that BOEM omitted the same calculation in its analysis of the effects of the Keystone Pipeline—demonstrates how an increase in foreign oil consumption translates into greenhouse gas emissions. Using a “simple calculation,” relying on parameters publicly provided in BOEM’s report, the Institute calculates the expected resultant greenhouse gas emissions from increased foreign consumption of oil. It concludes that developing the Pipeline would cause an increase in global oil consumption ten times greater than the increase in domestic consumption forecasted by BOEM. Other studies in the record confirm the same: domestic consumption impacts foreign oil consumption, and increases in foreign oil consumption can be translated into estimates of greenhouse gas emissions.

BOEM now explains that these studies rely on “simplistic assumptions that [fall] well short of the detailed model that BOEM used to analyze the U.S. energy market,” but it is unclear from the record why these assumptions are any more simplistic than those the market-simulation model incorporates. The model assumes, for example, near constant oil and gas demand over the next 40 to 70 years, an unrestricted supply of foreign oil for substitution, and that all oil and gas produced domestically is consumed domestically. BOEM’s conclusion for the higher emissions produced by the no-action alternative assumes that the petroleum products substituted for oil not produced at Liberty will come from places with “comparatively weaker environmental protection standards.” It is unclear from the administrative record what justifies these assumptions and not those needed to estimate foreign oil consumption.

Even if the nature of BOEM’s assumptions did not sufficiently demonstrate the need for further explanation, the result upon which the agency relied surely did. BOEM’s conclusion that not drilling will result in more carbon emissions than drilling is counterintuitive. An agency acts arbitrarily and capriciously when it reaches a decision that is “so implausible that it could not be ascribed to a difference in view or the

product of agency expertise.” Without further explanation, we cannot ascribe the implausibility of the result to BOEM’s expertise or rational decision-making. We will uphold a decision “of less than ideal clarity if the agency’s path may be reasonably discerned,” but we cannot “supply a reasoned basis for the agency’s action that the agency itself has not given.”

We “understand that in some cases quantification may not be feasible.” But even if BOEM is unable to quantitatively evaluate the emissions generated by foreign countries in the absence of the Liberty project, it still must thoroughly explain why such an estimate is impossible. The Department of Interior has promulgated a regulation addressing such situations, where “incomplete or unavailable information” impedes the agency’s ability to evaluate a “reasonably foreseeable significant adverse effect[]” of the project. The regulation requires the agency to include a statement explaining that the information is lacking, its relevance, a summary of any existing credible evidence evaluating the foreseeable adverse impacts, and the agency’s evaluation of the impacts based upon “theoretical approaches or research methods generally accepted in the scientific community.” These requirements are read “in the context of the more general requirements for preparation of an EIS,” including the “rigorous evaluation” of the indirect, direct, and cumulative effects of the selected alternatives.

The EIS’s two-page explanation of BOEM’s decision to omit foreign oil emissions is insufficient to meet these requirements. BOEM did not summarize existing research addressing foreign oil emissions nor attempt to estimate the magnitude of such emissions. It cannot ignore basic economics principles and state—without citations or discussion—that the impact of the Liberty project on foreign oil consumption will be negligible. Some “educated assumptions are inevitable in the NEPA process,” and the “effects of assumptions on estimates can be checked by disclosing those assumptions so that readers can take the resulting estimates with the appropriate amount of salt.”

We note that we typically accord significant deference to an agency’s decisions that require a “high level of technical expertise.” But such deference applies only when the agency is making predictions “within its area of special expertise.” BOEM’s area of expertise is the management of “conventional (e.g., oil and gas) and renewable energy-related” functions, including “activities involving resource evaluation, planning, and leasing.” The scope of its expertise does not include the economic analysis of greenhouse gas emissions. Therefore, we do not readily defer to its decision to exclude a discussion of foreign oil consumption, particularly in light of our conclusion that its decision to do so was unreasonable

In short, the EIS “should have either given a quantitative estimate of the downstream greenhouse gas emissions” that will result from

consuming oil abroad, or “explained more specifically why it could not have done so,” and provided a more thorough discussion of how foreign oil consumption might change the carbon dioxide equivalents analysis. BOEM has the statutory authority to act on the emissions resulting from foreign oil consumption. If it later concludes that such emissions will be significant, it may well approve another alternative included in the EIS or deny the lease altogether. For these reasons, we agree with CBD that BOEM’s alternatives analysis in the EIS was arbitrary and capricious.

Page 383, insert after Note 3:

4. The Trump Administration eliminated references to cumulative and indirect effects and imposed a more restrictive standard of causation. CEQ has now revoked those changes.

The current regulation reads:

(g) Effects or impacts means changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and include the following:

(1) Direct effects, which are caused by the action and occur at the same time and place.

(2) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

(3) Cumulative effects, which are effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

(4) Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental

effects, even if on balance the agency believes that the effects will be beneficial.

CEQ, “National Environmental Policy Act Implementing Regulations Revisions,” 87 *Fed. Reg.* 23453, 23469-70. (April 2022).

3. CONTENT OF THE IMPACT STATEMENT

Page 386, add at the end of Note 1:

The 2020 amendments to the CEQ regulations define reasonable alternatives to include “a reasonable range of alternatives that are technically and economically feasible, meet the purpose and need for the proposed action, and, where applicable, meet the goals of the applicant.” In 2022, the regulation was changed again to read: “(z) Reasonable alternatives means a reasonable range of alternatives that are technically and economically feasible, and meet the purpose and need for the proposed action.” Note that the reference to the “goals of the applicant” has been deleted. See CEQ, “National Environmental Policy Act Implementing Regulations Revisions,” 87 *Fed. Reg.* 23453, 23470. (April 20, 2022).

To count as an alternative, a course of action must serve the same purpose as the agency’s proposal. However, agency missions may require them to consider multiple objectives, making it arbitrary to base decisions solely on any one goal. This issue is illustrated by *High Country Conservation Advocates v. U.S. Forest Serv.*, 951 F.3d 1217 (10th Cir. 2020). The case involved a proposal by the Forest Service to open part of a roadless area to allow coal mining. The court held that the Forest Service had arbitrarily and capriciously ignored the option of opening only part of the area to mining (the “Pilot Knob Alternative”). Consistent with the Trump Administration’s policy of prioritizing production of fossil fuels, the Forest Service rejected this option because it would allow long-term access to less coal, though it would also protect more land than opening the entire area. The court held that maximizing coal access was only one of the Forest Service’s objectives, but it had failed to explain how its decision served the other objectives:

Its explanation is based solely on the fact that the Pilot Knob Alternative would protect more land and provide access to fewer tons of coal than Alternative B (reinstating the entire North Fork Exception) It does not address the Forest Service’s other objective—providing management direction for conserving roadless areas in Colorado. This one-sided approach conflicts with the agency’s obligation under NEPA to “provide legitimate consideration to alternatives that fall between the obvious extremes.” Under the agency’s logic, every alternative except Alternative B could have been

eliminated from detailed study merely because it forecloses long-term coal mining opportunities.

The court concluded:

QED: The Forest Service's rationale for eliminating the Pilot Knob Alternative is arbitrary. In light of the agency's stated objectives, the proffered explanation does not establish that the alternative was rejected as too remote, speculative, impractical, or ineffective. Where the agency omits an alternative but fails to explain why that alternative is not reasonable, the EIS is inadequate.

4. NEPA'S PAST AND FUTURE

Page 395, insert before the final paragraph:

The CEQ adopted new NEPA regulations in 2020. In announcing the new regulations, President Trump said, "Today's action is part of my administration's fierce commitment to slashing the web of needless bureaucracy that is holding back our citizens. I've been wanting to do this from day one." Trump stressed the need to speed up the approval process for infrastructure projects: "So we're cutting the federal permitting timeline for a major project from up to 20 years or more—hard to believe—down to two years or less And our goal is one year." Critics argued that this desire to streamline the process came at the expense of NEPA's mandate for full consideration of environmental impacts. The Biden Administration has embarked on a reconsideration of the Trump revisions.

Putting aside the specifics of these recent amendments, is there a good argument that NEPA currently impedes infrastructure projects (including renewable energy) too much? If so, are there ways of speeding up the process without undue risk to the environment? These issues are sure to remain on the agenda regardless of the fate of these particular amendments. The issues also cut across environmental stances—the same NEPA rules that delay oil pipelines also delay transmission lines for renewable energy.

Apart from possible changes to speed up the review process, Biden Administration may also want to consider other issues in considering its own possible amendments to the CEQ regulations, such as addressing when climate impacts should be considered substantial or how impact statements should discuss environmental justice issues. It seems clear at this point that climate impacts do count, but questions remain: Under what circumstances should downstream emissions be considered, included emissions due to the indirect effects of a project (as in *CBD v. USFS*, above)? At what point does the amount of carbon emissions become large enough to require an EIS? Similar issues apply to environmental justice. How should an agency go about appraising the environmental justice

implications of its actions? Can an impact that would be considered non-significant if spread over a larger group be considered significant because it impacts a disadvantaged community, and if so, when? In short, there are arguments on both the conservative and progressive sides for continued rethinking of how NEPA should be implemented.

A recent study of almost 1500 NEPA cases concluded that only one in 450 NEPA decisions was challenged in court and that the percentage is declining over time. Environmental groups were the most successful plaintiffs, and they brought cases only when they had a high likelihood of success. The authors argue against placing page limits on impact statements or imposing time requirements, since doing so might limit public participation without reducing the compliance burden. See John C. Ruple and Kayla M. Race, “Measuring the NEPA Litigation Burden: A Review of 1,499 Federal Court Cases,” 50 *Env. L.* 479 (2020). Another research team including one of the same authors studied over forty thousand NEPA decisions by the Forest Service. John C. Ruple, Jamie Pleune and Erik Heiny, “Evidence-Based Recommendations for Improving National Environmental Policy Act Implementation,” 65 *Colum. J. Env. L.* 273 (2022). The authors conclude:

Contrary to widely held assumptions, we found that a less rigorous level of analysis often fails to deliver faster decisions. Delays, we found, are often caused by factors only tangentially related to the Act, like inadequate agency budgets, staff turnover, delays receiving information from permit applicants, and compliance with other laws. Improving NEPA efficacy, we argue, should therefore focus on improving agency capacity.

Id.

CHAPTER 6

AIR POLLUTION



G. THE COMMON LAW

2. PUBLIC NUISANCE

Page 415, insert a new note 4 as follows:

A number of municipalities and several states have filed a new round of nuisance lawsuits under state, rather than federal, nuisance laws. The defendants in the cases are oil companies like ExxonMobil, British Petroleum, and Shell, and the governments are seeking compensatory and punitive damages for damage caused by climate change. The new cases may fare better than the cases that have been dismissed in federal court in part because some states have nuisance statutes rather than relying only on common law (California is an example, *see* Cal. Civ. Code §§3479-3486.5), state courts are more accustomed to deciding common law claims (federal common law is unusual), and the *American Electric Power* decision applied only to federal common law in holding that the Clean Air Act displaces federal common law nuisance claims for greenhouse gases. The lawsuits rely, too, on relatively new information that at least some of the oil company defendants knew about the risks of climate change as early as the 1960s, changed their own internal operations as a result (by, for example, fortifying oil platforms that might be affected by storm surges and sea level rise), and nevertheless financed a campaign to create doubt among members of the public about whether climate change is occurring. For representative complaints *see* Climate Change Litigation Databases: Common Law Claims, <http://climatecasechart.com/category/common-law-claims/>

Do you think nuisance cases are an appropriate way to address the problem of climate change? What obstacles do you think plaintiffs will face in attempting to prove their cases? Will courts find that the Clean Air Act also displaces state nuisance claims? Note that many of the cases also involve deception claims based on general state fraud doctrines or consumer fraud statutes. These claims are based on the effort to the companies to promote doubts about the reality or causes of climate change despite allegedly knowing that these doubts were trumped up.

The oil companies have filed numerous motions seeking to remove the state cases to federal court. Most district courts and three appellate courts that have heard the removal claims rejected the oil company motions. *See, e.g.,*

Mayor of Baltimore v. BP, No. 19-1644, (March 6, 2020); http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200306_docket-19-1644_opinion.pdf *City of Oakland v. BP*, No. 18-16663 (May 26, 2020), http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200526_docket-18-16663_opinion.pdf. In April 2021, the Second Circuit rejected New York City's state law claims against Chevron, ConocoPhillips, Exxon Mobil, Shell, and BP. Unlike the other climate nuisance cases, New York was pursuing its state law claims in federal court under diversity jurisdiction. See <http://blogs.law.columbia.edu/climatechange/2021/04/09/april-2021-updates-to-the-climate-case-charts/>. In May 2021, the U.S. Supreme Court held, in a narrow procedural decision regarding the City of Baltimore's lawsuit against 26 oil and gas companies, that the Fourth Circuit was permitted to review a district court order remanding the case to state court. See *B.P. P.L.C. et al. v. Baltimore*, 593 U.S. __ slip op (May 17, 2021). The Court did not review the merits of the case. Court of appeals decision since that time have continued to rule in favor of remanding to state court.

Page 416, insert a new note 6

6. The nuisance cases against oil companies are not the only novel form of litigation designed to combat greenhouse gas emissions. A group of 21 children sued the federal government arguing that the government has a constitutional obligation to provide for a stable climate system and a public trust obligation to protect the global atmosphere. Although the case withstood a motion to dismiss in the district court, the Ninth Circuit Court of Appeal dismissed the case on standing grounds. *Juliana v. United States*, 18-36082, (Jan 17, 2020). The Ninth Circuit subsequently denied the plaintiffs' petition for rehearing *en banc*. *Juliana v. United States*, No. 18-36082 (9th Cir., Feb. 10, 2021). The plaintiffs then filed a motion to amend their complaint asking only for a declaratory judgment that the nation's fossil fuel-based energy system is unconstitutional, citing the relief that civil rights plaintiffs sought in *Brown v. Board of Education*. In May 2021, U.S. district court judge Ann Aiken ordered the parties to engage in settlement talks and scheduled a hearing on the plaintiffs' motion to amend their complaint. In June 2021, 17 states moved to intervene in the case opposing any settlement. See also Chapter 5 at 325 (update).

C. THE BASICS OF THE CLEAN AIR ACT

1. AIR QUALITY STANDARDS

Page 448, insert a new note 4

4. The EPA has an obligation under section 109(d) to review and, if necessary, revise the list of air pollutants every five years. The agency has been

sued repeatedly by the American Lung Association for failing to do this. *See, e.g., American Lung Association v. Browner*, 884 F. Supp. 345 (D. Ariz. 1994). The prevailing view from the courts is that the agency does not have a non-discretionary duty to revise the NAAQS, but it must take *some* action regarding review and revision by the statutory deadline. *See, e.g., Environmental Defense Fund v. Thomas*, 870 F.2d 892 (2d Cir. 1989). In February, 2010, the EPA tightened the primary NAAQS for nitrogen dioxide. *See* <http://www.epa.gov/ttn/naaqs/standards/nox/fr/20100209.pdf>. In 2015, it tightened the ozone standard after a lengthy court battle. *See* U.S. Environmental Protection Agency, Implementation of the 2015 National Ambient Air Quality Standard for Ozone: State Implementation Plan Requirements, <https://www.epa.gov/ground-level-ozone-pollution/implementation-2015-national-ambient-air-quality-standards-naaqs-ozone>. In March, 2020, EPA proposed leaving the current standard for PM_{2.5} in place despite findings from its own staff that “the risk assessment estimates that the current PM 2.5 standards could allow a substantial number of PM_{2.5}-associated deaths in the U.S.” U.S. Environmental Protection Agency, *Policy Assessment for the Review of the National Ambient Air Quality Standards for Particulate Matter*, (Jan 2020) at 3-106, https://www.epa.gov/sites/production/files/2020-01/documents/final_policy_assessment_for_the_review_of_the_pm_naaqs_01-2020.pdf. In June 2021, EPA announced that it would reconsider the previous administration’s decision to retain the PM_{2.5} standard “because available scientific evidence and technical information indicate that the current standards may not be adequate to protect public health and welfare, as required by the Clean Air Act.” EPA expects to issue a proposed rulemaking in Summer 2022 and a final rule in Spring 2023. *See* U.S. EPA, *EPA to Reexamine Health Standards for Harmful Soot that Previous Administration Left Unchanged*, (June 10, 2021), available at: <https://www.epa.gov/newsreleases/epa-reexamine-health-standards-harmful-soot-previous-administration-left-unchanged>.

D. MAJOR PROVISIONS OF THE CAA

2. HAZARDOUS AIR POLLUTANTS

Pages 482-833, replace notes 1 and 2 with the following:

1. Would it make a difference in EPA’s analysis if it considered cost before or after deciding to issue regulations? On April 25, 2016, EPA issued a supplemental finding holding that it is “appropriate and necessary” to regulate mercury from the electric power sector. *See* 81 Fed. Reg. 24420. Twenty states and industry groups immediately appealed the finding. *Murray Energy v. EPA*, No. 16-1127 (D.C. Cir). The Trump Administration subsequently asked the court to suspend briefing in the case while it evaluated the rule. EPA then rescinded the “appropriate and necessary” finding on the grounds that the Obama Administration inappropriately considered co-benefits from reducing particulate and other conventional pollutants in deciding whether to regulate.

Instead, proposed to consider only those benefits that come directly from regulating mercury and other hazardous pollutants at the “appropriate and necessary” stage. Because the quantified direct benefits (between \$4 and \$6 million) are so much lower than the costs to implement pollution controls (between \$7 and \$9 billion), EPA asserted that there is a “gross imbalance” between the costs on industry of compliance versus the benefits to human health and environment. Although the agency rescinded the “appropriate and necessary” finding, it did not propose rescinding the rule. See U.S. EPA, *Mercury and Air Toxics Standards, Final Revised Supplemental Finding and Results of the Residual Risk and Technology Review*. <https://www.epa.gov/mats/final-revised-supplemental-finding-and-results-residual-risk-and-technology-review>. For an analysis of the Trump Administration strategy, see Ann Carlson, *The Curious Case of EPA’s Mercury Cost-Benefit Decision*, LEGAL PLANET (Dec. 30, 2018), <http://legal-planet.org/2018/12/30/the-curious-case-of-epas-mercury-cost-benefit-decision/>. For a critique of the Trump administration’s position on the mercury rule, see, Joseph Aldy, et al., *Deep Flaws in a Mercury Regulatory Analysis*, 368 SCIENCE 247 (2020). See also the discussion of costs and benefits in Chapter 2 at page 87 (update). Do you think the proposal to consider only direct benefits at the “appropriate and necessary” stage and finding no need to regulate is a reasonable interpretation of the statute under *Chevron*? Notably, the utility industry did not request reconsideration of the MATS standard, although the coal industry did. At present, the Biden Administration is reconsidering the Trump Administration’s position. It has proposed finding that regulating mercury is necessary and appropriate based primarily on the impact of mercury to the most vulnerable and heavily exposed population, subsistence fishers and their families.

2. Is the opinion in *Michigan v. EPA* consistent with the *Chevron* doctrine? Does the Court’s opinion signal that it will defer less frequently to agency interpretations of ambiguous statutory provisions? Should the Court have decided the case under Step 1 of *Chevron* rather than Step 2? For a sense of Justice Brett Kavanaugh’s view of the *Chevron* Doctrine, see Brett Kavanaugh, *Fixing Statutory Interpretation*, 129 HARV. L. REV. 2118 (2016). Justice Neil Gorsuch also criticized the doctrine when he served as a circuit court judge on the 10th Circuit. *Guitierrez-Brezuela v. Lynch*, 834 F.3d 1142 (10th Cir. 2016).

In two recent cases, several justices have indicated that they may revive a long-dormant doctrine known as the non-delegation doctrine, particularly for issues that raise “major questions.” Justice Gorsuch suggested in a dissent in a case involving criminal sex offender registries that current non-delegation doctrine may have strayed too far from constitutional limitations on delegated authority to executive actors. *Gundy v. United States*, __U.S.__, 139 s. Ct. 2126, 2123 (2019). He was joined by Justices Roberts and Thomas. Justice Alito suggested he may be open to revisiting the doctrine as well. Justice Kavanaugh signaled in a separate explanation of a denial of certiorari that he might join his conservative colleagues in scaling back delegations of authority to executive agencies, possibly relying on the major questions in doing so. *Paul v. United*

States, 140 S. Ct. 342 (Mem) (Nov. 25, 2019) (Kavanaugh, J., respecting the denial of certiorari). For further discussion *see* Note, Chapter 5 at 341 (update).

E. MOBILE SOURCE, SPILLOVERS AND OTHER SPECIAL PROVISIONS OF THE CLEAN AIR ACT

2. INTERSTATE AIR POLLUTION

Page 529, insert a new note 4:

4. Since *EME Homer* was decided, the D.C. Circuit Court of Appeal has twice heard challenges to technical aspects of the cross-state air pollution rule. In *EME Homer v. EPA* (“EME Homer II”), 795 F.3d 118 (2025), the court upheld much of the rule against highly technical industry and state challenges but found, in as-applied challenges from various states, that EPA had “over controlled” some emissions and remanded the rule back to the agency for revision. It nevertheless kept the rule in place pending that revision. In *Wisconsin v. EPA*, [https://www.cadc.uscourts.gov/internet/opinions.nsf/AB56D2429DBDBE3B8525847400512A0D/\\$file/16-1406.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/AB56D2429DBDBE3B8525847400512A0D/$file/16-1406.pdf) (2019) the court again upheld most of the rule against numerous technical challenges from industry, states, and environmental groups, noting that courts are ““at [our] most deferential” when reviewing an agency’s predictions and scientific determinations.”(internal citations omitted.) The court did, however, rule in favor of one portion of the challenge brought by environmental and downwind states. The EPA rule set no deadline for upwind states and sources to meet their required emissions cuts. Downwind states were nevertheless still required to meet statutory attainment deadlines. The court found that this omission of a deadline violated the Clean Air Act, finding no ambiguity in the statutory deadlines for attainment. The court also dismissed as not ripe challenges to several state emissions budgets and left the current rule in place pending revision.

3. GREENHOUSE GAS EMISSIONS AND THE CLEAN AIR ACT

Page 543, insert a new note 1:

1. After a long and protracted battle, the EPA issued an endangerment finding in April, 2009 holding that greenhouse gas emissions in the atmosphere threaten the public health and welfare “of current and future generations.” U.S. Environmental Protection Agency, *Overview of EPA’s Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under the Clean Air Act*, (April 17, 2009). The Obama Administration then followed the endangerment finding with two sets of regulations to cut greenhouse gases from vehicles. The first set grew out of California’s efforts to regulate GHGs from passenger cars. The effort began when the state passed Assembly Bill 1493, authorizing the state’s Air Resources Board to establish standards for emissions of carbon dioxide (CO₂). *See* California Air Resources Board, Climate

Change, <http://www.arb.ca.gov/cc/cc.htm#Background>, for more information about regulations implementing the law, which were to take effect in January 2006 for model years 2009 and thereafter. California could not implement its regulations without a waiver from the federal government. After a long and convoluted battle that included several federal lawsuits and an initial denial of the waiver by the Bush Administration, on June 30, 2009 the EPA finally granted the California waiver. California and the U.S. then issued harmonized greenhouse gas regulations for 2012-2016 model years, regulations that also harmonized fuel economy standards (known as CAFE standards) under the Energy Policy and Conservation Act. The standards set a fleet average of 35.5 miles per gallon by the 2016 year. The federal government and California together then issued a set of standards for the 2017-2025 model years, with a 2025 fleet average standard of 55.5 mpg, increasing in the final years of the rule by 5% annually. See U.S. EPA, *Regulations for Emissions from Vehicles and Engines, Final Rule for Model Year 2017 and Later Light Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards*.

The Trump Administration then rolled back the second set of standards beginning for model year 2021, limiting the increases through 2025 to 1.5 percent per year. See *The Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021-2026*, <https://www.epa.gov/regulations-emissions-vehicles-and-engines/safer-affordable-fuel-efficient-safe-vehicles-final-rule>. As part of the so-called “SAFE” rule, the Trump administration also revoked the California waiver to issue greenhouse gas standards and for its Zero Emission Vehicle program. U.S. EPA, *U.S. EPA and DOT Propose Fuel Economy Standards for MY 2021-2026 Vehicles*. The Trump EPA claimed that the standards were uneconomical and would cause an increase in traffic deaths. Both claims were heavily criticized. See, e.g., Robinson Meyer, *The Trump Administration Flunked Its Math Homework*, THE ATLANTIC (Oct. 31, 2018), <https://www.theatlantic.com/science/archive/2018/10/trumps-clean-car-rollback-is-riddled-with-math-errors-clouding-its-legal-future/574249/>. For an explanation of how the proposal to revoke California’s waiver is part of a broader attack on California climate policy, see Ann Carlson, *The Trump Administration’s Assault on California’s Global Climate Leadership*, 112 AJIL UNBOUND 269 (2018). A coalition of state and local governments challenged the GHG rollbacks as well as the revocation of the California waiver. On April 26, 2021, EPA formally signaled its intent to reinstate the California waiver. See U.S. EPA, *EPA Reconsiders Previous Administration’s Withdrawal of California’s Waiver to Enforce Greenhouse Gas Standards for Cars and Light Trucks*, (April 26, 2021), available at: <https://www.epa.gov/newsreleases/epa-reconsiders-previous-administrations-withdrawal-californias-waiver-enforce>. President Biden’s Executive Order 13990, *Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis*, (86 FR 7037, Jan 25, 2021) also directs EPA and NHTSA to consider a proposed rule suspending, revising, or rescinding the SAFE rule. In April 2021, the National Highway Traffic Safety Administration (NHTSA) issued a notice of proposed rulemaking to withdraw its portion of the SAFE rule dealing with CAFE

standards. See *Corporate Average Fuel Economy (CAFE) Preemption*, (86 Fed. Reg. 25980, May 12, 2021). The waiver was then reinstated. 87 Fed. Rev. 14332 (March 14, 2022).

Page 557-58, replace notes 5, 6 and 7 with the following:

5. In 2014, EPA, after a protracted legal and political battle, issued NSPS for both new and existing electric generating units (EGUs or, more conventionally, power plants) to limit greenhouse gas emissions. The rules for new power plants would have essentially banned the regulatory approval of coal-fired power plants by setting an emissions limit equivalent to efficient natural gas plants, one that existing technology for new coal plants couldn't meet. The much larger regulatory program, however, would have regulated greenhouse gases from *existing* power plants. Section 111(d) of the CAA requires states to submit plans similar to SIPs that establish "standards of performance" for "an existing source of any air pollutant" that is not regulated as a criteria pollutant. 42 U.S.C. §7411(d). "Standard of performance" is defined as a standard "which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which ... the Administrator determines has been adequately demonstrated." 42 U.S.C. §7411(a)(1).

Although the Biden administration proposed a Clean Electricity Standard as a core component of new legislation on climate change, this provision was not included in the most recent package of climate measures proposed in the Inflation Reduction Act of 2022. See https://www.democrats.senate.gov/imo/media/doc/summary_of_the_energy_security_and_climate_change_investments_in_the_inflation_reduction_act_of_2022.pdf such legislation. EPA's efforts to revisit its regulatory options to regulate existing power plants under section 111 of the Clean Air Act also suffered a major setback in June 2022 when the Supreme Court issued its decision in *West Virginia v. EPA*. As you read the opinions below, consider not only the very different views of EPA's authority under section 111(d) but also the contrasting views of government and the capacity of regulatory agencies to devise creative solutions to complex public problems.

**WEST VIRGINIA ET AL. v. ENVIRONMENTAL PROTECTION
AGENCY ET AL.**

Supreme Court of the United States, 2022

597 U.S. __ (2022)

CHIEF JUSTICE ROBERTS delivered the opinion of the Court.

The Clean Air Act authorizes the Environmental Protection Agency to regulate power plants by setting a "standard of performance" for their emission

of certain pollutants into the air. That standard may be different for new and existing plants, but in each case it must reflect the “best system of emission reduction” that the Agency has determined to be “adequately demonstrated” for the particular category. For existing plants, the States then implement that requirement by issuing rules restricting emissions from sources within their borders.

Since passage of the Act 50 years ago, EPA has exercised this authority by setting performance standards based on measures that would reduce pollution by causing plants to operate more cleanly. In 2015, however, EPA issued a new rule concluding that the “best system of emission reduction” for existing coal-fired power plants included a requirement that such facilities reduce their own production of electricity, or subsidize increased generation by natural gas, wind, or solar sources.

The question before us is whether this broader conception of EPA’s authority is within the power granted to it by the Clean Air Act.

I

A

The Clean Air Act establishes three main regulatory programs to control air pollution from stationary sources such as power plants. [The Court then described the basic features of the new source performance standards program under section 111, the NAAQS program under sections 108, 109, and 110, and the hazardous air pollutant program under section 112.]

Although the thrust of Section 111 focuses on emissions limits for new and modified sources—as its title indicates—the statute also authorizes regulation of certain pollutants from existing sources. Under Section 111(d), once EPA “has set new source standards addressing emissions of a particular pollutant under . . . section 111(b),” it must then address emissions of that same pollutant by existing sources—but only if they are not already regulated under the NAAQS or HAP programs. Existing power plants, for example, emit many pollutants covered by a NAAQS or HAP standard. Section 111(d) thus “operates as a gap-filler,” empowering EPA to regulate harmful emissions not already controlled under the Agency’s other authorities.

Although the States set the actual rules governing existing power plants, EPA itself still retains the primary regulatory role in Section 111(d). The Agency, not the States, decides the amount of pollution reduction that must ultimately be achieved. It does so by again determining, as when setting the new source rules, “the best system of emission reduction . . . that has been adequately demonstrated for [existing covered] facilities.” The States then submit plans containing the emissions restrictions that they intend to adopt and enforce in order not to exceed the permissible level of pollution established by EPA.

Reflecting the ancillary nature of Section 111(d), EPA has used it only a handful of times since the enactment of the statute in 1970.

* * *

B

Things changed in October 2015, when EPA promulgated two rules addressing carbon dioxide pollution from power plants—one for new plants under Section 111(b), the other for existing plants under Section 111(d). Both were premised on the Agency’s earlier finding that carbon dioxide is an “air pollutant” that “may reasonably be anticipated to endanger public health or welfare” by causing climate change. Carbon dioxide is not subject to a NAAQS and has not been listed as a toxic pollutant.

The first rule announced by EPA established federal carbon emissions limits for new power plants of two varieties: fossil-fuel-fired electric steam generating units (mostly coal fired) and natural-gas-fired stationary combustion turbines. Following the statutory process set out above, the Agency determined the BSER for the two categories of sources. For steam generating units, for instance, EPA determined that the BSER was a combination of high-efficiency production processes and carbon capture technology. EPA then set the emissions limit based on the amount of carbon dioxide that a plant would emit with these technologies in place.

The second rule was triggered by the first: Because EPA was now regulating carbon dioxide from new coal and gas plants, Section 111(d) required EPA to also address carbon emissions from existing coal and gas plants. It did so through what it called the Clean Power Plan rule.

In that rule, EPA established “final emission guidelines for states to follow in developing plans” to regulate existing power plants within their borders. To arrive at the guideline limits, EPA did the same thing it does when imposing federal regulations on new sources: It identified the BSER.

The BSER that the Agency selected for existing coal-fired power plants, however, was quite different from the BSER it had chosen for new sources. The BSER for existing plants included three types of measures, which the Agency called “building blocks.” The first building block was “heat rate improvements” at coal-fired plants—essentially practices such plants could undertake to burn coal more efficiently. But such improvements, EPA stated, would “lead to only small emission reductions,” because coal-fired power plants were already operating near optimum efficiency. On the Agency’s view, “much larger emission reductions [were] needed from [coal- fired plants] to address climate change.”

So the Agency included two additional building blocks in its BSER, both of which involve what it called “generation shifting from higher-emitting to lower-emitting” producers of electricity. Building block two was a shift in electricity production from existing coal-fired power plants to natural-gas-fired plants. *Ibid.* Because natural gas plants produce “typically less than half as much” carbon dioxide per unit of electricity created as coal-fired plants, the Agency explained, “this generation shift [would] re- duce[] CO₂ emissions.” Building block three worked the same way, except that the shift was from both coal- and gas-fired plants to “new low- or zero-carbon generating capacity,”

mainly wind and solar. “Most of the CO₂ controls” in the rule came from the application of building blocks two and three.

The Agency identified three ways in which a regulated plant operator could implement a shift in generation to cleaner sources. First, an operator could simply reduce the regulated plant’s own production of electricity. Second, it could build a new natural gas plant, wind farm, or solar installation, or invest in someone else’s existing facility and then increase generation there. *Ibid.* Finally, operators could purchase emission allowances or credits as part of a cap-and-trade regime. Under such a scheme, sources that achieve a reduction in their emissions can sell a credit representing the value of that reduction to others, who are able to count it toward their own applicable emissions caps.

EPA explained that taking any of these steps would implement a sector-wide shift in electricity production from coal to natural gas and renewables. Given the integrated nature of the power grid, “adding electricity to the grid from one generator will result in the instantaneous reduction in generation from other generators,” and “reductions in generation from one generator lead to the instantaneous increase in generation” by others. So coal plants, whether by reducing their own production, subsidizing an increase in production by cleaner sources, or both, would cause a shift toward wind, solar, and natural gas.

Having decided that the “best system of emission reduction . . . adequately demonstrated” was one that would reduce carbon pollution mostly by moving production to cleaner sources, EPA then set about determining “the degree of emission limitation achievable through the application” of that system. The Agency recognized that—given the nature of generation shifting—it could choose from “a wide range of potential stringencies for the BSER.” Put differently, in translating the BSER into an operational emissions limit, EPA could choose whether to require anything from a little generation shifting to a great deal. The Agency settled on what it regarded as a “reasonable” amount of shift, which it based on modeling of how much more electricity both natural gas and renewable sources could supply without causing undue cost increases or reducing the overall power supply. Based on these changes, EPA projected that by 2030, it would be feasible to have coal provide 27% of national electricity generation, down from 38% in 2014.

C

These projections were never tested, because the Clean Power Plan never went into effect. The same day that EPA promulgated the rule, dozens of parties (including 27 States) petitioned for review in the D. C. Circuit. After that court declined to enter a stay of the rule, the challengers sought the same relief from this Court. We granted a stay, preventing the rule from taking effect. The Court of Appeals later heard argument on the merits en banc. But before it could issue a decision, there was a change in Presidential administrations. The new administration requested that the litigation be held

in abeyance so that EPA could reconsider the Clean Power Plan. The D. C. Circuit obliged, and later dismissed the petitions for review as moot.

EPA eventually repealed the rule in 2019, concluding that the Clean Power Plan had been “in excess of its statutory authority” under Section 111(d). Specifically, the Agency concluded that generation shifting should not have been considered as part of the BSER. The Agency interpreted Section 111 as “limit[ing] the BSER to those systems that can be put into operation at a building, structure, facility, or installation,” such as “add-on controls” and “inherently lower-emitting processes/practices/designs.” It then explained that the Clean Power Plan, rather than setting the standard “based on the application of equipment and practices at the level of an individual facility,” had instead based it on “a shift in the energy generation mix at the grid level,”—not the sort of measure that has “a potential for application to an individual source.”

The Agency determined that “the interpretative question raised” by the Clean Power Plan—“i.e., whether a ‘system of emission reduction’ can consist of generation-shifting measures”—fell under the “major question doctrine.” ***

EPA argued that under the major questions doctrine, a clear statement was necessary to conclude that Congress intended to delegate authority “of this breadth to regulate a fundamental sector of the economy.” It found none. “Indeed,” it concluded, given the text and structure of the statute, “Congress has directly spoken to this precise question and precluded” the use of measures such as generation shifting.

In the same rulemaking, the Agency replaced the Clean Power Plan by promulgating a different Section 111(d) regulation, known as the Affordable Clean Energy (ACE) Rule. Based on its view of what measures may permissibly make up the BSER, EPA determined that the best system would be akin to building block one of the Clean Power Plan: a combination of equipment upgrades and operating practices that would improve facilities’ heat rates. The ACE Rule determined that the application of its BSER measures would result in only small reductions in carbon dioxide emissions.

D

A number of States and private parties immediately filed petitions for review in the D. C. Circuit, challenging EPA’s repeal of the Clean Power Plan and its enactment of the replacement ACE Rule. Other States and private entities— including petitioners here West Virginia, North Dakota, Westmoreland Mining Holdings LLC, and The North American Coal Corporation (NACC)—intervened to defend both actions.

We granted the petitions and consolidated the cases.

II

[The Court found that the petitioners had standing and that the case was justiciable even though the Clean Power Plan had never gone into effect and was no longer expected to do so.]

III

A

In devising emissions limits for power plants, EPA first “determines” the “best system of emission reduction” that—taking into account cost, health, and other factors—it finds “has been adequately demonstrated.” *** The issue here is whether restructuring the Nation’s overall mix of electricity generation, to transition from 38% coal to 27% coal by 2030, can be the “best system of emission reduction” within the meaning of Section 111.

“It is a fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme.” Where the statute at issue is one that confers authority upon an administrative agency, that inquiry must be “shaped, at least in some measure, by the nature of the question presented”—whether Congress in fact meant to confer the power the agency has asserted. In the ordinary case, that context has no great effect on the appropriate analysis. Nonetheless, our precedent teaches that there are “extraordinary cases” that call for a different approach—cases in which the “history and the breadth of the authority that [the agency] has asserted,” and the “economic and political significance” of that assertion, provide a “reason to hesitate before concluding that Congress” meant to confer such authority.

Such cases have arisen from all corners of the administrative state. ***

***[I]n each case, given the various circumstances, “common sense as to the manner in which Congress [would have been] likely to delegate” such power to the agency at issue, made it very unlikely that Congress had actually done so. Extraordinary grants of regulatory authority are rarely accomplished through “modest words,” “vague terms,” or “subtle device[s].” Nor does Congress typically use oblique or elliptical language to empower an agency to make a “radical or fundamental change” to a statutory scheme.

Agencies have only those powers given to them by Congress, and “enabling legislation” is generally not an “open book to which the agency [may] add pages and change the plot line.” We presume that “Congress intends to make major policy decisions itself, not leave those decisions to agencies.”

Thus, in certain extraordinary cases, both separation of powers principles and a practical understanding of legislative intent make us “reluctant to read into ambiguous statutory text” the delegation claimed to be lurking there. To convince us otherwise, something more than a merely plausible textual basis for the agency action is necessary. The agency instead must point to “clear congressional authorization” for the power it claims.

As for the major questions doctrine, *** it took hold because it refers to an identifiable body of law that has developed over a series of significant cases all addressing a particular and recurring problem: agencies asserting highly consequential power beyond what Congress could reasonably be understood to have granted. Scholars and jurists have recognized the common threads between those decisions. So have we.

B

Under our precedents, this is a major questions case. In arguing that Section 111(d) empowers it to substantially restructure the American energy market, EPA “claim[ed] to discover in a long-extant statute an unheralded power” representing a “transformative expansion in [its] regulatory authority.” It located that newfound power in the vague language of an “ancillary provision[]” of the Act, one that was designed to function as a gap filler and had rarely been used in the preceding decades. And the Agency’s discovery allowed it to adopt a regulatory program that Congress had conspicuously and repeatedly declined to enact itself.

Given these circumstances, there is every reason to “hesitate before concluding that Congress” meant to confer on EPA the authority it claims under Section 111(d).

Prior to 2015, EPA had always set emissions limits under Section 111 based on the application of measures that would reduce pollution by causing the regulated source to operate more cleanly. It had never devised a cap by looking to a “system” that would reduce pollution simply by “shifting” polluting activity “from dirtier to cleaner sources.”

This consistent understanding of “system[s] of emission reduction” tracked the seemingly universal view, as stated by EPA in its inaugural Section 111(d) rulemaking, that “Congress intended a technology-based approach” to regulation in that Section. A technology-based standard, recall, is one that focuses on improving the emissions performance of individual sources.

But, the Agency explained, in order to “control[] CO₂ from affected [plants] at levels . . . necessary to mitigate the dangers presented by climate change,” it could not base the emissions limit on “measures that improve efficiency at the power plants.” “The quantity of emissions reductions resulting from the application of these measures” would have been “too small.” Instead, to attain the necessary “critical CO₂ reductions,” EPA adopted what it called a “broader, forward-thinking approach to the design” of Section 111 regulations. Rather than focus on improving the performance of individual sources, it would “improve the overall power system by lowering the carbon intensity of power generation.” And it would do that by forcing a shift throughout the power grid from one type of energy source to another. In the words of the then-EPA Administrator, the rule was “not about pollution

control” so much as it was “an investment opportunity” for States, especially “investments in renewables and clean energy.”

This view of EPA’s authority was not only unprecedented; it also effected a “fundamental revision of the statute, changing it from [one sort of] scheme of . . . regulation” into an entirely different kind. Under the Agency’s prior view of Section 111, its role was limited to ensuring the efficient pollution performance of each individual regulated source. Under that paradigm, if a source was already operating at that level, there was nothing more for EPA to do. Under its newly “discover[ed]” authority, however, EPA can demand much greater reductions in emissions based on a very different kind of policy judgment: that it would be “best” if coal made up a much smaller share of national electricity generation. And on this view of EPA’s authority, it could go further, perhaps forcing coal plants to “shift” away virtually all of their generation—i.e., to cease making power altogether.

We *** find it “highly unlikely that Congress would leave” to “agency discretion” the decision of how much coal-based generation there should be over the coming decades. The basic and consequential tradeoffs involved in such a choice are ones that Congress would likely have intended for itself. Congress certainly has not conferred a like authority upon EPA anywhere else in the Clean Air Act. The last place one would expect to find it is in the previously little-used backwater of Section 111(d).

Finally, we cannot ignore that the regulatory writ EPA newly uncovered conveniently enabled it to enact a program that, long after the dangers posed by greenhouse gas emissions “had become well known, Congress considered and rejected” multiple times. At bottom, the Clean Power Plan essentially adopted a cap-and-trade scheme, or set of state cap-and-trade schemes, for carbon. Congress, however, has consistently rejected proposals to amend the Clean Air Act to create such a program.

It has also declined to enact similar measures, such as a carbon tax. “The importance of the issue,” along with the fact that the same basic scheme EPA adopted “has been the subject of an earnest and profound debate across the country, . . . makes the oblique form of the claimed delegation all the more suspect.”

C

Given these circumstances, our precedent counsels skepticism toward EPA’s claim that Section 111 empowers it to devise carbon emissions caps based on a generation shifting approach. To overcome that skepticism, the Government must—under the major questions doctrine—point to “clear congressional authorization” to regulate in that manner.

All the Government can offer, however, is the Agency's authority to establish emissions caps at a level reflecting "the application of the best system of emission reduction . . . adequately demonstrated." As a matter of "definitional possibilities," generation shifting can be described as a "system"—"an aggregation or assemblage of objects united by some form of regular interaction,"—capable of reducing emissions. But of course almost anything could constitute such a "system"; shorn of all context, the word is an empty vessel. Such a vague statutory grant is not close to the sort of clear authorization required by our precedents.

We have no occasion to decide whether the statutory phrase "system of emission reduction" refers exclusively to measures that improve the pollution performance of individual sources, such that all other actions are ineligible to qualify as the BSER. To be sure, it is pertinent to our analysis that EPA has acted consistent with such a limitation for the first four decades of the statute's existence. But the only interpretive question before us, and the only one we answer, is more narrow: whether the "best system of emission reduction" identified by EPA in the Clean Power Plan was within the authority granted to the Agency in Section 111(d) of the Clean Air Act. For the reasons given, the answer is no.

* * *

Capping carbon dioxide emissions at a level that will force a nationwide transition away from the use of coal to generate electricity may be a sensible "solution to the crisis of the day." But it is not plausible that Congress gave EPA the authority to adopt on its own such a regulatory scheme in Section 111(d). A decision of such magnitude and consequence rests with Congress itself, or an agency acting pursuant to a clear delegation from that representative body. The judgment of the Court of Appeals for the District of Columbia Circuit is reversed, and the cases are remanded for further proceedings consistent with this opinion.

It is so ordered.

JUSTICE KAGAN, with whom JUSTICE BREYER and JUSTICE SOTOMAYOR join, dissenting.

Today, the Court strips the Environmental Protection Agency (EPA) of the power Congress gave it to respond to "the most pressing environmental challenge of our time."

Climate change's causes and dangers are no longer subject to serious doubt. Modern science is "unequivocal that human influence"—in particular, the emission of greenhouse gases like carbon dioxide—"has warmed the atmosphere, ocean and land." The Earth is now warmer than at any time "in the history of modern civilization," with the six warmest years on record all occurring in the last decade. The rise in temperatures brings with it "increases

in heat-related deaths,” “coastal inundation and erosion,” “more frequent and intense hurricanes, floods, and other extreme weather events,” “drought,” “destruction of ecosystems,” and “potentially significant disruptions of food production.” If the current rate of emissions continues, children born this year could live to see parts of the Eastern seaboard swallowed by the ocean. Rising waters, scorching heat, and other severe weather conditions could force “mass migration events[,] political crises, civil unrest,” and “even state failure.” And by the end of this century, climate change could be the cause of “4.6 million excess yearly deaths.”

Congress charged EPA with addressing those potentially catastrophic harms, including through regulation of fossil-fuel-fired power plants. Section 111 of the Clean Air Act directs EPA to regulate stationary sources of any substance that “causes, or contributes significantly to, air pollution” and that “may reasonably be anticipated to endanger public health or welfare.” Carbon dioxide and other greenhouse gases fit that description.

EPA thus serves as the Nation’s “primary regulator of greenhouse gas emissions.” And among the most significant of the entities it regulates are fossil-fuel-fired (mainly coal- and natural-gas-fired) power plants. Today, those electricity-producing plants are responsible for about one quarter of the Nation’s greenhouse gas emissions. Curbing that output is a necessary part of any effective approach for addressing climate change.

To carry out its Section 111 responsibility, EPA issued the Clean Power Plan in 2015. The premise of the Plan— which no one really disputes—was that operational improvements at the individual-plant level would either “lead to only small emission reductions” or would cost far more than a readily available regulatory alternative. That alternative—which fossil-fuel-fired plants were “already using to reduce their [carbon dioxide] emissions” in “a cost effective manner”—is called generation shifting. As the Court explains, the term refers to ways of shifting electricity generation from higher emitting sources to lower emitting ones— more specifically, from coal-fired to natural-gas-fired sources, and from both to renewable sources like solar and wind. A power company (like the many supporting EPA here) might divert its own resources to a cleaner source, or might participate in a cap-and-trade system with other companies to achieve the same emissions-reduction goals.

The limits the majority now puts on EPA’s authority fly in the face of the statute Congress wrote. The majority says it is simply “not plausible” that Congress enabled EPA to regulate power plants’ emissions through generation shifting. But that is just what Congress did when it broadly authorized EPA in Section 111 to select the “best system of emission reduction” for power plants. The “best system” full stop—no ifs, ands, or buts of any kind relevant here. The parties do not dispute that generation shifting is indeed the “best system”—the most effective and efficient way to reduce power plants’ carbon dioxide emissions. And no other provision in the Clean Air Act suggests that Congress meant to foreclose EPA from selecting that system; to the contrary, the Plan’s

regulatory approach fits hand-in-glove with the rest of the statute. The majority's decision rests on one claim alone: that generation shifting is just too new and too big a deal for Congress to have authorized it in Section 111's general terms. But that is wrong. A key reason Congress makes broad delegations like Section 111 is so an agency can respond, appropriately and commensurately, to new and big problems. Congress knows what it doesn't and can't know when it drafts a statute; and Congress therefore gives an expert agency the power to address issues—even significant ones—as and when they arise. That is what Congress did in enacting Section 111. The majority today overrides that legislative choice. In so doing, it deprives EPA of the power needed—and the power granted—to curb the emission of greenhouse gases.

I

Section 111(d) *** ensures that EPA regulates existing power plants' emissions of all pollutants. When the pollutant at issue falls within the NAAQS or HAP programs, EPA need do no more. But when the pollutant falls outside those programs, Section 111(d) requires EPA to set an emissions level for currently operating power plants (and other stationary sources). That means no pollutant from such a source can go unregulated: As the Senate Report explained, Section 111(d) guarantees that "there should be no gaps in control activities pertaining to stationary source emissions that pose any significant danger to public health or welfare." Reflecting that language, the majority calls Section 111(d) a "gap-filler." It might also be thought of as a backstop or catch-all provision, protecting against pollutants that the NAAQS and HAP programs let go by. But the section is not, as the majority further claims, an "ancillary provision" or a statutory "backwater." That characterization is a non-sequitur. That something is a backstop does not make it a backwater. Even if they are needed only infrequently, backstops can perform a critical function—and this one surely does. Again, Section 111(d) tells EPA that when a pollutant—like carbon dioxide—is not regulated through other programs, EPA must undertake a further regulatory effort to control that substance's emission from existing stationary sources. In that way, Section 111(d) operates to ensure that the Act achieves comprehensive pollution control.

[G]eneration shifting fits comfortably within the conventional meaning of a "system of emission reduction." Consider one of the most common mechanisms of generation shifting: the use of a cap-and-trade scheme. Here is how the majority describes cap and trade: "Under such a scheme, sources that receive a reduction in their emissions can sell a credit representing the value of that reduction to others, who are able to count it toward their own applicable emissions caps." Does that sound like a "system" to you? It does to me too. And it also has to this Court. In the past, we have explained that "[t]his type of 'cap-and-trade' system cuts costs while still reducing pollution to target levels."

So what does the majority mean when it says that “[a]s a matter of definitional possibilities, generation shifting can be described as a ‘system’”? Rarely has a statutory term so clearly applied.

Section 111 does not impose any constraints—technological or otherwise—on EPA’s authority to regulate stationary sources (except for those stated, like cost). ***

In Section 111, Congress spoke in capacious terms. It knew that “without regulatory flexibility, changing circumstances and scientific developments would soon render the Clean Air Act obsolete.” So the provision enables EPA to base emissions limits for existing stationary sources on the “best system.” That system may be technological in nature; it may be whatever else the majority has in mind; or, most important here, it may be generation shifting. The statute does not care. And when Congress uses “expansive language” to authorize agency action, courts generally may not “impos[e] limits on [the] agency’s discretion.” That constraint on judicial authority—that insistence on judicial modesty—should resolve this case.

II

The majority thinks not, contending that in “certain extraordinary cases”—of which this is one—courts should start off with “skepticism” that a broad delegation authorizes agency action. The majority labels that view the “major questions doctrine,” and claims to find support for it in our caselaw. But the relevant decisions do normal statutory interpretation: In them, the Court simply insisted that the text of a broad delegation, like any other statute, should be read in context, and with a modicum of common sense. Using that ordinary method, the decisions struck down agency actions (even though they plausibly fit within a delegation’s terms) for two principal reasons. First, an agency was operating far outside its traditional lane, so that it had no viable claim of expertise or experience. And second, the action, if allowed, would have conflicted with, or even wreaked havoc on, Congress’s broader design. In short, the assertion of delegated power was a misfit for both the agency and the statutory scheme. But that is not true here. The Clean Power Plan falls within EPA’s wheelhouse, and it fits perfectly—as I’ve just shown—with all the Clean Air Act’s provisions. That the Plan addresses major issues of public policy does not upend the analysis. Congress wanted EPA to do just that. Section 111 entrusts important matters to EPA in the expectation that the Agency will use that authority to combat pollution—and that courts will not interfere.

B

***Consider the Clean Power Plan’s component parts—let’s call them the what, who, and how—to see the rule’s normalcy. The “what” is the subject matter of the Plan: carbon dioxide emissions. This Court has already found that those emissions fall within EPA’s domain. We said then: “[T]here is nothing counterintuitive to the notion that EPA can curtail the emission of

substances that are putting the global climate out of kilter.” *** So too, there is nothing special about the Plan’s “who”: fossil-fuel-fired power plants. *** Those plants pollute—a lot—and so they have long lived under the watchful eye of EPA. That was true even before EPA began regulating carbon dioxide.

Finally, the “how” of generation shifting creates no mismatch with EPA’s expertise. As the Plan noted, generation shifting has a well-established pedigree as a tool for reducing pollution; even putting aside other federal regulation, both state regulators and power plants themselves have long used it to attain environmental goals. The technique is, so to speak, a tool in the pollution-control toolbox. And that toolbox is the one EPA uses. *** Instead, the majority protests that Congress would not have wanted EPA to “dictat[e],” through generation shifting, the “mix of energy sources nationwide.” But that statement reflects a misunderstanding of how the electricity market works. Every regulation of power plants—even the most conventional, facility-specific controls—“dictat[es]” the national energy mix to one or another degree. That result follows because regulations affect costs, and the electrical grid works by taking up energy from low-cost providers before high-cost ones. ***

Why, then, be “skeptical” of EPA’s exercise of authority? When there is no misfit, of the kind apparent in our precedents, between the regulation, the agency, and the statutory design? Although the majority offers a flurry of complaints, they come down in the end to this: The Clean Power Plan is a big new thing, issued under a minor statutory provision. I have already addressed the back half of that argument: In fact, there is nothing insignificant about Section 111(d), which was intended to ensure that EPA would limit existing stationary sources’ emissions of otherwise unregulated pollutants (however few or many there were). And the front half of the argument doesn’t work either. The Clean Power Plan was not so big. It was not so new. And to the extent it was either, that should not matter.

As to bigness—well, events have proved the opposite: The Clean Power Plan, we now know, would have had little or no impact. The Trump administration’s repeal of the Plan created a kind of controlled experiment: The Plan’s “magnitude” could be measured by seeing how far short the industry fell of the Plan’s nationwide emissions target. Except that turned out to be the wrong question, because the industry didn’t fall short of the Plan’s goal; rather, the industry exceeded that target, all on its own. In effect, the Plan predicted market behavior, rather than altered it (as regulations usually do). And that fact has been understood for some years. At the time of the repeal, the Trump administration explained that “there [was] likely to be no difference between a world where the [Clean Power Plan was] implemented and one where it [was] not.” It is small wonder, then, that the power industry overwhelmingly supports EPA in this case. In the regulated parties’ view, the rule aimed to achieve what most power companies also want: substantial reductions in carbon dioxide emissions accomplished in a cost-effective way while maintaining a reliable electricity market.

Congress makes broad delegations in part so that agencies can “adapt their rules and policies to the demands of changing circumstances.” To keep faith with that congressional choice, courts must give agencies “ample latitude” to revisit, rethink, and revise their regulatory approaches. So it is here. Section 111(d) was written, as I’ve shown, to give EPA plenty of leeway. The enacting Congress told EPA to pick the “best system of emission reduction” (taking into account various factors). In selecting those words, Congress understood—it had to—that the “best system” would change over time. Congress wanted and instructed EPA to keep up. To ensure the statute’s continued effectiveness, the “best system” should evolve as circumstances evolved—in a way Congress knew it couldn’t then know. EPA followed those statutory directions to the letter when it issued the Clean Power Plan. It selected a system (as the regulated parties agree) that achieved greater emissions reductions at lower cost than any technological alternative could have, while maintaining a reliable electricity market. Even if that system was novel, it was in EPA’s view better—actually, “best.” So it was the system that accorded with the enacting Congress’s choice.

III

It is not surprising that Congress has always delegated, and continues to do so—including on important policy issues. As this Court has recognized, it is often “unreasonable and impracticable” for Congress to do anything else. In all times, but ever more in “our increasingly complex society,” the Legislature “simply cannot do its job absent an ability to delegate power under broad general directives.” Consider just two reasons why.

First, Members of Congress often don’t know enough—and know they don’t know enough—to regulate sensibly on an issue. Of course, Members can and do provide overall direction. But then they rely, as all of us rely in our daily lives, on people with greater expertise and experience. Those people are found in agencies. Congress looks to them to make specific judgments about how to achieve its more general objectives. And it does so especially, though by no means exclusively, when an issue has a scientific or technical dimension. Why wouldn’t Congress instruct EPA to select “the best system of emission reduction,” rather than try to choose that system itself? Congress knows that systems of emission reduction lie not in its own but in EPA’s “unique expertise.”

Second and relatedly, Members of Congress often can’t know enough—and again, know they can’t—to keep regulatory schemes working across time. Congress usually can’t predict the future—can’t anticipate changing circumstances and the way they will affect varied regulatory techniques. Nor can Congress (realistically) keep track of and respond to fast-flowing

developments as they occur. Once again, that is most obviously true when it comes to scientific and technical matters. The “best system of emission reduction” is not today what it was yesterday, and will surely be something different tomorrow. So for this reason too, a rational Congress delegates. It enables an agency to adapt old regulatory approaches to new times, to ensure that a statutory program remains effective.

Over time, the administrative delegations Congress has made have helped to build a modern Nation. Congress wanted fewer workers killed in industrial accidents. It wanted to prevent plane crashes, and reduce the deadliness of car wrecks. It wanted to ensure that consumer products didn’t catch fire. It wanted to stop the routine adulteration of food and improve the safety and efficacy of medications. And it wanted cleaner air and water. If an American could go back in time, she might be astonished by how much progress has occurred in all those areas. It didn’t happen through legislation alone. It happened because Congress gave broad-ranging powers to administrative agencies, and those agencies then filled in—rule by rule by rule—Congress’s policy outlines.

This Court has historically known enough not to get in the way. *** [W]hen it comes to delegations, there are good reasons for Congress (within extremely broad limits) to get to call the shots. Congress knows about how government works in ways courts don’t. More specifically, Congress knows what mix of legislative and administrative action conduces to good policy. Courts should be modest.

Today, the Court is not. Section 111, most naturally read, authorizes EPA to develop the Clean Power Plan—in other words, to decide that generation shifting is the “best system of emission reduction” for power plants churning out carbon dioxide. Evaluating systems of emission reduction is what EPA does. And nothing in the rest of the Clean Air Act, or any other statute, suggests that Congress did not mean for the delegation it wrote to go as far as the text says. In rewriting that text, the Court substitutes its own ideas about delegations for Congress’s. And that means the Court substitutes its own ideas about policymaking for Congress’s. The Court will not allow the Clean Air Act to work as Congress instructed. The Court, rather than Congress, will decide how much regulation is too much.

The subject matter of the regulation here makes the Court’s intervention all the more troubling. Whatever else this Court may know about, it does not have a clue about how to address climate change. And let’s say the obvious: The stakes here are high. Yet the Court today prevents congressionally authorized agency action to curb power plants’ carbon dioxide emissions. The Court appoints itself—instead of Congress or the expert agency—the decision-maker on climate policy. I cannot think of many things more frightening. Respectfully, I dissent.

NOTES

1. What is the main dispute between the majority and the dissent with respect to the use of section 111(d) to regulate CO₂ emissions from existing fossil fuel power plants? How much of this turns on the manner in which each side characterizes section 111(d) and its relative importance in the broader statutory scheme? Is it a backwater or a backstop?

2. Should the fact that the electric power grid operates as a single integrated system (“one big machine” as some have put it) that has to be perfectly balanced in real time make a difference in terms of the potential scope of section 111(d) to accommodate generation shifting rather than focusing exclusively on “inside the fenceline” measures to reduce emissions?

3. Does it matter that the emissions reductions contemplated under the Obama administration’s Clean Power Plan turned out to be quite modest and well below the reductions actually achieved as a result of general trends in the power sector in the absence of the Clean Power Plan?

4. The majority opinion by Chief Justice Roberts characterizes this case as “a major questions case”—that is, a case under the so-called major questions doctrine. What are the factors, according to majority, that determine whether a case falls under the major questions doctrine? What are the consequences of classifying a case under the major questions doctrine? How do you think this might impact agency behavior going forward? For instance, could EPA require coal generators to add natural gas or biomass to their fuel mix? Could it require that some of the carbon emitted by natural gas plants be captured, sequestered and stored, provided that doing so was economically and technologically feasible? What about classifying CO₂ as a criteria pollutant under the NAAQS program and requiring states to produce SIPs?

5. In a concurring opinion joined by Justice Alito, Justice Gorsuch articulated a more muscular version of the major questions doctrine, linking it more explicitly to the non-delegation doctrine. In his view, “[t]he major questions doctrine works . . . to protect the Constitution’s separation of powers” and, specifically, to ensure that legislative powers remain vested in Congress rather than agencies. In the absence of a “clear statement” that Congress intended for an agency to regulate vast areas of economic and political significance, courts must step in to protect Congressional prerogatives. How might this view affect the way that Congress drafts legislation in the future?

6. What do you make of the dissent’s argument that Congress intentionally drafted section 111 in broad, expansive terms in order to give the EPA the flexibility it needed to devise creative solutions to new problems that were not foreseen at the time the legislation was enacted? How would you characterize the different views of the regulatory state held by the majority and concurring opinions on the one side and the dissent on the other?

7. Near the end of the Trump Administration, the EPA adopted two New Source Performance Standards (NSPS) rules on methane and volatile organic compound (VOC) emissions from new oil and gas wells. *See Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review*, (85 FR 57018, Sept. 14, 2020); *Oil and Natural Gas Sector: Emission*

Standards for New, Reconstructed, and Modified Sources Reconsideration, (85 FR 57398, Sept. 14, 2020). Methane is a potent greenhouse gas and the oil and gas industry has emerged as a major source of methane in the wake of the explosion of oil and gas development based on hydraulic fracturing (“fracking”). The new rules lifted emissions standards for broad segments of the industry regarding VOCs, in place since 2012, and methane, in place since 2016. The changes also sought to interpret the Clean Air Act in a manner that would restrict EPA’s authority to set pollution control standards generally. Public health and environmental groups challenged the rules in court and President Biden, in Executive Order 13990, *Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis*, specifically identified the rules for immediate review. In April 2021, the U.S. Senate invoked its power under the Congressional Review Act and voted to overturn the Trump EPA rules and restore the previous Obama EPA standards. The House followed suit in June 2021 and President Biden signed the measure. In November 2021, EPA proposed new methane rules for the oil and gas sector under section 111. See *Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review*, (86 FR 63110, Nov. 15, 2021). And in January 2022, the White House released a comprehensive action plan to reduce methane emissions across multiple sectors. See <https://www.whitehouse.gov/wp-content/uploads/2021/11/US-Methane-Emissions-Reduction-Action-Plan-1.pdf>.

CHAPTER 7

WATER POLLUTION

■ ■ ■

D. ISSUES IN THE IMPLEMENTATION OF THE CWA

1. POINT SOURCES

Page 619, delete note 5 and insert the following:

COUNTY OF MAUI V. HAWAII WILDLIFE FUND
Supreme Court of the United States, 2020
140 S.Ct. 1462

Justice BREYER delivered the opinion of the Court.

The Clean Water Act forbids the “addition” of any pollutant from a “point source” to “navigable waters” without the appropriate permit from the Environmental Protection Agency (EPA). The question presented here is whether the Act “requires a permit when pollutants originate from a point source but are conveyed to navigable waters by a nonpoint source,” here, “groundwater.” Suppose, for example, that a sewage treatment plant discharges polluted water into the ground where it mixes with groundwater, which, in turn, flows into a navigable river, or perhaps the ocean. Must the plant’s owner seek an EPA permit before emitting the pollutant? We conclude that the statutory provisions at issue require a permit if the addition of the pollutants through groundwater is the functional equivalent of a direct discharge from the point source into navigable waters.

Congress’ purpose as reflected in the language of the Clean Water Act is to “‘restore and maintain the ... integrity of the Nation’s waters.’” Prior to the Act, Federal and State Governments regulated water pollution in large part by setting water quality standards. The Act restructures federal regulation by insisting that a person wishing to discharge any pollution into navigable waters first obtain EPA’s permission to do so.

The Act’s provisions use specific definitional language to achieve this result. First, the Act defines “pollutant” broadly, including in its definition, for example, any solid waste, incinerator residue, “heat,” “discarded equipment,” or sand (among many other things). Second, the Act defines a “point source” as “any discernible, confined and discrete conveyance ... from which pollutants are or may be discharged,” including, for example, any “container,” “pipe, ditch, channel, tunnel, conduit,” or “well.” Third, it defines the term

“discharge of a pollutant” as “any addition of any pollutant to navigable waters [including navigable streams, rivers, the ocean, or coastal waters] from any point source.”

The Act then sets forth a statutory provision that, using these terms, broadly states that (with certain exceptions) “the discharge of any pollutant by any person” without an appropriate permit “shall be unlawful.” The question here, as we have said, is whether, or how, this statutory language applies to a pollutant that reaches navigable waters only after it leaves a “point source” and then travels through groundwater before reaching navigable waters. In such an instance, has there been a “discharge of a pollutant,” that is, has there been “any addition of any pollutant to navigable waters from any point source?”

The petitioner, the County of Maui, operates a wastewater reclamation facility on the island of Maui, Hawaii. The facility collects sewage from the surrounding area, partially treats it, and pumps the treated water through four wells hundreds of feet underground. This effluent, amounting to about 4 million gallons each day, then travels a further half mile or so, through groundwater, to the ocean.

In 2012, several environmental groups, the respondents here, brought this citizens’ Clean Water Act lawsuit against Maui. They claimed that Maui was “discharg[ing]” a “pollutant” to “navigable waters,” namely, the Pacific Ocean, without the permit required by the Clean Water Act. The District Court, relying in part upon a detailed study of the discharges, found that a considerable amount of effluent from the wells ended up in the ocean (a navigable water). It wrote that, because the “path to the ocean is clearly ascertainable,” the discharge from Maui’s wells into the nearby groundwater was “functionally one into navigable water.” And it granted summary judgment in favor of the environmental groups.

The Ninth Circuit affirmed the District Court, but it described the relevant statutory standard somewhat differently. The appeals court wrote that a permit is required when “the pollutants are fairly traceable from the point source to a navigable water such that the discharge is the functional equivalent of a discharge into the navigable water.” The court left “for another day the task of determining when, if ever, the connection between a point source and a navigable water is too tenuous to support liability.”

Maui petitioned for certiorari. In light of the differences in the standards adopted by the different Courts of Appeals, we granted the petition.

The linguistic question here concerns the statutory word “from.” Is pollution that reaches navigable waters only through groundwater pollution that is “from” a point source, as the statute uses the word? The word “from” is broad in scope, but context often imposes limitations. “Finland,” for example,

is often not the right kind of answer to the question, “Where have you come from?” even if long ago you were born there.

The parties here disagree dramatically about the scope of the word “from” in the present context. The environmental groups, the respondents, basically adopt the Ninth Circuit’s view—that the permitting requirement applies so long as the pollutant is “fairly traceable” to a point source even if it traveled long and far (through groundwater) before it reached navigable waters. They add that the release from the point source must be “a proximate cause of the addition of pollutants to navigable waters.”

Maui, on the other hand, argues that the statute creates a “bright-line test.” A point source or series of point sources must be “the means of delivering pollutants to navigable waters.” They add that, if “at least one nonpoint source (e.g., unconfined rainwater runoff or groundwater)” lies “between the point source and the navigable water,” then the permit requirement “does not apply.” A pollutant is “from” a point source only if a point source is the last “conveyance” that conducted the pollutant to navigable waters.

The Solicitor General, as *amicus curiae*, supports Maui, at least in respect to groundwater. Reiterating the position taken in a recent EPA “Interpretive Statement,” he argues that, given the Act’s structure and history, “a release of pollutants to groundwater is not subject to” the Act’s permitting requirement “even if the pollutants subsequently migrate to jurisdictional surface waters,” such as the ocean.

We agree that statutory context limits the reach of the statutory phrase “from any point source” to a range of circumstances narrower than that which the Ninth Circuit’s interpretation suggests. At the same time, it is significantly broader than the total exclusion of all discharges through groundwater described by Maui and the Solicitor General.

Virtually all water, polluted or not, eventually makes its way to navigable water. This is just as true for groundwater. Given the power of modern science, the Ninth Circuit’s limitation, “fairly traceable,” may well allow EPA to assert permitting authority over the release of pollutants that reach navigable waters many years after their release (say, from a well or pipe or compost heap) and in highly diluted forms.

* * *

Our view is that Congress did not intend the point source-permitting requirement to provide EPA with such broad authority as the Ninth Circuit’s narrow focus on traceability would allow. First, to interpret the word “from” in this literal way would require a permit in surprising, even bizarre, circumstances, such as for pollutants carried to navigable waters on a bird’s feathers, or, to mention more mundane instances, the 100-year migration of pollutants through 250 miles of groundwater to a river.

Second, and perhaps most important, the structure of the statute indicates that, as to groundwater pollution and nonpoint source pollution, Congress intended to leave substantial responsibility and autonomy to the

States. Much water pollution does not come from a readily identifiable source. Rainwater, for example, can carry pollutants (say, as might otherwise collect on a roadway); it can pollute groundwater, and pollution collected by unchanneled rainwater runoff is not ordinarily considered point source pollution. Over many decades, and with federal encouragement, the States have developed methods of regulating nonpoint source pollution through water quality standards, and otherwise.

The Act envisions EPA's role in managing nonpoint source pollution and groundwater pollution as limited to studying the issue, sharing information with and collecting information from the States, and issuing monetary grants. Although the Act grants EPA specific authority to regulate certain point source pollution (it can also delegate some of this authority to the States acting under EPA supervision), these permitting provisions refer to "point sources" and "navigable waters," and say nothing at all about nonpoint source regulation or groundwater regulation. We must doubt that Congress intended to give EPA the authority to apply the word "from" in a way that could interfere as seriously with States' traditional regulatory authority—authority the Act preserves and promotes—as the Ninth Circuit's "fairly traceable" test would.

Third, those who look to legislative history to help interpret a statute will find that this Act's history strongly supports our conclusion that the permitting provision does not extend so far. * * * The upshot is that Congress was fully aware of the need to address groundwater pollution, but it satisfied that need through a variety of state-specific controls. Congress left general groundwater regulatory authority to the States; its failure to include groundwater in the general EPA permitting provision was deliberate.

Finally, longstanding regulatory practice undermines the Ninth Circuit's broad interpretation of the statute. EPA itself for many years has applied the permitting provision to pollution discharges from point sources that reached navigable waters only after traveling through groundwater. But, in doing so, EPA followed a narrower interpretation than that of the Ninth Circuit. EPA has opposed applying the Act's permitting requirements to discharges that reach groundwater only after lengthy periods. Indeed, in this very case (prior to its recent Interpretive Statement), EPA asked the Ninth Circuit to apply a more limited "direct hydrological connection" test. The Ninth Circuit did not accept this suggestion.

We do not defer here to EPA's interpretation of the statute embodied in this practice. Indeed, EPA itself has changed its mind about the meaning of the statutory provision. But this history, by showing that a comparatively narrow view of the statute is administratively workable, offers some additional

support for the view that Congress did not intend as broad a delegation of regulatory authority as the Ninth Circuit test would allow.

As we have said, the specific meaning of the word “from” necessarily draws its meaning from context. The apparent breadth of the Ninth Circuit’s “fairly traceable” approach is inconsistent with the context we have just described.

Maui and the Solicitor General argue that the statute’s permitting requirement does not apply if a pollutant, having emerged from a “point source,” must travel through any amount of groundwater before reaching navigable waters. That interpretation is too narrow, for it would risk serious interference with EPA’s ability to regulate ordinary point source discharges.

Consider a pipe that spews pollution directly into coastal waters. There is an “addition of” a “pollutant to navigable waters from [a] point source.” Hence, a permit is required. But Maui and the Government read the permitting requirement not to apply if there is any amount of groundwater between the end of the pipe and the edge of the navigable water. If that is the correct interpretation of the statute, then why could not the pipe’s owner, seeking to avoid the permit requirement, simply move the pipe back, perhaps only a few yards, so that the pollution must travel through at least some groundwater before reaching the sea? We do not see how Congress could have intended to create such a large and obvious loophole in one of the key regulatory innovations of the Clean Water Act.

* * *

Over the years, courts and EPA have tried to find general language that will reflect a middle ground between these extremes. The statute’s words reflect Congress’ basic aim to provide federal regulation of identifiable sources of pollutants entering navigable waters without undermining the States’ longstanding regulatory authority over land and groundwater. We hold that the statute requires a permit when there is a direct discharge from a point source into navigable waters or when there is the functional equivalent of a direct discharge. We think this phrase best captures, in broad terms, those circumstances in which Congress intended to require a federal permit. That is, an addition falls within the statutory requirement that it be “from any point source” when a point source directly deposits pollutants into navigable waters, or when the discharge reaches the same result through roughly similar means.

Time and distance are obviously important. Where a pipe ends a few feet from navigable waters and the pipe emits pollutants that travel those few feet through groundwater (or over the beach), the permitting requirement clearly applies. If the pipe ends 50 miles from navigable waters and the pipe emits pollutants that travel with groundwater, mix with much other material, and end up in navigable waters only many years later, the permitting requirements likely do not apply.

The object in a given scenario will be to advance, in a manner consistent with the statute’s language, the statutory purposes that Congress sought to achieve. As we have said (repeatedly), the word “from” seeks a “point source” origin, and context imposes natural limits as to when a point source can

properly be considered the origin of pollution that travels through groundwater. That context includes the need, reflected in the statute, to preserve state regulation of groundwater and other nonpoint sources of pollution. Whether pollutants that arrive at navigable waters after traveling through groundwater are “from” a point source depends upon how similar to (or different from) the particular discharge is to a direct discharge.

The difficulty with this approach, we recognize, is that it does not, on its own, clearly explain how to deal with middle instances. But there are too many potentially relevant factors applicable to factually different cases for this Court now to use more specific language. Consider, for example, just some of the factors that may prove relevant (depending upon the circumstances of a particular case): (1) transit time, (2) distance traveled, (3) the nature of the material through which the pollutant travels, (4) the extent to which the pollutant is diluted or chemically changed as it travels, (5) the amount of pollutant entering the navigable waters relative to the amount of the pollutant that leaves the point source, (6) the manner by or area in which the pollutant enters the navigable waters, (7) the degree to which the pollution (at that point) has maintained its specific identity. Time and distance will be the most important factors in most cases, but not necessarily every case.

At the same time, courts can provide guidance through decisions in individual cases. The Circuits have tried to do so, often using general language somewhat similar to the language we have used. And the traditional common-law method, making decisions that provide examples that in turn lead to ever more refined principles, is sometimes useful, even in an era of statutes.

The underlying statutory objectives also provide guidance. Decisions should not create serious risks either of undermining state regulation of groundwater or of creating loopholes that undermine the statute’s basic federal regulatory objectives.

EPA, too, can provide administrative guidance (within statutory boundaries) in numerous ways, including through, for example, grants of individual permits, promulgation of general permits, or the development of general rules. Indeed, over the years, EPA and the States have often considered the Act’s application to discharges through groundwater.

Both Maui and the Government object that to subject discharges to navigable waters through groundwater to the statute’s permitting requirements, as our interpretation will sometimes do, would vastly expand the scope of the statute, perhaps requiring permits for each of the 650,000 wells like petitioner’s or for each of the over 20 million septic systems used in many Americans’ homes.

But EPA has applied the permitting provision to some (but not to all) discharges through groundwater for over 30 years. In that time we have seen no evidence of unmanageable expansion. EPA and the States also have tools to mitigate those harms, should they arise, by (for example) developing general permits for recurring situations or by issuing permits based on best practices

where appropriate. Judges, too, can mitigate any hardship or injustice when they apply the statute's penalty provision. That provision vests courts with broad discretion to set a penalty that takes account of many factors, including "any good-faith efforts to comply" with the Act, the "seriousness of the violation," the "economic impact of the penalty on the violator," and "such other matters as justice may require." We expect that district judges will exercise their discretion mindful, as we are, of the complexities inherent to the context of indirect discharges through groundwater, so as to calibrate the Act's penalties when, for example, a party could reasonably have thought that a permit was not required.

In sum, we recognize that a more absolute position, such as the means-of-delivery test or that of the Government or that of the Ninth Circuit, may be easier to administer. But, as we have said, those positions have consequences that are inconsistent with major congressional objectives, as revealed by the statute's language, structure, and purposes. We consequently understand the permitting requirement, § 301, as applicable to a discharge (from a point source) of pollutants that reach navigable waters after traveling through groundwater if that discharge is the functional equivalent of a direct discharge from the point source into navigable waters.

Because the Ninth Circuit applied a different standard, we vacate its judgment and remand the case for further proceedings consistent with this opinion.

It is so ordered.

Justice THOMAS, with whom Justice GORSUCH joins, dissenting.

The Clean Water Act (CWA) requires a federal permit for "the discharge of any pollutant by any person." The CWA defines a "discharge" as "any addition of any pollutant to navigable waters from any point source." Based on the statutory text and structure, I would hold that a permit is required only when a point source discharges pollutants directly into navigable waters. The Court adopts this interpretation in part, concluding that a permit is required for "a direct discharge." But the Court then departs from the statutory text by requiring a permit for "the functional equivalent of a direct discharge," which it defines through an open-ended inquiry into congressional intent and practical considerations. Because I would adhere to the text, I respectfully dissent.

* * *

The best reading of the statute is that a "discharge" is the release of pollutants directly from a point source to navigable waters. The application of this interpretation to the undisputed facts of this case makes a remand unnecessary. Petitioner operates a wastewater treatment facility and injects treated wastewater into four underground injection control wells. All parties agree that the wastewater enters groundwater from the wells and does not directly enter navigable waters. Based on these undisputed facts, there is no

“discharge,” so I would reverse the judgment of the Ninth Circuit. I respectfully dissent.

Justice ALITO, dissenting.

If the Court is going to devise its own legal rules, instead of interpreting those enacted by Congress, it might at least adopt rules that can be applied with a modicum of consistency. Here, however, the Court makes up a rule that provides no clear guidance and invites arbitrary and inconsistent application.

The text of the Clean Water Act generally requires a permit when a discharge “from” a “point source” (such as a pipe) “add[s]” a pollutant “to” navigable waters (such as the Pacific Ocean). There are two ways to read this text. A pollutant that reaches the ocean could be understood to have been added “from” a pipe if the pipe originally discharged the pollutant and the pollutant eventually made its way to the ocean by flowing over or under the surface of the ground. Or a pollutant that reaches the ocean could be understood to have come “from” a pipe if the pollutant is discharged from the pipe directly into the ocean.

There is no comprehensible alternative to these two interpretations, but the Court refuses to accept either. Both alternatives, it believes, lead to unacceptable results, and it therefore tries to find a middle way. It holds that a permit is required “when there is a direct discharge from a point source into navigable waters or when there is the functional equivalent of a direct discharge.” This is not a plausible interpretation of the statutory text and, to make matters worse, the Court’s test has no clear meaning.

Just what is the “functional equivalent” of a “direct discharge”? The Court provides no real answer. All it will say is that the distance a pollutant travels and the time this trip entails are the most important factors, but at least five other factors may have a bearing on the question, and even this list is not exhaustive. Entities like water treatment authorities that need to know whether they must get a permit are left to guess how this nebulous standard will be applied. Regulators are given the discretion, at least in the first instance, to make of this standard what they will. And the lower courts? The Court’s advice, in essence, is: “That’s your problem. Muddle through as best you can.”

* * *

The term “functional equivalent” may have a quasi-technical ring, but what does it mean? “Equivalent” means “equal” in some respect, and “functional” signifies a relationship to a function. The function of a direct discharge from a point source into navigable waters is to convey the entirety of the discharge into navigable waters without any delay. Therefore, the “functional equivalent” of a direct discharge of a pollutant into navigable

waters would seem to be a discharge that is equal to a direct discharge in these respects.

If that is what the Court meant by “the functional equivalent of a direct discharge,” the test would apply at best to only a small set of situations not involving a direct discharge. The Court’s example of a pipe that emits pollutants a few feet from the ocean would presumably qualify on *de minimis* grounds, but if the pipe were moved back any significant distance, the discharge would not be exactly equal to a direct discharge. There would be some lag from the time of the discharge to the time when the pollutant reaches navigable waters; some of the pollutant might not reach that destination; and the pollutant might have changed somewhat in composition by the time it reached the navigable waters.

For these reasons, the Court’s reference to “the functional equivalent of a direct discharge,” if taken literally, would be of little importance, but the Court’s understanding of this concept is very different from the literal meaning of the phrase. As used by the Court, “the functional equivalent of a direct discharge” means a discharge that is sufficiently similar to a direct discharge to warrant a permit in light of the Clean Water Act’s “language, structure, and purposes.” But what, in concrete terms, does this mean? How similar is sufficiently similar?

The Court provides this guidance. It explains that time and distance are the most important factors but it does not set any time or distance limits except to observe that a permit is needed where the discharge is a few feet away from navigable waters and that a permit is not required where the discharge is far away and it takes “many years” for the pollutants to complete the journey. Beyond this, the Court provides a list (and a non-exhaustive one at that!) of five other factors that may be relevant: “the nature of the material through which the pollutant travels,” “the extent to which the pollutant is diluted or chemically changed as it travels,” “the amount of pollutant entering the navigable waters relative to the amount of the pollutant that leaves the point source,” “the manner by or area in which the pollutant enters the navigable waters,” and “the degree to which the pollution (at that point) has maintained its specific identity.”

The Court admits that its rule “does not, on its own, clearly explain how to deal with middle instances,” but that admission does not go far enough. How the rule applies to “middle instances” is anybody’s guess. Except in extreme cases, dischargers will be able to argue that the Court’s multifactor test does not require a permit. Opponents will be able to make the opposite argument. Regulators will be able to justify whatever result they prefer in a particular case. And judges will be left at sea.

Instead of concocting our own rule, I would interpret the words of the statute, and in my view, the better of the two possible interpretations is that a permit is required when a pollutant is discharged directly from a point source to navigable waters. This interpretation is consistent with the statutory language and better fits the overall scheme of the Clean Water Act. And

properly understood, it does not have the sort of extreme consequences that the Court finds unacceptable.

* * *

The Court adopts a nebulous standard, enumerates a non-exhaustive list of potentially relevant factors, and washes its hands of the problem. We should not require regulated parties to “feel their way on a case-by-case basis” where the costs of uncertainty are so great. The Court’s decision invites “arbitrary and inconsistent decisionmaking.” And “[t]hat is not what the Clean [Water] Act contemplates.”

I would reverse the judgment below and instruct the lower courts to apply the test set out above. I therefore respectfully dissent.

NOTES

1. In the aftermath of the *Maui* decision, EPA, states, regulated entities, and the courts are faced with the challenge of interpreting, implementing, and enforcing the “functional equivalent” test for indirect point source discharges. EPA developed a guidance memorandum in January 2021. See Guidance Memorandum: Applying the Supreme Court’s *County of Maui v. Hawaii Wildlife Fund* Decision in the Clean Water Act Section 402 National Pollutant Discharge Elimination System Permit Program, available at: <https://www.epa.gov/npdes/guidance-memorandum-applying-supreme-courts-county-maui-v-hawaii-wildlife-fund-decision-clean>. The Biden EPA has yet to decide if it will withdraw the Trump EPA’s Guidance and replace it with new guidance or initiate a formal rulemaking process to flesh out the functional equivalent test.

2. DEVELOPMENT RESTRICTIONS ON PRIVATE WETLANDS

Page 704, replace note 3 with the following:

3. In 2015, the Obama Administration issued a new rule – after extensive public comment, to clarify the federal government’s jurisdiction over wetlands. See *Clean Water Rule: Definition of ‘Waters of the United States’* (80 FR 37054, June 29, 2015). Known as the “Waters of the United States” rule, or “WOTUS,” the rule specifies waters that are categorically included in the definition (including traditional navigable waters, interstate waters, tributaries as long as they have a bed, bank, and high-water mark, and adjacent waters). It also essentially codifies the “substantial nexus” test from *Rapanos* and delineates five categories of waters that should be subject to a case-by-case analysis to see if a substantial nexus exists between the water body and a “water of the United States.” These five categories include Prairie potholes, Carolina and Delmarva bays, pocosins, western vernal pools in California, and Texas coastal prairie wetlands.

The Trump Administration made clear as soon as President Trump was elected that it would move to repeal the WOTUS rule. It began proceedings to do so in June of 2018 and temporarily replaced the WOTUS rule with pre-existing guidance documents.

In April, 2020, EPA issued a replacement rule *See The Navigable Waters Protection Rule: Definition of “Waters of the United States”* (85 FR 22250, April 21, 2020). The replacement rule is much closer to Justice Scalia’s dissent than to Justice Kennedy’s substantial nexus test. It includes four categories of waters that are subject to federal jurisdiction: 1) the territorial seas and traditional navigable waters; perennial and intermittent tributaries to those waters; certain lakes, ponds and impoundments, and wetlands adjacent to jurisdictional waters. Importantly, it excludes jurisdiction over “ephemeral waters” that flow after rainfall and several other categories of water bodies. The U.S. Geological Survey estimates that the new rule would eliminate jurisdiction over 51 percent of wetlands and almost 20 percent of streams that lack a permanent connection to surface waters.

The rule has already faced critique, not only because of the significant contraction of federal jurisdiction over wetlands, but because the rule is not – even according to a science advisory board appointed by the Trump Administration – based in sound science. A letter from EPA’s Science Advisory Board concluded about the rule when it was still in proposed form: “the proposed WOTUS rule does not incorporate best available science and as such we find that a scientific basis for the proposed Rule, and its consistency with the objectives of the Clean Water Act, is lacking.” *See* https://www.eenews.net/assets/2020/03/04/document_gw_01.pdf A number of lawsuits were filed challenging the new the rule as inconsistent with the Clean Water Act and with sound science, including by a coalition of states. *See* https://oag.ca.gov/system/files/attachments/press-docs/WOTUS%20Complaint%20Filed_05012020.pdf. Some industry groups also challenged the rule as too environmentally protective. https://www.epa.gov/sites/production/files/2019-10/documents/2019-10-22_n.m._cattle_growers_assn_v._epa_d.n.m._-_complaint.pdf. The retirement of Justice Kennedy makes it hard to predict how a Supreme Court will react to the new rule if it reaches the high Court.

While the Trump Administration defends the rule in court, different parts of the country may be subject to different jurisdictional requirements. In *Nat’l Assn of Manufacturers v. Dept of Defense*, 583 U.S. __, 138 S.Ct. 617 (2018), the Supreme Court held that challenges to the Obama WOTUS rule must be filed in federal district court, not in the federal courts of appeal. As a result, different challenges to the Trump rule in different parts of the country could lead to differential outcomes about what rule is in effect pending the final outcome of the litigation. A motion to stay the effective date of the new Trump rule filed by the states in *California v. EPA* failed. http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200619_docket-320-cv-03005_order.pdf. A similar motion filed in Colorado district court succeeded,

meaning the Obama rule remains in place for the state of Colorado, though the judge refused to extend the injunction nationwide. https://www.eenews.net/assets/2020/06/23/document_gw_06.pdf. The Tenth Circuit Court of Appeals subsequently lifted the injunction. *See Colorado v. EPA*, 989 F.3d 874 (10th Cir. 2021).

After the Trump WOTUS rule went into effect in June 2020, the Army Corps of Engineers determined that more than 40,000 wetlands and other waterways did not qualify for federal protection under the rule, allowing development to proceed. *See Hannah Northey, Exclusive: Trump rule imperils more than 40,000 waterways*, Greenwire (March 19, 2021), available at: <https://www.eenews.net/stories/1063727993>.

Since the Biden Administration took office, the Department of Justice has been filing motions to stay in the various cases that are underway around the country in order to allow the EPA and the Army Corps of Engineers to establish a schedule for repealing and replacing the Trump WOTUS rule. In August 2021, a federal district court in Arizona vacated the Trump Administration's WOTUS rule. On December 7, 2021, EPA and the Army Corps proposed a new Revised Definition of Waters of the United States that would restore the protections in place prior to the 2015 WOTUS implementation and establish a durable definition of "waters of the United States." *See Revised Definition of "Waters of the United States"* (86 FR 69372, Dec. 7, 2021).

In October of 2022, the Supreme Court will hear argument in *Sackett v. EPA* (No. 21-454). The Court appears poised to decide between Justice Scalia's and Justice Kennedy's interpretations of the statute in the *Rapanos* case. If the Court adopts the Scalia interpretation, something along the lines of the Trump rule may be legally required.

CHAPTER 8

HAZARDOUS WASTE



A. REGULATING THE TREATMENT, STORAGE, AND DISPOSAL OF HAZARDOUS WASTE: RCRA

Page 759, insert before the subheading:

6. LONG-TERM MONITORING OF CLOSED TSDFs

In March 2021, the EPA Office of Inspector General issued an audit report finding that EPA had failed to consistently monitor site conditions at closed TSDFs around the country. For those TSDFs that were closed with waste in place (in contrast to closed TSDFs where the wastes have been removed and the site decontaminated), the report found that roughly half were not inspected every two years as required by the statute and EPA's own policies. The report also found that EPA's regional offices were inconsistent in their oversight of closed TSDF inspections. As the report observed: "Because of the lack of inspections, a hazardous waste leak from a compromised unit could go undetected for years, with dire human health and environmental consequences." According to the report, 22.8 million people live within 3 miles of a TSDF that has been closed with waste in place, with a slightly higher proportion of low-income and minority communities (as defined by the EJSCREEN Demographic Index) when compared to the national average. Finally, the report also noted inconsistent and incomplete tracking of TSDF units that had been transferred between the RCRA program to the Superfund program. In general, these findings point to the importance of long-term environmental monitoring and careful tracking within programs to ensure that the "grave" part of RCRA's cradle-to-grave program for hazardous waste does not cause additional contamination of the environment and contribute further to the environmental injustices associated with hazardous waste facilities. See EPA Office of Inspector General, *EPA Does Not Consistently Monitor Hazardous Waste Units Closed with Waste in Place or Track and Report on Facilities That Fall Under the Two Responsible Programs*, Report No. 21-P-0114 (March 29, 2021), available at: https://www.epa.gov/sites/production/files/2021-03/documents/epaoig_20210329-21-p-0114.pdf.

B. CLEAN UP OF CONTAMINATED SITES: CERCLA

2. LIABILITY

c. Potentially Responsible Parties

v. Other Parties: Parent Corporations, Successors, Lenders, and Governmental Entities

Page 789, Insert before the subheading:

Does a Government order to cease operations at a facility constitute operator liability? Between 1934 and 1943, the Lava Cap Gold Mining Corporation owned and operated the Lava Cap Mine in the foothills of the Sierra Nevada mountains. At the time, Lava Cap was one of the largest gold and silver mining operations in California. The mining operations produced substantial amounts of waste, including mill tailings with high concentrations of arsenic that were stored behind log dams. When the United States entered World War II in 1941, it faced a shortage of critical metals such as copper as well as a shortage of machinery, supplies, and labor needed to produce copper and other essential metals. In 1942, the U.S. War Production Board issued an order directing all gold and other *nonessential* mines to cease operations in order to free up materials and labor for the essential mines. The order also prohibited the owners and operators of gold and other non-essential mines from removing any ore or waste from the mines. After the order, which was expressly found to apply to Lava Cap in 1943, the mine never resumed operations. In 1979, one of the log dams built to contain the mill tailings partially collapsed, triggering a release of contaminated waste. In 1997, catastrophic flooding completely collapsed the log dam and released an estimated 10,000 cubic yards of arsenic-contaminated mill tailings into local waterways. EPA and the state of California initiated response actions and the EPA designated Lava Cap a superfund site in 1999. EPA and California then sued Sterling Centrecorp, Inc., a Canadian company that had acquired the mine in 1952, to recover some \$32 million in cleanup costs. Sterling subsequently sued the United States for contribution on the theory that the United States was an “operator” of the site by virtue of the War Production Board’s 1942 order to cease operations at the site, including the prohibition on removing any ore or waste from the site. In a split decision, the 9th Circuit found that the United States was not an operator under the *Bestfoods* standard and that operator liability “requires something more than general control over an industry or a facility. It requires some level of direction, management, or control over the facility’s polluting activities.” *United States v. Sterling Centrecorp.*, 977 F.3d 750 (9th Cir., 2020). But why does the Government’s order to shut down operations, including its prohibition on removal of wastes,

among other things, not constitute “direction, management, or control over the facility’s polluting activities”? Would the outcome be different if a parent corporation ordered its subsidiary to cease operations and prohibited it from removing waste from the facility? If so, why?

g. Settlement

Page 813, Insert the before the subheading:

Once EPA has developed a cleanup plan as part of a settlement with one or more PRPs, can local landowners affected by the pollution from the contaminated site seek relief under state law for additional clean-up and restoration? That question was addressed in the following case involving the massive Superfund site in Butte, Montana.

ATLANTIC RICHFIELD COMPANY V. CHRISTIAN

Supreme Court of the United States, 2020
140 S.Ct. 1335

Chief Justice ROBERTS delivered the opinion of the Court.

For nearly a century, the Anaconda Copper Smelter in Butte, Montana contaminated an area of over 300 square miles with arsenic and lead. Over the past 35 years, the Environmental Protection Agency has worked with the current owner of the smelter, Atlantic Richfield Company, to implement a cleanup plan under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980. EPA projects that the cleanup will continue through 2025.

A group of 98 landowners sued Atlantic Richfield in Montana state court for common law nuisance, trespass, and strict liability. Among other remedies, the landowners sought restoration damages, which under Montana law must be spent on rehabilitation of the property. The landowners’ proposed restoration plan includes measures beyond those the agency found necessary to protect human health and the environment.

We consider whether the Act strips the Montana courts of jurisdiction over the landowners’ claim for restoration damages and, if not, whether the Act requires the landowners to seek EPA approval for their restoration plan.

In 1980, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act, also known as the Superfund statute, to address “the serious environmental and health risks posed by industrial pollution.” The Act seeks “to promote the timely cleanup of hazardous waste sites and to ensure that the costs of such cleanup efforts [are] borne by those responsible for the contamination.”

The Act directs EPA to compile and annually revise a prioritized list of contaminated sites for cleanup, commonly known as Superfund sites. EPA may clean those sites itself or compel responsible parties to perform

the cleanup. If the Government performs the cleanup, it may recover its costs from responsible parties. Responsible parties are jointly and severally liable for the full cost of the cleanup, but may seek contribution from other responsible parties.

Prior to selecting a cleanup plan, EPA conducts (or orders a private party to conduct) a remedial investigation and feasibility study to assess the contamination and evaluate cleanup options. Section 122(e)(6) of the Act provides that, once the study begins, “no potentially responsible party may undertake any remedial action” at the site without EPA approval.

The Act prescribes extensive public consultation while a cleanup plan is being developed. It requires an opportunity for public notice and comment on proposed cleanup plans. It requires “substantial and meaningful involvement by each State in initiation, development, and selection” of cleanup actions in that State. And, in most instances, it requires that remedial action comply with “legally applicable or relevant and appropriate” requirements of state environmental law.

But once a plan is selected, the time for debate ends and the time for action begins. To insulate cleanup plans from collateral attack, § 113(b) of the Act provides federal district courts with “exclusive original jurisdiction over all controversies arising under” the Act, and § 113(h) then strips such courts of jurisdiction “to review any challenges to removal or remedial action,” except in five limited circumstances.

* * *

Between 1884 and 1902, the Anaconda Copper Mining Company built three copper smelters 26 miles west of the mining town of Butte, Montana. The largest one, the Washoe Smelter, featured a 585-foot smoke stack, taller than the Washington Monument. The structure still towers over the area today, as part of the Anaconda Smoke Stack State Park. Together, the three smelters refined tens of millions of pounds of copper ore mined in Butte, the “Richest Hill on Earth,” to feed burgeoning demand for telephone wires and power lines. “It was hot. It was dirty. It was dangerous. But it was a job for thousands.” From 1912 to 1973, Anaconda Company payrolls totaled over \$2.5 billion, compensating around three-quarters of Montana’s work force.

Bust followed boom. By the 1970s, the falling price of copper, an ongoing energy crisis, and the nationalization of Anaconda’s copper mines in Chile and Mexico squeezed Anaconda. But what others saw as an ailing relic, Atlantic Richfield saw as a turnaround opportunity, purchasing the Anaconda Company for the discount price of \$700 million. Unfortunately, Atlantic Richfield was unable to revive Anaconda’s fortunes. By 1980 Atlantic Richfield had closed the facility for good, and by 1984 Fortune had dubbed the purchase one of the “Decade’s Worst Mergers.”

Atlantic Richfield's troubles were just beginning. After Congress passed the Superfund statute in 1980, Atlantic Richfield faced strict and retroactive liability for the many tons of arsenic and lead that Anaconda had spewed across the area over the previous century. In 1983, EPA designated an area of more than 300 square miles around the smelters as one of the inaugural Superfund sites. In the 35 years since, EPA has managed an extensive cleanup at the site, working with Atlantic Richfield to remediate more than 800 residential and commercial properties; remove 10 million cubic yards of tailings, mine waste, and contaminated soil; cap in place 500 million cubic yards of waste over 5,000 acres; and reclaim 12,500 acres of land. To date, Atlantic Richfield estimates that it has spent roughly \$450 million implementing EPA's orders.

More work remains. As of 2015, EPA's plan anticipated cleanup of more than 1,000 additional residential yards, revegetation of 7,000 acres of uplands, removal of several waste areas, and closure of contaminated stream banks and railroad beds. EPA projects that remedial work will continue through 2025.

In 2008, a group of 98 owners of property within the Superfund site filed this lawsuit against Atlantic Richfield in Montana state court, asserting trespass, nuisance, and strict liability claims under state common law. The landowners sought restoration damages, among other forms of relief.

* * *

To collect restoration damages, a plaintiff must demonstrate that he has "reasons personal" for restoring the property and that his injury is temporary and abatable, meaning "[t]he ability to repair [the] injury must be more than a theoretical possibility." The injured party must "establish that the award actually will be used for restoration."

The landowners here propose a restoration plan that goes beyond EPA's own cleanup plan, which the agency had found "protective of human health and the environment." For example, the landowners propose a maximum soil contamination level of 15 parts per million of arsenic, rather than the 250 parts per million level set by EPA. And the landowners seek to excavate offending soil within residential yards to a depth of two feet rather than EPA's chosen depth of one. The landowners also seek to capture and treat shallow groundwater through an 8,000-foot long, 15-foot deep, and 3-foot wide underground permeable barrier, a plan the agency rejected as costly and unnecessary to secure safe drinking water.

The landowners estimate that their cleanup would cost Atlantic Richfield \$50 to \$58 million. Atlantic Richfield would place that amount in a trust and the trustee would release funds only for restoration work.

In the trial court, Atlantic Richfield and the landowners filed competing motions for summary judgment on whether the Act precluded

the landowners' claim for restoration damages. The court granted judgment for the landowners on that issue and allowed the lawsuit to continue. After granting a writ of supervisory control, the Montana Supreme Court affirmed.

The Montana Supreme Court rejected Atlantic Richfield's argument that § 113 stripped the Montana courts of jurisdiction over the landowners' claim for restoration damages. The court recognized that § 113 strips federal courts (and, it was willing to assume, state courts) of jurisdiction to review challenges to EPA cleanup plans. But the Montana Supreme Court reasoned that the landowners' plan was not such a challenge because it would not "stop, delay, or change the work EPA is doing." The landowners were "simply asking to be allowed to present their own plan to restore their own private property to a jury of twelve Montanans who will then assess the merits of that plan."

The Montana Supreme Court also rejected Atlantic Richfield's argument that the landowners were potentially responsible parties (sometimes called PRPs) prohibited from taking remedial action without EPA approval under § 122(e)(6) of the Act. The Court observed that the landowners had "never been treated as PRPs for any purpose—by either EPA or [Atlantic Richfield]—during the entire thirty-plus years" since the designation of the Superfund site, and that the statute of limitations for a claim against the landowners had run. "Put simply, the PRP horse left the barn decades ago."

We granted certiorari.

* * *

We begin with two threshold questions: whether this Court has jurisdiction to review the decision of the Montana Supreme Court and, if so, whether the Montana courts have jurisdiction over the landowners' claim for restoration damages.

[The Court found that it did have jurisdiction to review the decision of the Montana Supreme Court and that CERCLA does not strip the Montana courts of jurisdiction over the landowners claims for restoration damages]

* * *

Although the Montana Supreme Court answered the jurisdictional question correctly, the Court erred by holding that the landowners were not potentially responsible parties under the Act and therefore did not need EPA approval to take remedial action. Section 122(e)(6), titled "Inconsistent response action," provides that "[w]hen either the President, or a potentially responsible party ... has initiated a remedial investigation and feasibility study for a particular facility under this chapter, no potentially responsible party may undertake any remedial action at the facility unless such remedial action has been authorized by the President."

Both parties agree that this provision would require the landowners to obtain EPA approval for their restoration plan if the landowners qualify as potentially responsible parties.

To determine who is a potentially responsible party, we look to the list of “covered persons” in § 107, the liability section of the Act. “Section 107(a) lists four classes of potentially responsible persons (PRPs) and provides that they ‘shall be liable’ for, among other things, ‘all costs of removal or remedial action incurred by the United States Government.’ ” The first category under § 107(a) includes any “owner” of “a facility.” “Facility” is defined to include “any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located.” Arsenic and lead are hazardous substances. Because those pollutants have “come to be located” on the landowners’ properties, the landowners are potentially responsible parties.

The landowners and Justice GORSUCH argue that even if the landowners were once potentially responsible parties, they are no longer because the Act’s six-year limitations period for recovery of remedial costs has run, and thus they could not be held liable in a hypothetical lawsuit.

This argument collapses status as a potentially responsible party with liability for the payment of response costs. A property owner can be a potentially responsible party even if he is no longer subject to suit in court. As we have said, “[E]ven parties not responsible for contamination may fall within the broad definitions of PRPs in §§ 107(a)(1)–(4).” That includes “‘innocent’ ... landowner[s] whose land has been contaminated by another,” who would be shielded from liability by the Act’s so-called “innocent landowner” or “third party” defense in § 107(b)(3). The same principle holds true for parties that face no liability because of the Act’s limitations period.

Interpreting “potentially responsible parties” to include owners of polluted property reflects the Act’s objective to develop, as its name suggests, a “Comprehensive Environmental Response” to hazardous waste pollution. Section 122(e)(6) is one of several tools in the Act that ensure the careful development of a single EPA-led cleanup effort rather than tens of thousands of competing individual ones.

Yet under the landowners’ interpretation, property owners would be free to dig up arsenic-infected soil and build trenches to redirect lead-contaminated groundwater without even notifying EPA, so long as they have not been sued within six years of commencement of the cleanup. We doubt Congress provided such a fragile remedy for such a serious problem. And we suspect most other landowners would not be too pleased if Congress required EPA to sue each and every one of them just to ensure an orderly cleanup of toxic waste in their neighborhood. A straightforward reading of the text avoids such anomalies.

* * *

Turning from text to consequences, the landowners warn that our interpretation of § 122(e)(6) creates a permanent easement on their land, forever requiring them “to get permission from EPA in Washington if they want to dig out part of their backyard to put in a sandbox for their grandchildren.” The grandchildren of Montana can rest easy: The Act does nothing of the sort.

Section 122(e)(6) refers only to “remedial action,” a defined term in the Act encompassing technical actions like “storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous substances and associated contaminated materials,” and so forth. While broad, the Act’s definition of remedial action does not reach so far as to cover planting a garden, installing a lawn sprinkler, or digging a sandbox. In addition, § 122(e)(6) applies only to sites on the Superfund list. The Act requires EPA to annually review and reissue that list. EPA delists Superfund sites once responsible parties have taken all appropriate remedial action and the pollutant no longer poses a significant threat to public health or the environment.

The landowners and Justice GORSUCH alternatively argue that the landowners are not potentially responsible parties because they did not receive the notice of settlement negotiations required by § 122(e)(1). Under a policy dating back to 1991, EPA does not seek to recover costs from residential landowners who are not responsible for contamination and do not interfere with the agency’s remedy. EPA views this policy as an exercise of its “enforcement discretion in pursuing potentially responsible parties.” Because EPA has a policy of not suing innocent homeowners for pollution they did not cause, it did not include the landowners in settlement negotiations.

But EPA’s nonenforcement policy does not alter the landowners’ status as potentially responsible parties. Section 107(a) unambiguously defines potentially responsible parties and EPA does not have authority to alter that definition. Section 122(e)(1) requires notification of settlement negotiations to all potentially responsible parties. To say that provision determines who is a potentially responsible party in the first instance would render the Act circular. Even the Government does not claim that its decisions whether to send notices of settlement negotiations carry such authority.

In short, even if EPA ran afoul of § 122(e)(1) by not providing the landowners notice of settlement negotiations, that does not change the landowners’ status as potentially responsible parties.

The landowners relatedly argue that the limitation in § 122(e)(6) on remedial action by potentially responsible parties cannot carry the weight we assign to it because it is located in the Act’s section on settlement

negotiations. Congress, we are reminded, does not “hide elephants in mouseholes.”

We take no issue with characterizing § 122(e)(6) as an elephant. It is, after all, one of the Act’s crucial tools for ensuring an orderly cleanup of toxic waste. But § 122 of the Act is, at the risk of the tired metaphor spinning out of control, less a mousehole and more a watering hole—exactly the sort of place we would expect to find this elephant.

Settlements are the heart of the Superfund statute. EPA’s efforts to negotiate settlement agreements and issue orders for cleanups account for approximately 69% of all cleanup work currently underway. The Act commands EPA to proceed by settlement “[w]henver practicable and in the public interest ... in order to expedite effective remedial actions and minimize litigation.” EPA, for its part, “prefers to reach an agreement with a potentially responsible party (PRP) to clean up a Superfund site instead of issuing an order or paying for it and recovering the cleanup costs later.”

* * *

What is more, Atlantic Richfield remains potentially liable under state law for compensatory damages, including loss of use and enjoyment of property, diminution of value, incidental and consequential damages, and annoyance and discomfort. The damages issue before the Court is whether Atlantic Richfield is also liable for the landowners’ own remediation beyond that required under the Act. Even then, the answer is yes—so long as the landowners first obtain EPA approval for the remedial work they seek to carry out.

* * *

As a last ditch effort, the landowners contend that, even if § 107(a) defines potentially responsible parties, they qualify as contiguous property owners under § 107(q), which would pull them outside the scope of § 107(a). The landowners are correct that contiguous property owners are not potentially responsible parties. Section 107(q)(1)(A) provides that “[a] person that owns real property that is contiguous to or otherwise similarly situated with respect to, and that is or may be contaminated by a release or threatened release of a hazardous substance from, real property that is not owned by that person shall not be considered” an owner of a facility under § 107(a). The problem for the landowners is that there are eight further requirements to qualify as a contiguous property owner. Each landowner individually must “establish by a preponderance of the evidence” that he satisfies the criteria.

The landowners cannot clear this high bar. One of the eight requirements is that, at the time the person acquired the property, the person “did not know or have reason to know that the property was or could be contaminated by a release or threatened release of one or more hazardous substances.” All of the landowners here purchased their

property after the Anaconda Company built the Washington Monument sized smelter. Indeed “evidence of public knowledge” of contamination was “almost overwhelming.” In the early 1900s, the Anaconda Company actually obtained smoke and tailing easements authorizing the disposition of smelter waste onto many properties now owned by the landowners. The landowners had reason to know their property “could be contaminated by a release or threatened release” of a hazardous substance.

At any rate, contiguous landowners must provide “full cooperation, assistance, and access” to EPA and those carrying out Superfund cleanups in order to maintain that status. But the Government has represented that the landowners’ restoration plan, if implemented, would interfere with its cleanup by, for example, digging up contaminated soil that has been deliberately capped in place. If that is true, the landowners’ plan would soon trigger a lack of cooperation between EPA and the landowners. At that point, the landowners would no longer qualify as contiguous landowners and we would be back to square one.

The Montana Supreme Court erred in holding that the landowners were not potentially responsible parties under § 122(e)(6) and therefore did not need to seek EPA approval. Montana law requires that “an award of restoration damages actually ... be used to repair the damaged property.” But such action cannot be taken in the absence of EPA approval. That approval process, if pursued, could ameliorate any conflict between the landowners’ restoration plan and EPA’s Superfund cleanup, just as Congress envisioned. In the absence of EPA approval of the current restoration plan, we have no occasion to entertain Atlantic Richfield’s claim that the Act otherwise preempts the plan.

The judgment of the Montana Supreme Court is affirmed in part and vacated in part. The case is remanded for further proceedings not inconsistent with this opinion.

It is so ordered.

Justice GORSUCH, with whom Justice THOMAS joins, concurring in part and dissenting in part.

For nearly a century, Atlantic Richfield’s predecessor operated a smelter near the town of Opportunity, Montana. At one time, the smelter produced much of the Nation’s copper supply and served as the State’s largest employer. Eventually, though, it became apparent the smelter was producing more than just copper and jobs. Studies showed that the plant emitted up to 62 tons of arsenic and 10 tons of lead each day. Thanks to what was once the world’s tallest brick smokestack, these heavy metals blanketed the town and the whole of the Deer Lodge Valley—contaminating hundreds of square miles. Today, the smokestack is all that

is left of the once massive operation. It stands alone in a state park, much of which remains dangerously contaminated and closed to the public. Visitors may view the stack, but only from a distance, through fences and between huge slag piles.

This case involves nearly 100 nearby residents. Some have lived in their homes for decades, some long before the environmental consequences of the smelter were fully appreciated. They say they have thought about moving, but for many their property values aren't what they once were. Besides, as one homeowner put it, "I couldn't find a kitchen door that's got all my kids' heights on it."

The federal government has tried to help in its own way. In 1983, the government designated the 300-square-mile area surrounding the smelter a Superfund site under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). After years of study and negotiation, the government ordered Atlantic Richfield to remove up to 18 inches of soil in residential yards with arsenic levels exceeding 250 parts per million (ppm). For so-called "pasture land"—that is, nearly everything else—the government set the threshold for soil removal at 1,000 ppm. By way of reference, even 100 ppm is sometimes considered too toxic for local landfills, and the federal government itself has elsewhere set a threshold of 25 ppm. Some States set residential cleanup levels as low as 0.04 ppm.

The cleanup work that followed left much to be desired. By 2016, Atlantic Richfield claimed that it had virtually finished work on the landowners' properties. Yet, only 24 of their 77 properties had been remediated, and only about 5 percent of the total acreage had been touched. Soil near Tammy Peters's daycare playground, for example, still shows an arsenic level of 292 ppm. But because the "weighted average" for her yard is below 250 ppm, Atlantic Richfield performed no cleanup of the playground at all.

So the landowners here proceeded as landowners historically have: They sought remedies for the pollution on their lands in state court under state law. * * * The Montana Supreme Court has held that the landowners' case states a viable claim for relief and warrants trial.

Now, however, Atlantic Richfield wants us to call a halt to the proceedings. The company insists that CERCLA preempts and prohibits common law tort suits like this one. On Atlantic Richfield's telling, CERCLA even prevents private landowners from voluntarily remediating their own properties at their own expense. No one may do anything in 300 square miles of Montana, the company insists, without first securing the federal government's permission.

But what in the law commands that result? Everything in CERCLA suggests that it seeks to supplement, not supplant, traditional state law remedies and promote, not prohibit, efforts to restore contaminated land.

* * *

So how does Atlantic Richfield seek to transform CERCLA from a tool to aid cleanups into a ban on them? * * * Atlantic Richfield directs our attention to § 122(e)(6). It's a provision buried in a section captioned "Settlements." The section outlines the process private parties must follow to negotiate a settlement and release of CERCLA liability with the federal government. Subsection (e)(6) bears the title "Inconsistent response action" and states that, "[w]hen either the President, or a potentially responsible party pursuant to an administrative order or consent decree under this chapter, has initiated a remedial investigation and feasibility study for a particular facility under this chapter, no potentially responsible party may undertake any remedial action at the facility unless such remedial action has been authorized by the President." So even read for all its worth, this provision only bars those "potentially responsible" to the federal government from initiating cleanup efforts without prior approval. To get where it needs to go, Atlantic Richfield must find some way to label the innocent landowners here "potentially responsible part[ies]" on the hook for cleanup duties with the federal government.

They are hardly that. When interpreting a statute, this Court applies the law's ordinary public meaning at the time of the statute's adoption, here 1980. To be "potentially responsible" for something meant then, as it does today, that a person could possibly be held accountable for it; the outcome is capable of happening. And there is simply no way the landowners here are potentially, possibly, or capable of being held liable by the federal government for anything. In the first place, the federal government never notified the landowners that they might be responsible parties, as it must under § 122(e)(1). Additionally, everyone admits that the period allowed for bringing a CERCLA claim against them has long since passed under § 113(g)(2)(B). On any reasonable account, the landowners are potentially responsible to the government for exactly nothing.

Statutory context is of a piece with the narrow text. Nothing in § 122 affects the rights of strangers to the federal government's settlement process. Everything in the section speaks to the details of that process. * * * It says nothing about the rights and duties of individuals who, like the landowners here, have nothing to settle because they face no potential liability.

* * *

Atlantic Richfield's replies do nothing to address these problems. Instead of making some helpful textual or contextual rejoinder about § 122,

the company asks us look somewhere else entirely. Now, Atlantic Richfield says, we should direct our attention to § 107, a provision that lists four classes of “[c]overed persons” the federal government is authorized to sue under CERCLA. One of these classes encompasses any person who owns a “facility” where hazardous waste has “come to be located.” Because the landowners’ properties qualify as “facilit[ies]” where Atlantic Richfield’s waste has come to be located, everyone admits the landowners themselves are “[c]overed persons.” And, according to Atlantic Richfield, this necessarily means they are also “potentially responsible part[ies]” subject to § 122(e)(6)’s requirement that they seek federal permission before proceeding with any cleanup.

But notice the linguistic contortion and logical leap. Linguistically, § 107 identifies the “[c]overed persons” the government is authorized to sue. Section 122 requires a “potentially responsible party” seeking settlement with and discharge of liability from the federal government to obtain its permission before engaging in a cleanup. The terms use different language, appear in different statutory sections, and address different matters.

* * *

Under the plain and ordinary meaning of the statutory terms before us, these landowners are not potentially responsible parties and CERCLA doesn’t require them to seek permission from federal officials before cleaning their own lands. If Congress had wished to extend its ask-before-cleaning rule to every covered person—including those the government chooses not to pursue for potential liability—all it had to do was say so. Congress displayed no trouble using the term “[c]overed persons” elsewhere in the statute. Conspicuously, it made a different choice here.

* * *

In the end, the company’s case cannot help but be seen for what it really is: an appeal to policy. On its view, things would be so much more orderly if the federal government ran everything. And, let’s be honest, the implication here is that property owners cannot be trusted to clean up their lands without causing trouble (especially for Atlantic Richfield). Nor, we are told, should Montanans worry so much: The restrictions Atlantic Richfield proposes aren’t really that draconian because homeowners would still be free to do things like build sandboxes for their grandchildren (provided, of course, they don’t scoop out too much arsenic in the process).

But, as in so many cases that come before this Court, the policy arguments here cut both ways. Maybe paternalistic central planning cannot tolerate parallel state law efforts to restore state lands. But maybe, too, good government and environmental protection would be better served if state law remedies proceeded alongside federal efforts. State and federal law enforcement usually work in just this way, complementing rather than displacing one another. And, anyway, how long would Atlantic Richfield

have us enforce what amounts to a federal easement requiring landowners to house toxic waste on their lands? The government has been on site since 1983; work supposedly finished around the landowners' homes in 2016; the completion of "primary" cleanup efforts is "estimated" to happen by 2025. So, yes, once a Superfund site is "delisted," the restrictions on potentially responsible parties fade away. But this project is well on its way to the half-century mark and still only a "preliminary" deadline lies on the horizon. No one before us will even hazard a guess when the work will finish and a "delisting" might come. On Atlantic Richfield's view, generations have come and gone and more may follow before the plaintiffs can clean their land.

The real problem, of course, is that Congress, not this Court, is supposed to make judgments between competing policy arguments like these. And, as we've seen, Congress has offered its judgment repeatedly and clearly. CERCLA sought to add to, not detract from, state law remedial efforts. It endorsed a federalized, not a centralized, approach to environmental protection. What if private or state cleanup efforts really do somehow interfere with federal interests? Congress didn't neglect the possibility. But instead of requiring state officials and local landowners to beg Washington for permission, Congress authorized the federal government to seek injunctive relief in court. Atlantic Richfield would have us turn this system upside down, recasting the statute's presumption in favor of cooperative federalism into a presumption of federal absolutism.

While I agree with the Court's assessment in Parts I and II of its opinion that we have jurisdiction to hear this case, I cannot agree with its ruling on the merits in Part III. Departing from CERCLA's terms in this way transforms it from a law that supplements state environmental restoration efforts into one that prohibits them. Along the way, it strips away ancient common law rights from innocent landowners and forces them to suffer toxic waste in their backyards, playgrounds, and farms. Respectfully, that is not what the law was written to do; that is what it was written to prevent.

Can a PRP sue for contribution under CERCLA after a settlement resolving environmental liabilities under another statute? In *Guam v. United States*, 593 U. S. ____ slip op (May 24, 2021), the Court took up the question whether a party must resolve a CERCLA-specific liability in order to trigger a contribution action under CERCLA section §113(f)(3)(B) or whether a settlement involving non-CERCLA environmental liabilities is sufficient. The case involved the Ordot Dump, a "280-foot mountain of trash" near the center of the island of Guam. After constructing the dump in the 1940s, the United States Navy allegedly deposited toxic military waste there for several decades. The United States later ceded control of

the site to Guam, which itself used the dump as a public landfill. Many years later, the EPA determined that the dump posed a hazard to the surrounding environment and directed Guam to remediate the site. After Guam failed to comply with the EPA directives, the Agency sued under the Clean Water Act, asserting that Guam was “discharging pollutants . . . into waters of the United States without obtaining a permit.” Guam and the EPA entered into a consent decree in 2004 under which Guam agreed to pay a civil penalty and to remediate the site in return for a full settlement and satisfaction of Guam’s Clean Water Act liabilities. The settlement did not resolve Guam’s other potential liabilities for the site. In 2017, Guam then sued the United States under CERCLA on the grounds that the United States earlier use of the site had exposed it to CERCLA liability under either §107 (cost recovery) or §113 (contribution). The D.C. Circuit found that Guam did not have a §107 action but did—at one time—have a possible §113 contribution action against the United States as a result of its settlement of the previous Clean Water Act liabilities. But because the three-year statute of limitations for contribution actions had run, the D.C. Circuit held that Guam had no remedy. The Supreme Court granted certiorari and reversed in a unanimous decision. The Court noted that the provision at issue—§113(f)(3)(B)—recognizes a statutory right to contribution in the specific circumstance where a person “has resolved its liability” via “settlement.” Reading this provision in its broader statutory context, the Court held “[t]he most natural reading of §113(f)(3)(B) is that a party may seek contribution under CERCLA only after settling a CERCLA-specific liability.”

3. CLEANING UP CONTAMINATED SITES

Page 826, Insert at end of chapter

f. Climate Change Impacts on Superfund Sites

In 2017, Hurricane Harvey dumped an unprecedented amount of rainfall over the greater Houston area, damaging several Superfund sites that contain hazardous substances. At one site on the San Jacinto River in Texas, floodwater eroded part of the structure containing such substances, including dioxins, which are known human carcinogens and among the most toxic substances ever evaluated. Sampling at the site after Harvey found dioxin concentrations of over 70,000 nanograms per kilogram—far above the site clean-up level of 30 nanograms per kilogram. A 2019 GAO report found that 60% of all non-federal superfund sites are located in areas that may be impacted by climate change, including flooding, storm surge, wildfires, and sea level rise. See U.S. GAO, *Superfund: EPA Should Take Additional Actions to Manage Risks from Climate Change*, GAO-20-73 (Oct. 2019), available at: <https://www.gao.gov/assets/gao-20-73.pdf>.

CHAPTER 9

REGULATION OF TOXIC SUBSTANCES AND GENETICALLY MODIFIED ORGANISMS

■ ■ ■

H. REGULATING PESTICIDES

1. THE PESTICIDE PROBLEM

Page 828, insert after the first full paragraph:

A recent study by the U.S. Geological Survey found pesticides and their breakdown products in 90% of streams tested. The study focused on small streams in urban and rural watersheds across the country. Among the most frequently detected pesticides was atrazine, which was found in roughly half of all sampled streams. The study is the most geographically extensive to date. It also highlighted the general lack of information on the toxicity of pesticide breakdown products or what the report refers to as pesticide transformation products (TPs). According to the report, toxicity information is available for only about 25% of the TPs analyzed for the study. If one assumes that TPs have the same toxicity as their parent pesticide, the report concluded that the potential aquatic effects of pesticide-related compounds could be underestimated by an order of magnitude or more. See USGS, *Pesticide Transformation Products are Nearly Ubiquitous in Small U.S. Streams*, (March 11, 2021) available at: https://www.usgs.gov/center-news/pesticide-transformation-products-are-nearly-ubiquitous-small-us-streams?qt-news_science_products=1#qt-news_science_products.

3. ESTABLISHING TOLERANCES FOR PESTICIDE RESIDUES ON FOOD

Page 851, insert the following at the end of Note 4:

In April 2019, in response to a request for rehearing *en banc*, the 9th Circuit ordered EPA to issue a “full and final decision” on chlorpyrifos within 90 days. See *LULAC v. Wheeler*, 922 F.3d 443 (9th Cir. 2019). In July 2019, EPA issued its decision, refusing to revoke the tolerances and cancel the registrations for chlorpyrifos on the grounds that the claims regarding neurodevelopmental toxicity were not supported by valid, complete, and reliable evidence. The Agency also claimed that it could forgo further consideration of the question of chlorpyrifos’s safety until chlorpyrifos

underwent a registration re-review under FIFRA. *See Chlorpyrifos; Final Order Denying Objections to March 2017 Petition Denial Order* (84 FR 35555, July 24, 2019). In April 2021, the 9th Circuit held in a split decision that EPA's 2019 rule was "a total abdication of the EPA's statutory duty under the FFDCA" and ordered the agency to issue a final rule within 60 days "either to modify chlorpyrifos tolerances *and* concomitantly publish a finding that the modified tolerances are safe, including for infants and children – or to revoke all chlorpyrifos tolerances." The Court also ordered EPA to correspondingly modify or cancel the related FIFRA registrations for chlorpyrifos regarding food use in a timely fashion consistent with the requirements of 21 U.S.C. § 346a(a)(1). *See LULAC v. Regan*, 996 F.3d 673 (9th Cir., 2021). In response to EPA's delay, several states, including California, have banned chlorpyrifos. And in February 2020, the leading manufacturer of chlorpyrifos, Corteva Agriscience (a 2019 spinoff of the crop protection business of DowDuPont) announced that it would stop producing the pesticide by the end of 2020.

I. REGULATING INDUSTRIAL CHEMICALS

3. TSCA 2.0: KEY PROVISIONS OF THE REVISED STATUTE

Page 867, insert the following after Note 2 and renumber subsequent notes:

3. Pursuant to the amended section 8 of TSCA, EPA issued a final rule on the TSCA inventory reset in 2017. *See TSCA Inventory Notification (Active-Inactive) Requirements*, (82 FR 37520, Aug. 11, 2017). Among other things, the rule allows companies to assert claims of confidentiality over certain chemicals as long as they substantiate those claims. The Environmental Defense Fund challenged various aspects of the rule, including EPA's decision to forego any requirements that a company substantiate claims of confidentiality on the basis of that the company have a reasonable basis for believing that the information is not readily discoverable through reverse engineering (and thus not eligible for confidential treatment). In 2019, the D.C. Circuit held that this particular provision of the rule was arbitrary and capricious. *See EDF v. EPA*, 922 F.3d 446 (D.C. Cir. 2019). What is the policy concern here and what in your view is the appropriate balance between industry concerns regarding confidentiality and the public health goals of a complete TSCA inventory of chemicals in commerce?

Page 868, insert the following after Note 3 (renumbered as Note 4):

SAFER CHEMICALS, HEALTHY FAMILIES V. U.S. ENVIRONMENTAL PROTECTION AGENCY

United States Court of Appeals, Ninth Circuit, 2019.
943 F.3d 397

MICHELLE T. FRIEDLAND, CIRCUIT JUDGE:

Petitioners, a variety of environmental groups and other organizations, seek review of a rule promulgated by the United States Environmental Protection Agency (“EPA” or “the Agency”) establishing a process to evaluate the health and environmental risks of chemical substances. EPA promulgated the “Risk Evaluation Rule” under its authority granted by 15 U.S.C. § 2605(b)(4)(B), a provision added in 2016 to the Toxic Substances Control Act (“TSCA”). Petitioners argue that provisions in the Risk Evaluation Rule relating to the Agency’s evaluation of the risks from a substance’s “conditions of use” violate several of TSCA’s requirements. Specifically, Petitioners argue: (1) that TSCA requires EPA to evaluate risks associated with a chemical’s uses collectively before determining that the chemical is safe; (2) that EPA must consider all of a chemical’s conditions of use in that evaluation; and (3) that, when considering conditions of use, EPA must evaluate past disposals of all chemicals, as well as the use and subsequent disposal of chemicals not currently or prospectively manufactured or distributed in commerce for that use. Petitioners argue that various provisions of the Risk Evaluation Rule demonstrate that EPA will not do any of these three things.

We hold that we lack jurisdiction to review Petitioners’ first challenge, and that their second fails on the merits. But we grant in part the Petition for Review with respect to Petitioners’ third challenge.

I.

A.

Congress enacted TSCA in 1976 “to prevent unreasonable risks of injury to health or the environment associated with the manufacture, processing, distribution in commerce, use, or disposal of chemical substances.” TSCA was “designed to fill a number of regulatory gaps” in premarket review, regulation of chemicals themselves (rather than regulation of discharges, emissions, ambient air, or consumer products), and information-gathering responsibility. TSCA required EPA to regulate chemical substances that the Agency found to “present an unreasonable risk of injury to health or the environment.” As originally enacted, however, TSCA did not provide a specific process or timeline by which EPA was required to evaluate a substance’s risks.

In the decades following TSCA’s passage, Congress found that “effective implementation of TSCA by [EPA] ha[d] been challenged by shortcomings in the statute itself, and by several key decisions of Federal Courts and the Agency’s interpretation of those decisions.” There had “been persistent concerns about the pace of EPA’s work under TSCA, the ability of the Agency to use its existing authority, and whether the statute prevent[ed] certain regulatory efforts.” Congress accordingly amended TSCA in 2016. See Frank R. Lautenberg Chemical Safety for the 21st Century Act, Pub. L. No. 114-182, 130 Stat. 448 (2016) (codified at 15 U.S.C. § 2601 et seq.).

The 2016 amendments “restructur[ed] the way ... chemicals are evaluated and regulated,” but Congress’s policy goals reflected in the 1976 Act remained “intact.” Congress intended through the amendments “to provide broad

protection of human health and the environment,” and “to improve availability of information about chemicals.”

B.

The 2016 amendments create, among other things, “a separate risk evaluation process for determining whether a chemical substance presents or will present an unreasonable risk of injury,” and prescribe statutory deadlines by which EPA is required to complete such evaluations. The amendments also direct EPA’s Administrator to prioritize evaluations of the risks of chemicals considered to be the most dangerous. And once EPA determines that a particular chemical substance is associated with an unreasonable risk, the Agency is required to regulate that substance.

With respect to prioritizing risk evaluations, TSCA requires that the Administrator “designate as a high-priority substance a chemical substance that the Administrator concludes ... may present an unreasonable risk of injury to health or the environment ... under the conditions of use.” The Administrator must designate a substance as “low-priority” if “such substance does not meet the standard” to be high-priority.

For chemical substances that EPA designates as high-priority, the Agency must initiate and complete a risk evaluation of the chemical within three years, with a possible six-month extension. EPA must also conduct some risk evaluations at the request of chemical manufacturers (“manufacturer-requested risk evaluations”).

TSCA’s risk evaluation provision requires EPA to evaluate chemical substances under their “conditions of use.” Specifically, TSCA states:

The Administrator shall conduct risk evaluations pursuant to this paragraph to determine whether a chemical substance presents an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant to the risk evaluation by the Administrator, under the conditions of use.

The term “conditions of use” is defined to mean “the circumstances, as determined by the Administrator, under which a chemical substance is intended, known, or reasonably foreseen to be manufactured, processed, distributed in commerce, used, or disposed of.” In the early stages of the risk evaluation process, TSCA requires EPA to list in a published scope document the conditions of use it “expects to consider” for the chemical substance being evaluated.

Once a risk evaluation is completed, if the Administrator determines based on that evaluation “that the manufacture, processing, distribution in commerce, use, or disposal of a chemical substance or mixture, or that any combination of such activities, presents an unreasonable risk of injury to health or the environment, the Administrator shall” promulgate rules regulating that chemical substance so that it “no longer presents such [an unreasonable] risk.”

In order to effectuate TSCA's statutory requirements, Congress instructed EPA to "establish, by rule, a risk-based screening process, including criteria for designating chemical substances as" either high-priority or low-priority for risk evaluation. EPA was also required to establish by rule "a process to conduct risk evaluations."

* * *

C.

In accordance with TSCA, EPA issued rules for prioritization and risk evaluation in July 2017. The Risk Evaluation Rule states, generally, that EPA will evaluate chemical substances under their conditions of use:

As part of the risk evaluation, EPA will determine whether the chemical substance presents an unreasonable risk of injury to health or the environment under each condition of uses [sic] within the scope of the risk evaluation, either in a single decision document or in multiple decision documents.

The Risk Evaluation Rule similarly explains that "[t]he scope of the risk evaluation will include," among other things, "[t]he condition(s) of use, as determined by the Administrator, that the EPA plans to consider in the risk evaluation." "Conditions of use" is defined in the Risk Evaluation Rule as "the circumstances, as determined by the Administrator, under which a chemical substance is intended, known, or reasonably foreseen to be manufactured, processed, distributed in commerce, used, or disposed of"—the same definition as in TSCA itself.

In the preamble to the Risk Evaluation Rule, EPA states that three categories of uses and activities are excluded from the definition of conditions of use. Procedures for Chemical Risk Evaluation Under the Amended Toxic Substances Control Act. These are: (1) "circumstances associated with activities that do not reflect ongoing or prospective manufacturing, processing, or distribution," which the Agency calls "legacy uses"; (2) "disposals from such uses," which the Agency calls "associated disposal"; and (3) "disposals that have already occurred," which the Agency calls "legacy disposal." In this litigation, EPA refers to these uses and activities collectively as "legacy activities."

* * *

II.

A.

Petitioners first challenge provisions of the Risk Evaluation Rule relating to the process by which EPA will conduct risk determinations. Petitioners argue that several provisions in the Rule assert that EPA has authority to determine whether individual conditions of use, in isolation, pose unreasonable risks, rather than to evaluate the risks posed by a chemical substance holistically.

* * *

We conclude that Petitioners' challenge regarding use-by-use risk evaluations is not justiciable because it is not clear, due to the ambiguous text of the Risk Evaluation Rule, whether the Agency will actually conduct risk evaluations in the manner Petitioners fear.

* * *

Because Petitioners' theory of injury is dependent upon harm caused by a failure to assess all conditions of use together, and because it is very uncertain whether EPA ever plans to do what Petitioners fear, Petitioners' alleged injury is too speculative at this time to establish Article III jurisdiction. If EPA does, in the future, fail to consider all conditions of use together in completing a risk evaluation, and if Petitioners are harmed by that failure, then Petitioners may, under TSCA, seek review of EPA's "no unreasonable risk" determination. Petitioners would at that time have standing to sue, and such a claim would be ripe for review. And EPA has insisted—both at oral argument and in its briefing here—that Petitioners would be able to challenge an allegedly improper risk determination.

B.

Petitioners next argue that the Risk Evaluation Rule contravenes TSCA's requirement that EPA consider all of a chemical's conditions of use when conducting a risk evaluation—which Petitioners assert is required whether or not Petitioners are correct in their argument, discussed above, that the risk analysis should look at uses collectively.

* * *

Petitioners' challenge to the Rule's scope provisions, however, fails on the merits. The problem with Petitioners' theory is that the meaning they attribute to these provisions is inconsistent with the provisions themselves. The phrase "the conditions of use within the scope of" an evaluation simply refers to the conditions of use that are applicable to any particular substance—and that therefore are included in the scope of that substance's evaluation—without excluding any conditions of use in forming that list. Likewise, the phrase that refers to the conditions of use "that the EPA plans to consider" simply refers to the Agency's role in determining what the conditions of use are for a particular substance. Petitioners effectively acknowledge as much in arguing that the similar language of TSCA itself referring to the conditions of use that the Administrator "expects to consider" does not grant EPA discretion to exclude conditions of use. We see no reason why "plans to consider" should be read differently than "expects to consider."

C.

Finally, we turn to Petitioners' challenge to EPA's categorical exclusion of legacy activities from the definition of "conditions of use."

TSCA defines the term "conditions of use" to mean: "the circumstances, as determined by the Administrator, under which a chemical substance is intended, known, or reasonably foreseen to be manufactured, processed, distributed in commerce, used, or disposed of." The definition in the Risk

Evaluation Rule parrots the statute. In the preamble to the Risk Evaluation Rule, EPA elaborated on this definition, however, and stated that it does not consider what it now calls “legacy activities”—consisting of “legacy uses,” “associated disposals,” and “legacy disposals”—to be conditions of use.

EPA defines the term “legacy uses” in the preamble as “the circumstances associated with activities that do not reflect ongoing or prospective manufacturing, processing, or distribution.” For example, although asbestos is now infrequently used in making new insulation, it remains in place in previously installed insulation. According to EPA’s interpretation, the use of asbestos in insulation is a “legacy use” of that chemical. “Associated disposal[s]” refers to future disposals from legacy uses, *id.*, such as the removal of asbestos-containing insulation to a landfill during a building’s renovation. Finally, “legacy disposal[s]” are defined as “disposals that have already occurred,” regardless of whether the substance disposed of is still manufactured for its pre-disposal use. For example, this could refer to the previous placement of asbestos insulation into a landfill or the previous disposal of a chemical substance in a flame retardant that is still used for that purpose. Petitioners argue that EPA’s exclusion of these legacy activities from the definition of “conditions of use” contradicts TSCA’s clear statutory definition of the term.

* * *

1.

* * *

Petitioners argue that their members are exposed to—and injured by—the use of chemical substances through legacy activities. For example, Petitioner United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union has members who, through their work, are exposed to the known carcinogen asbestos in the form of legacy uses when “equipment or structures are demolished, repaired[,] or refurbished.” Petitioners also argue that their members are at risk of exposure to asbestos through its associated disposal. Petitioners similarly claim that their members suffer harmful lead exposures resulting from the “legacy use” of lead paint and water pipes.

Petitioners have standing to challenge this exclusion, and their challenge is ripe. As Petitioners point out, EPA’s interpretation here is “definitional,” and generally “requir[es] EPA to ignore ongoing exposures from ‘legacy activities’ in every risk evaluation.” Petitioners claim that excluding these ongoing exposures from consideration will understate a chemical’s health risks, violating Petitioners’ right to risk evaluations that comply with TSCA. They argue that this threatens their concrete interest in the health protections provided by TSCA. EPA’s exclusion of legacy activities from the definition of “conditions of use” has the clear, immediate effect of excluding broad categories of activities from EPA’s consideration in chemical risk evaluations, and Petitioners’ alleged resulting injury is sufficiently clear and concretely tied to

the challenged preamble to satisfy the requirements of both standing and ripeness

2.

In reviewing an agency's interpretation of a statute, we apply the standard articulated by the Supreme Court in *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984). Under Chevron step one, we ask "whether Congress has directly spoken to the precise question at issue." At that point, "[i]f the intent of Congress is clear, that is the end of the matter; ... [we] must give effect to the unambiguously expressed intent of Congress." But if "the statute is silent or ambiguous with respect to the specific issue, we must ask" at Chevron step two "whether the regulations promulgated by the agency are based on a permissible construction of the statute." If they are, we "must defer to the agency." We need not defer to agency regulations, however, "if they construe a statute in a way that is contrary to congressional intent or that frustrates congressional policy."

* * *

TSCA defines "conditions of use" as "the circumstances, as determined by the Administrator, under which a chemical substance is intended, known, or reasonably foreseen to be manufactured, processed, distributed in commerce, used, or disposed of." Interpreting this statutory text in the preamble to the Rule, EPA relied on what it understood to be TSCA's "focus on uses for which manufacturing, processing, or distribution in commerce is intended, known to be occurring, or reasonably foreseen to occur (i.e., is prospective or on-going), rather than reaching back to evaluate the risks associated with legacy uses, associated disposal, and legacy disposal." As evidence, EPA pointed to the "to be" phrasing in TSCA's definition of "conditions of use." EPA also noted that TSCA's legislative history focuses on the regulation of chemicals "in commerce." Finally, the Agency stated that TSCA does not authorize it to regulate uses of chemicals except by regulating chemicals' manufacture, processing, or distribution. For example, although EPA could regulate the production of a flame retardant for use in home furniture, the Agency contends in its briefing here that it could not prevent individuals who already own furniture treated with that flame retardant from continuing to use that furniture. Together, such considerations led EPA to give TSCA a "prospective interpretation" that excludes legacy activities.

In defending its interpretation here, EPA draws on these explanations given in the preamble. EPA further argues that the terms "intended" and "reasonably foreseen" as used in TSCA's definition of "conditions of use" "are plainly forward looking"; that "known," when combined with "to be," is a "present tense verb"; and that "intended," "known," and "reasonably foreseen" are all "broad, general terms that plainly require EPA to exercise its judgment." This language, EPA contends, demonstrates that Congress intended EPA to focus on activities for which the manufacturing, processing, or distribution in commerce of a chemical is intended, known, or reasonably foreseen. EPA also argues that it would make little sense to interpret

conditions of use to include activities that EPA has little time to evaluate or ability to regulate, and that TSCA should be interpreted to allow the Agency to focus on quickly regulating the worst risks, which it contends do not arise from legacy activities.

Petitioners argue that EPA's interpretation is contradicted by the plain text of TSCA's statutory definition of "conditions of use," and is not saved by any grant of unfettered discretion to the Agency. Petitioners argue that EPA's interpretation, which only includes the use and subsequent disposal of chemicals that also continue to be manufactured, processed, or distributed in commerce for that same use, fails to give independent meaning to "use" and "disposal" in the statutory definition's disjunctive list ("manufactured, processed, distributed in commerce, used, or disposed of"). For instance, Petitioners note, "lead pipes are 'known to be used' in water distribution systems," and "[t]his is true regardless of whether lead pipes continue to be manufactured or distributed." Petitioners also argue that an interpretation that "would result in inconsistent treatment of identical activities based solely on whether manufacture or distribution is ongoing," as EPA's would, does not square with TSCA itself. Petitioners dispute EPA's claim that, when a substance is no longer manufactured or distributed for a particular use, it is unable to evaluate or regulate that use and associated disposal, and argue that even if EPA's assertions to that effect were correct, that would not necessitate a finding that EPA could therefore exclude consideration of such use and disposal from risk evaluations. They further argue that because previously disposed substances continue to be present at disposal sites, their disposal is ongoing, and captured by TSCA's definition. Finally, Petitioners generally contend that EPA's exclusion of legacy activities "undermine[s] TSCA's core aim to prevent unreasonable risks to health and the environment from toxic chemicals."

EPA's contention that TSCA can reasonably be read to refer to the future use of a product, and disposals associated with such use, only when the product will also be manufactured in the future for that use—and not when the product is no longer manufactured for the relevant use—is without merit. TSCA's "conditions of use" definition plainly addresses conditions of use of chemical substances that will be used or disposed of in the future, regardless of whether the substances are still manufactured for the particular use.

Although we agree with EPA that the phrase "to be" in the statutory definition denotes the present or future tense, when "to be" is combined with "used" and "disposed of," two plain meanings result: future uses and future disposals. And these are precisely the things that EPA has purported to exclude by defining conditions of use to exclude legacy uses and associated disposals: activities (i.e., uses), "that do not reflect ongoing or prospective manufacturing, processing, or distribution," and "disposals from such uses," such as "the future disposal of insulation that contains a chemical substance that is no longer manufactured, processed, or distributed for use in insulation."

The example used by EPA in the Risk Evaluation Rule's preamble—the disposal of insulation previously installed in a building—in fact serves as a useful example for why the Agency's interpretation cannot be upheld: The future disposal of asbestos insulation is clearly an example of a chemical substance being “disposed of.” To the extent it is “intended” that such a substance be disposed of, or “known” that it will be, or if such disposal is “reasonably foreseen,” that circumstance unambiguously falls within TSCA's definition of “conditions of use.” Similarly, as Petitioners point out, if lead pipes exist in water distribution systems, they are “known to be used” in those systems. This is so without any regard to whether these substances are also intended, known, or reasonably foreseen to be prospectively manufactured (or processed, or distributed in commerce) for those uses.

EPA resists this conclusion, arguing that the Agency has broad discretion, granted to it by TSCA, to determine what constitutes a condition of use. We agree that the statute grants EPA discretion to determine the conditions of use for each chemical substance, but that discretion may only be exercised within the bounds of the statutory definition itself. Where Congress has explicitly provided a definition for a term, and that definition is clear, an agency must follow it. And here, as we have explained, TSCA's definition of “conditions of use” clearly includes uses and future disposals of chemicals even if those chemicals were only historically manufactured for those uses. EPA's exclusion of legacy uses and associated disposals from the definition of “conditions of use” is therefore unlawful.

We draw a distinction, however, between “legacy uses” and “associated disposals,” on the one hand, and “legacy disposals,” on the other. EPA uses the term “legacy disposals” to refer to “disposals that have already occurred (e.g., a chemical substance currently in a landfill or in groundwater).” As to this issue, EPA's present tense argument has more force, and we hold that its interpretation is permissible under TSCA.

In our view, TSCA unambiguously does not require past disposals to be considered conditions of use. The statutory definition, once again, covers the circumstances “under which a chemical substance is intended, known, or reasonably foreseen to be manufactured, processed, distributed in commerce, used, or disposed of.” A substance that has already been disposed of will not ordinarily be intended, known, or reasonably foreseen to be prospectively manufactured, processed, distributed in commerce, used, or (again) disposed of. Of course, there may be some substances that already have been disposed of yet are also “known ... to be ... distributed in commerce” or used. And TSCA's definition does, as discussed above, clearly cover those substances and those prospective uses. But TSCA does not address a substance that has already been disposed of and remains so.

Petitioners argue that “disposal” in this context “is not a one-time occurrence when the substance ... is buried or placed in a landfill or other waste facility,” but rather that disposal “remains ongoing after the initial act of discard.” By way of example, Petitioners note that although TSCA itself does not define the term “disposal,” EPA has previously defined the term in the

context of regulating chemicals known as PCBs, under the pre-2016 TSCA. In that context, EPA defines “disposal” to mean “intentionally or accidentally to discard, throw away, or otherwise complete or terminate the useful life of PCBs and PCB Items,” and specifically notes that “[d]isposal includes spills, leaks, and other uncontrolled discharges of PCBs as well as actions related to containing, transporting, destroying, degrading, decontaminating, or confining PCBs and PCB Items.” EPA takes issue with Petitioners’ reliance on this definition, but acknowledges in its briefing here that the term “disposed of” could refer to “the act of putting something in a landfill or other resting place, or it could conceivably refer to the movement of chemicals by natural forces after the initial act of disposal.”

We need not wade into any debate over the precise meaning of “disposal.” Even accepting Petitioners’ asserted definition, we see no reason why “spills, leaks, and other uncontrolled discharges”—or even “actions related to containing ... or confining” substances as also referenced in 40 C.F.R. § 761.3—would not be considered independent disposals. They would thus qualify as “disposals” (and therefore conditions of use) for substances that are currently manufactured for their pre-disposal use, or “associated disposals” for substances that are no longer manufactured for their pre-disposal use. If, under the applicable definition of “disposal,” something is in fact again disposed of—even if it was disposed of previously—or when a disposal is in fact ongoing, we see no reason why that use is not captured as a prospective disposal. But that does not mean that legacy disposals—as used to refer simply to “disposals that have already occurred”—should fall under the statutory definition of “conditions of use.”

Because TSCA’s statutory definition of “conditions of use” unambiguously does not reach legacy disposals, we hold that the Agency did not err in excluding such disposals from consideration as “conditions of use.”

III.

For the reasons discussed, the Petition for Review is DISMISSED in part, GRANTED in part, and DENIED in part. The Petition is dismissed with respect to Petitioners’ challenge regarding use-by-use determinations. The Petition is granted with respect to Petitioners’ challenge to EPA’s exclusion of “legacy uses” and “associated disposals” from the definition of “conditions of use,” and those portions of the Risk Evaluation Rule’s preamble are vacated. The Petition is denied with respect to the alleged exclusion of conditions of use from the scope of risk evaluation and with respect to EPA’s exclusion of “legacy disposals” from “conditions of use.” The parties shall bear their own costs on appeal.

NOTES

1. The Biden Administration has signaled that it will reconsider the Trump Era rules for TSCA implementation, including an evaluation of EPA policies, guidances, templates, and regulations under TSCA’s new chemicals

program; a review and evaluation of EPA risk assessments of ten high priority chemicals that were completed in January 2021; a reevaluation of the rules for several Persistent, Bioaccumulative and Toxic Chemicals (PBTs); a more expansive interpretation of the “conditions of use” in evaluating the risks posed by chemicals; more attention to workplace exposure; and increased attention to the impacts on vulnerable populations and potential routes of exposure, including through the ambient environment. As of June 2021, no formal regulatory action had been taken.

2. Per- and polyfluoroalkyl substances (PFAS) are a group of some 9,000 synthetic chemical compounds, including PFOA, PFOS, GenX, and many other chemicals. Known as “forever chemicals,” these compounds take thousands of years to break down in the environment. People are exposed to PFAS through multiple pathways, including food, water, air, consumer products, packaging, and pesticides (among others). PFAS are present in the bodies of nearly all people living in the United States, Europe, and most of the world. There is evidence that exposure to PFAS can lead to adverse health outcomes in humans. The most-studied PFAS chemicals are PFOA and PFOS. Studies indicate that PFOA and PFOS can cause reproductive and developmental, liver and kidney, and immunological effects in laboratory animals. Both chemicals have caused tumors in animals. The current EPA Administrator, Michael Regan, has stated that tacking the problem of PFAS will be one of his “top priorities.” Among other things, Administrator Regan has established an EPA Council on PFAS composed of senior EPA officials from across the agency to develop a comprehensive plan to use EPA’s various authorities to mitigate and reduce PFAS pollution. More specifically, the Agency has also issued a new toxicity assessment for PFAS compounds used in products such as firefighting foam and carpeting; initiated an effort to develop a national drinking water standard for PFAS; and proposed a new regulation under TSCA that would establish reporting requirements for PFAS chemicals from manufacturers. The rule is expected to be finalized in 2022.

