

C O M M E N T

Permitting and Innovation in the Digital Age

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Co-authors Eric Biber and J.B. Ruhl should be commended for providing a thoughtful framework for when agencies should consider individual versus general permitting regimes. They presented a similar framework for the Administrative Conference of the United States, which is a helpful forum for airing perspectives on important administrative law topics. While Biber and Ruhl discuss some of the key factors for agencies in designing a permitting scheme, we identify some areas where they may have relied on overly generalized assumptions and suggest additional considerations they could take into account in their model.

In particular, we want to highlight the extent to which the Environmental Protection Agency (EPA) is exploring innovation in permitting. Taking advantage of advances in digital information technology, EPA has been pursuing initiatives like electronic reporting and seeking ways to advance transparency and public participation to address environmental justice. These modern approaches make permitting work more efficiently and effectively.

We also note that the longer version of Biber and Ruhl's article is a response to Richard Epstein's 1996 article, "The Permit Power Meets the Constitution."¹ Epstein paints an extreme picture of the permitting power that is not, in our view, reflective of reality, and is based on a number of unwarranted assumptions.² As Biber and Ruhl note, Epstein "employed a caricature of permitting that bears little resemblance to permitting in action today."³ They recognize that the "reality is that the permitting system has evolved into a far more flexible, nuanced, and innovative institution in the modern administrative state."⁴ In their longer piece, Biber and Ruhl offer

increased use of general permits as an antidote to some of the problems depicted by Epstein. But in so doing, they risk implicitly accepting certain premises of Epstein that are not necessarily accurate.

To tackle these points in a succinct and hopefully entertaining way, we have organized our comment around some of the fallacies or misperceptions about permitting that are, unfortunately, repeated in many different contexts and deserve some rebuttal. We hope that Biber and Ruhl will parse some of these misconceptions as they further develop their framework.

I. Misconception #1—Agencies Do Not Make Sufficient Use of General Permits

Biber and Ruhl's recommendation encouraging greater consideration of general permits could be read to imply that agencies like EPA are not doing enough to take advantage of general permitting as a regulatory approach. To the contrary, EPA is well aware of this tool and uses it where legally authorized and appropriate.

EPA recognizes that general permits can create efficiencies for regulatory agencies and regulated entities alike. They can reduce paperwork on both sides, ensure consistent permit conditions for similar facilities, and lower transaction costs, delays, and uncertainty. General permits can serve the statutory goal of protecting public health and the environment and provide the agency with useful information about regulated facilities.⁵ In some situations, general permits may be the only realistic solution to meeting statutory goals without creating a crushing administrative workload.⁶

1. Richard A. Epstein, *The Permit Power Meets the Constitution*, 81 IOWA L. REV. 407 (1995).

2. We disagree with many aspects of Epstein's critique. For example, while Epstein paints permitting as ripe for abuse, checks and balances in the permitting process—including rulemaking to set up permitting programs, public participation requirements, and judicial review—constrain agency discretion and provide meaningful protections for permit applicants.

3. Eric Biber & J.B. Ruhl, *The Permit Power Revisited: The Theory and Practice of Regulatory Permits in the Administrative State*, 64 DUKE L.J. 133, 138 (2014).

4. *Id.* at 138-39.

5. The term "general permit" itself embraces a variety of permit structures. Some general permit programs provide automatic coverage. Others solicit certain information about the facility and type of discharge, and may also require monitoring and regular reporting. General permits can also have tiered conditions to address differences within a category of permittees. The NPDES permit regulations at 40 C.F.R. 122.28 provide an example of the variety of general permits.

6. *NRDC v. Costle*, 568 F.2d 1369, 1380 (D.C. Cir. 1977) (recognizing that EPA may rely on general permits under the Clean Water Act as a "means of coping with administrative exigency").

As Biber and Ruhl acknowledge, for example, EPA makes significant use of general permits in certain Clean Water Act programs. Notably, around 95% of sources permitted under the National Pollutant Discharge Elimination System (NPDES) program are regulated under general permits.⁷ EPA and the Army Corps of Engineers also extensively rely on general permits in implementing the Clean Water Act section 404 program.⁸ When property owners seek permits under the Clean Water Act for the discharge of dredged or fill material into navigable waters, 90-95% of their proposed activities are covered by an existing general permit. These general permits cover most projects that are likely to be undertaken by individuals or small businesses. The vast majority of general permit applicants (86%) receive verification of their coverage within 60 days of submitting their application.⁹

While some statutory schemes may be more amenable to use of general permits than others, the potential utility of general permits is certainly not limited to water programs. To take a recent example from the air context, in 2015 EPA issued general permits under the Clean Air Act for minor sources in Indian country.¹⁰ These general permits cover hot mix asphalt plants and stone quarrying, crushing and screening facilities. EPA issued general permits for these industries because the covered facilities are similar in size and operating conditions and would use similar control equipment or techniques. The general permits contain emission limitations and other restrictions governing how sources may be constructed, modified, and operated. In issuing the general permits, EPA noted that they were cost-effective in streamlining the process, reducing resource burdens, and decreasing time lags for permittees.

II. Misconception #2—General Permits Are Easy and Noncontroversial

Biber and Ruhl's recommendation may understate how complex it can be to develop general permits that fit a large group of entities, while meeting statutory requirements and objectives. Although they note that the Administrative Procedure Act gives agencies great flexibility in designing their administrative procedures, they do not grapple with the specific procedural and substantive requirements for permit programs in environmental statutes, which can constrain agency discretion; nor do they fully consider cross-cutting statutes like the Endangered Species Act and

National Environmental Policy Act, which add procedural requirements and other legal considerations.¹¹

Biber and Ruhl suggest that one of the main deterrents to wider use of general permits is an agency's unwillingness to commit resources up front to develop general permit regimes. The decision whether to use general permits goes far beyond that, however, and requires careful thought and legal analysis; the development of environmentally protective, implementable, legally defensible general permits can be challenging.

Going down the path of general permits is not without legal risk. For example, EPA's 2003 general permit for stormwater discharges from construction activities was challenged on the grounds that it did not fulfill the Clean Water Act's public notice provisions or meet the requirements of the Endangered Species Act; in that case, the permit was upheld by the Fifth Circuit.¹² By contrast, EPA's 2013 Vessel General Permit for discharge of ballast water from ships was challenged by environmental groups and remanded by the court.¹³ Our point here is not to delve into the extensive case law generated by litigation over general permits, but simply to note that the question of individual versus general permits can be a complex and highly context-specific inquiry, depending on the particular statute and program at issue.

III. Misconception #3—Epstein's Critique of the "Permit Power" Is Directly Relevant to the Pollution Control Context

In their analysis of agency permitting choices, Biber and Ruhl translate Epstein's concerns about the permit power from land use/zoning into the pollution control context. The solutions they offer, including broader use of general permits, seem intended (in part) to assuage the concerns Epstein raised. We question, however, whether Epstein's underlying philosophical concerns carry over to the pollution context in the first place.

In our view, the "prohibited unless authorized" framework that Epstein critiques—under which a harm-

7. Proposed NPDES Electronic Reporting Rule, 78 Fed. Reg. 46006, 46026 (July 30, 2013).

8. See Biber & Ruhl, *supra* note 3, at 162-63.

9. Brief of Petitioner, U.S. Army Corps of Engineers v. Hawkes Co., No. 15-290 (S. Ct. Jan. 22, 2016).

10. General Permits and Permits by Rule for the Federal Minor New Source Review Program in Indian Country for Five Source Categories, 80 Fed. Reg. 25064 (May 1, 2015).

11. For example, the Clean Water Act requires that NPDES permits "ensure that every discharge of pollutants will comply with all applicable effluent limitations and standards." *Waterkeeper Alliance v. EPA*, 399 F.3d 486, 498 (D.C. Cir. 2005) (citing CWA § 402(a)). NPDES permits include technology-based effluent limitations based on available pollution control technology, water-quality-based effluent limitations based on the impact of discharges on receiving waters, and monitoring and reporting conditions.

12. *Texas Independent Producers & Royalty Owners Association v. EPA*, 410 F.3d 964 (5th Cir. 2003).

13. *NRDC v. EPA*, 804 F.3d 149 (2d Cir. 2014) (remand without vacatur). In another example of how complicated the issuance of general permits can be, a coalition of industry groups challenged EPA's 2000 Multi-Sector General Permit (resulting in a settlement), and a coalition of environmental groups subsequently challenged EPA's 2015 Multi-Sector General Permit. Litigation on the latter is pending.

ful behavior is presumed prohibited unless a permit is obtained—is a natural starting point for regulation of pollution that threatens public health and the environment. After all, there is no inherent “right to pollute.” That is one of the fundamental premises behind major environmental regulatory regimes such as the Clean Water Act and Clean Air Act, which, in essence, recognize the right of the public to be free from unreasonable dangers imposed by those who engage in pollution generating activities.

We also disagree with the suggestion (if one were to take seriously the implications of Epstein’s article) that pollution externalities can adequately be addressed by a permitting framework limited by principles of public nuisance and tort law. For society’s most pressing environmental challenges, the common-law framework is, as a general matter, outdated and unworkable. That is why Congress established and empowered regulatory agencies with technical expertise to address impacts systematically in an efficient, fair, and protective way—which includes a proactive permitting regime. The Supreme Court recently recognized this in *American Electric Power v. Connecticut*, where, in the context of finding that federal common-law nuisance claims were displaced by Congress, it described several ways in which the tort system may be inadequate to address complex air pollution issues, such as controlling greenhouse gases, that transcend traditional boundary lines. The Court opined that, in contexts like these, the “expert agency is surely better equipped to do the job than individual district judges issuing ad hoc, case-by-case injunctions. Federal judges lack the scientific, economic, and technological resources an agency can utilize in coping with issues of this order.”¹⁴

We suspect that Biber and Ruhl would agree that Epstein’s critique of the “Permit Power” is fundamentally flawed and of questionable relevance to the pollution control context. Query, then, how helpful it is to think about general permits as an antidote to the ills posited by Epstein, as opposed to considering them on their own merit based on their relative advantages and disadvantages.

IV. Misconception #4—“The Power Grab”: Regulators Seek to Use Permitting Regimes to Expand Their Power

Another common misconception is that agencies are constantly trying to expand their regulatory reach by enlarging the scope of permitting. For example, Biber and Ruhl’s article, in its discussion of the ubiquity of permitting today, may be read to suggest that through the regulation of greenhouse gases under the Clean Air Act, EPA was “attempt[ing] to ease its way into a massive permitting program.”¹⁵ It would be ironic to imply that EPA was seeking to vastly expand its permit power

where the agency went to great lengths to cabin permitting requirements for stationary sources of air pollution to those emitting the greatest amounts of the pollutant in question.

In the “Tailoring Rule,”¹⁶ EPA sought to address a statutory threshold that appeared unsuited to greenhouse gases when EPA took action to regulate this pollutant under the Clean Air Act following the Supreme Court’s decision in *Massachusetts v. EPA*. EPA was not seeking to expand its permitting power. Rather, EPA felt compelled by the plain language of the statute to address all sources emitting greenhouse gases above the statutory thresholds and tried in good faith to fulfill its statutory obligations.¹⁷ EPA sought to implement the Clean Air Act permitting power reasonably and judiciously by writing the Tailoring Rule to initially limit the permitting requirement to only large sources.¹⁸ EPA also outlined a plan to develop streamlining measures, including the possible use of general permits, to enable EPA and the states to potentially implement the permitting requirements for scores of additional sources down the road.¹⁹ In *UARG v. EPA*,²⁰ although the Supreme Court rejected one aspect of EPA’s interpretation of the statute, the Court effectively agreed with EPA’s approach of focusing on major emitters, as well as EPA’s motivation to avoid burdensome and absurd results. In the big picture, EPA considered the Supreme Court’s decision to have resulted in a favorable outcome that allows the agency to address greenhouse gas pollution without unnecessarily burdening myriad small sources. The Clean Air Act permitting programs are being implemented successfully today, mainly by states that have primacy, as Prevention of Significant Determination permits now contain limitations on greenhouse gas emissions based on the application of Best Available Control Technology.

The notion that agencies constantly seek to aggrandize power by expanding the reach of their permitting jurisdiction is also belied by several examples from the water context. Biber and Ruhl accurately point out that EPA has tried on several occasions to exempt certain activities from Clean Water Act NPDES permitting, only to have the courts read the statute to require permitting.²¹ Indeed, one of the key early decisions in this area arose when EPA attempted to exempt certain stormwater discharges from permitting due to the “intolerable permit load” of covering hundreds of thousands of sources; the environmental challengers advocated that EPA adopt general permits instead—an approach subsequently endorsed by the courts.²²

14. 564 U.S. 410, 428 (2011). Even Epstein seems to acknowledge the limits of the common-law tort construct for widespread environmental harms in his later scholarship. See Biber & Ruhl, *supra* note 3, at footnote 297.

15. Biber & Ruhl, *supra* note 3, at 152.

16. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31514 (Jun. 3, 2010).

17. *Id.* at 31560-62.

18. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule Step 3 and GHG Plantwide Applicability Limits, 77 Fed. Reg. 41051 (July 12, 2012).

19. 75 Fed. Reg. at 31577; Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule Step 3 and GHG Plantwide Applicability Limits, 77 Fed. Reg. 14226, 14250-55 (Mar. 8, 2012) (proposed rule).

20. *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014).

21. See Biber & Ruhl, *supra* note 3, at 148.

22. *NRDC v. Costle*, 568 F.2d 1369, 1381 (D.C. Cir. 1977).

As these examples illustrate, the history of permitting is not a simple narrative. Agencies frequently find themselves caught between competing legal and practical imperatives while seeking the most efficient and effective administrative solutions to complex problems. That leads to our next several points highlighting a number of interesting and innovative EPA initiatives related to permitting.

V. Misconception #5—Individual Permitting Regimes Are “Old School” and Not Susceptible to Innovation

While general permits, where authorized and appropriate, have many potential advantages, one consideration missing from Biber and Ruhl’s framework is the extent to which agencies use the flexibility afforded by individual permits to explore innovative approaches to benefit permittees and protect and empower communities affected by pollution.

Individual permits can give agencies more flexibility to pilot new approaches—flexibility that would not necessarily exist in a general permitting regime. To cite one example, EPA and the Massachusetts Department of Environmental Protection developed a unique NPDES permit for the Kendall Station Power Plant in Cambridge, Massachusetts that reduced its harmful heat discharge into the Charles River by sending the steam it generated across the river to provide heat for consumers in Boston instead of building cooling towers. Embodying a sustainable pollution reduction strategy, this permit generated additional revenue for the permittee and created indirect air quality benefits, all while protecting aquatic life.²³ Such a nuanced and tailored approach would obviously be less workable in a general permit regime.

The flexibility of permitting has also allowed innovation in areas such as the adoption of advanced monitoring technologies. For example, continuous water quality monitoring is now feasible—and has been required in some permits—because of technological advances in sensors, which can detect the relevant metrics accurately and reliably. Real-time monitoring information on parameters such as temperature, flow, and pH can support continued permit compliance and allows for prompt action to address environmental concerns.²⁴

Through innovative permitting, EPA has also looked for ways to empower communities by improving transparency through web notification requirements, among other means. The NPDES permit for the City of Seattle, for example, requires the city to inform citizens of combined sewer overflows through a real-time public

notification website. And the NPDES permit for Logan Airport in Boston requires the Massachusetts Port Authority to make the results of water quality sampling at airport outfalls available on its website.²⁵ Individual permits allow agencies to assess site-specific needs and implement new approaches where needed; this also tests the feasibility, cost, and value of innovations in practice to help determine whether they should be replicated and applied more widely.²⁶

Individual permits can also provide a vehicle for piloting creative approaches to address environmental justice. For example, agencies can facilitate meaningful public engagement during the development of individual permits that allows the agency and permit applicant to better understand and serve the needs of overburdened communities. To be sure, general permits also provide an opportunity for the public and prospective permittees to provide input through notice and comment. However, individual permits can address factors and sensitivities specific to a given project and community circumstances.

For example, while EPA was developing a Clean Air Act permit for the Energy Answers Arecibo Power Plant in Puerto Rico, the community surrounding the facility raised concerns about the potential for disproportionate risk of lead exposure because there was also a battery recycling facility nearby. To address concerns raised during public engagement over the permit, the plant undertook additional analyses and volunteered to install a monitor to measure lead levels in the community’s ambient air.

More recently, EPA released a new Environmental Justice Screening and Mapping Tool called “EJSCREEN,” which provides access to demographic and environmental information, helping users identify areas with minority and/or low-income populations and potentially elevated environmental burdens that may warrant further consideration, analysis, or outreach.²⁷ Through such tools, which harness the power of information and technological advances, permit-writers can identify permit applications that may benefit from novel approaches. For these reasons, EPA’s draft “EJ 2020 Action Agenda Framework” includes innovation in permitting as an area that EPA plans to focus on to improve the health and environment of overburdened communities.²⁸

23. See George Wyeth & Beth Termini, *Regulating for Sustainability*, 45 LEWIS & CLARK ENVTL. L. REV. 663, 679-80 (2015) (also discussing “flexible” permits that reduce the need for frequent permit modifications by providing facility-wide limits or by pre-authorizing facility modifications at the time a permit is issued).

24. For more information on advanced monitoring, see Cynthia Giles, *Next Generation Compliance*, 45 ELR 10205 (Mar. 2015).

25. For more information on these and other examples, see U.S. EPA NPDES Compendium of Next Generation Compliance Examples (Sept. 2015), available at <https://www.epa.gov/sites/production/files/2015-06/documents/npdesnextgencomplcompendium.pdf>.

26. States are innovating in this space as well. For example, Minnesota has issued permits for four sand processing facilities that require fence-line monitoring for particulate matter. More information is available at <https://www.pca.state.mn.us/air/air-monitoring-minnesota-silica-sand-facilities#winoona-b9a765fc>.

27. Available at <https://www.epa.gov/ejscreen>.

28. U.S. EPA Draft EJ 2020 Action Agenda Framework (June 15, 2015), available at <https://www3.epa.gov/environmentaljustice/resources/policy/ej2020/draft-framework.pdf>.

VI. Misconception #6—Permitting Is Bureaucratic and Filled With Paperwork

Archaic, burdensome permitting may be the stereotype, but it doesn't have to be the reality. At a programmatic level, EPA is seeking ways to modernize its permit regimes by standardizing best practices and capturing the benefits of new technology. Notably, EPA is working with states through an effort known as "E-Enterprise for the Environment" to leverage technology and provide tools that streamline the implementation of environmental programs including permitting.²⁹

As one of the highlights of this effort, in 2013, EPA established a new policy setting forth electronic reporting as the default standard in developing new regulations.³⁰ E-Reporting goes beyond a regulated entity e-mailing a PDF of a document. Rather, e-reporting is a system of electronic tools that guide the regulated entity through the reporting process, often with built-in compliance assistance and data quality checks. In short, electronic reporting brings permitting into the digital age.

One of EPA's key achievements in this area is the October 2015 promulgation of a rule requiring electronic reporting for NPDES permittees.³¹ The rule will allow EPA to use 21st century technology and analytics to evaluate electronically submitted monitoring data in a timely and efficient way. EPA's rule will also ease the permitting process for facilities covered by general permits, who will seek coverage electronically. Even before this rule, states had begun moving in this direction by offering electronic reporting tools as well.

Electronic submissions save time and resources for permittees and regulators while increasing data accuracy and improving compliance. This modern approach enhances transparency by providing greater clarity on who is and who is not in compliance and generating a complete, timely, nationally-consistent set of data about the program. When the rule is fully implemented, both NPDES permittees and regulatory agencies will save money and time.

Through initiatives like electronic reporting, regulators can use improved data and the resources saved from reduced paperwork burden to target the most serious water quality and compliance problems. This rule will also make it easier for EPA to provide a full picture to the public about the performance of permitted facilities and water quality in their communities.

VII. Misconception #7—Information Collected During Permitting Is Underutilized

Biber and Ruhl acknowledge that permits can be a tool for developing information, but comment that "there is no guarantee that the information that is gathered will be effectively used, or that the agency will even cumulate the data across permit applications."³² EPA, however, fully recognizes the value of permitting for collecting, analyzing, and disseminating data. EPA has launched a number of efforts to realize the potential of data collected from permittees. Since 2002, for example, EPA has made permit, compliance, and enforcement information available to the public on its Enforcement and Compliance History Online (ECHO) website.³³ ECHO shares data on air emissions, surface water discharges, hazardous waste, and drinking water systems and allows users to explore facilities, create maps, and analyze trends.

As another example, EPA's MyWATERS Mapper dynamically pulls together a variety of data sources and displays snapshots of water data, such as the status of NPDES permits overlaid with water quality assessments, water impairments, watershed boundaries, and water infrastructure needs. The user-friendly tool also enables interested members of the public to create customized maps of water information relevant to their communities.³⁴ The MyWATERS Mapper is part of EPA's MyEnvironment website, which displays information collected across the range of environmental statutes.³⁵

Most recently, in February 2016, EPA released a new drinking water mapping application for source waters, DWMAPS, which also uses monitoring data submitted by NPDES permittees as one of its inputs.³⁶ This application allows users to map potential sources of contamination and locate facilities discharging specific contaminants.

Such initiatives are not limited to the water program. On the air side, for example, the Air Markets Program Data Tool allows the public to search by criteria or region to find information about emissions, allowances, and compliance for facilities.³⁷ As these examples attest, EPA is continually looking for ways to harness the power of information in the digital age to collect and share data in ways that will help inform and empower communities.

VIII. Conclusion

In sum, we certainly agree with Biber and Ruhl that "the actual experience of permitting as practiced by agencies is rich with evidence that the problems motivating Epstein's pessimistic assessment are neither inevitable nor insur-

29. Thomas S. Burack & A. Stanley Meiburg, *Collaborative Federalism*, ENVTL. F., May-June 2016, at 23, 26.

30. Memorandum, E-Reporting Policy Statement for EPA Regulations (Sept. 30, 2013), available at <http://www.epa.gov/sites/production/files/2016-03/documents/epa-e-reporting-policy-statement-2013-09-30.pdf>.

31. NPDES Electronic Reporting Rule, 80 Fed. Reg. 64064 (Oct. 22, 2015).

32. Biber & Ruhl, *supra* note 3, at 187.

33. Available at <https://echo.epa.gov/>.

34. Available at <http://watersgeo.epa.gov/mwm/>.

35. Available at <https://www3.epa.gov/enviro/myenviro/>.

36. For more information, see <https://www.epa.gov/sites/production/files/2015-11/documents/dwmaps-overview.pdf>.

37. Available at <https://ampd.epa.gov/ampd/>.

mountable.” Biber and Ruhl focus on the use of general permits as a major reason for that optimistic assessment, suggesting that “a wide range of environmental problems plausibly might be better resolved by general permits to address the challenges we identify. . . .”³⁸ Without necessarily endorsing their precise prescriptions, we applaud them for producing a thoughtful framework for considering the relative pros and cons of general and individual permit-

ting regimes. But general versus individual permitting is only one dimension of a larger picture. In the digital age, electronic data can be collected and shared at the touch of a button, and the technology of monitoring and reporting is constantly advancing. Agencies can and will adopt innovative approaches to improve the efficiency and efficacy of permits, whatever their form.

38. Biber & Ruhl, *supra* note 3, at 230; *see also id.* Section III, at 212, “The Case for General Permits.”