ICG Hazard: Permitting Away the Clean Water Act

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In Sierra Club v. ICG Hazard, the Sixth Circuit held that a general permit holder is only liable for discharges expressly prohibited by his/her permit terms as long as 1) he/she adequately disclosed other discharges and 2) the permitting agency reasonably contemplated those discharges at the time the permit was issued. ICG Hazard was the first time that a court of appeals had ever considered how the permit shield provision should apply in the general permit context. This Note discusses why extending the permit shield to discharges under general permits would result in detrimental environmental consequences against which the Clean Water Act is meant to protect. It then offers alternative legal avenues that environmental plaintiffs can take to ensure permittees respect state water quality standards.

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INTRODUCTION

Makeshift roads snake across a now barren, gray plateau—a common legacy of surface coal mining. Exposed coal seams lie in place of biologically diverse forests; mountaintop remains fill up and degrade headwater streams feeding into rivers. For decades, these features have defined vast portions of the Central Appalachian landscape in eastern Kentucky. In early 2015, the Sixth Circuit gave coal companies license to keep it that way.

When the court took up *Sierra Club v. ICG Hazard,* it became the first circuit to consider an important gap in Clean Water Act jurisprudence. The question seemed simple enough. Should the permit shield provision—which exempts permittees from liability for discharges not explicitly limited by permit conditions—apply in the same way for both general and individual permits?

As the court acknowledged, individual and general permits operate differently. An individual permit lays out limitations on pollutant discharges that are specific to one source. A general permit provides a single set of
requirements that apply to multiple sources. Refusing to open up general permit holders to what it predicted would be a barrage of lawsuits, the Sixth Circuit answered the question before it with a confident “yes,” and applied the permit shield provision to the general permit at issue.

But the court made a mistake. Its decision to apply the same framework for applying permit shield protection to individual and general permits will wreak havoc on waterways. It will subject aquatic environments to increased toxic pollution while reducing accountability for the harmful effects that follow. To properly enforce the Clean Water Act’s requirements, environmental plaintiffs need a better way to fight back.

This Note begins with an introduction to the Clean Water Act’s statutory scheme and a discussion of its application in ICG Hazard. Part I gives an overview of general permits in the National Pollution Discharge Elimination System (NPDES) and the permit shield exemption from liability for certain discharges. Part II provides an explanation of case facts and the Sixth Circuit’s reasoning in ICG Hazard.

In Parts III through VII, the Note analyzes the wisdom and implications of ICG Hazard. Part III identifies differences between individual and general permits in order to show why the court’s traditional test poses too low of a threshold for applying the permit shield provision to general permits. Disclosures under a general permit scheme would not provide adequate permit restrictions. Moreover, the types of discharges within the permitting agency’s reasonable contemplation—and thus protected by the permit shield—are more numerous for general permits because they cover pollution from many sources.

Part IV delves into the environmental harm that would result from applying the Sixth Circuit’s reasoning in ICG Hazard to offshore oil and gas development. After expanding on these harms, Part V explores some known avenues left for environmental plaintiffs to challenge discharges not explicitly authorized by general permits, concluding that these avenues are insufficient to guarantee compliance with the Clean Water Act. Part VI suggests new ways to defend the Clean Water Act’s purpose through the courts. To ensure compliance with state water quality standards (WQS), environmental plaintiffs should challenge agency approval of final general permits that do not include either effluent limitations or integration of state WQS for listed pollutants. Finally, Part VII discusses why WQS should be enforceable independently of any NPDES permit.

7. Id.
8. See id. at 287–88 (explaining that EPA’s concern that “compliance [with a requirement to set limits for every potential discharge] would be impossible and the potential for litigation limitless” applies “with even more force” to general permits).
I. **THE CLEAN WATER ACT AND THE PERMIT SHIELD PROVISION**

   **A. Purpose and Structure of the Clean Water Act**

   The Clean Water Act “is a comprehensive water quality statute designed to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”\(^9\) Pursuant to section 301, “the discharge of any pollutant by any person . . . [is] unlawful,” unless otherwise authorized.\(^10\) The Clean Water Act’s regulatory scheme has two main components. First, the NPDES allows “discharge of pollutants within prescribed limits” through a permit system.\(^11\) The Environmental Protection Agency (EPA) has delegated authority to states to administer their own NPDES programs.\(^12\) In Kentucky, where the coal mine at issue in *ICG Hazard* is located, the Kentucky Division of Water (KDOW) issues and enforces NPDES permits for sources in Kentucky under this delegated authority.\(^13\)

   Second, Clean Water Act section 303 also requires states to “institute comprehensive water quality standards . . . for all intrastate waters.”\(^14\) WQS provide designated uses for each waterway, describe criteria necessary to maintain these uses, establish a maximum amount of pollutants allowed, and detail other general policies related to implementing WQS.\(^15\) WQS help ensure that the NPDES program is effective at achieving desired water conditions. Specifically, NPDES permits must specify “any more stringent limitations . . . necessary to meet water quality standards.”\(^16\) In addition, Clean Water Act regulations prohibit state permitting agencies from issuing a permit “when the imposition of conditions cannot ensure compliance with the applicable water quality requirements.”\(^17\)

   A state or federal permitting authority can issue either an individual permit or a general permit. Individual permits apply to specific sources, whereas general permits “cover[] an entire category of dischargers within a geographic area.”\(^18\) A general permit may apply on a local, state, or even

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9. *Id.* at 284.
12. *Id.*
13. *Id.* at 284–85.
17. Prohibitions (applicable to State NPDES programs, see § 123.25), 40 C.F.R. § 122.4 (2015).
General permits set effluent limitations and monitoring requirements for similar operations and pollutants that the permitting authority determines are better suited to regulation by a general permit scheme than individual permits.\(^\text{20}\)

While agencies must analyze carefully whether to approve individual permits for every applicant, the general permitting process involves less “probing” agency review.\(^\text{21}\) After the permitting authority drafts a general permit and puts it in place, applicants may notify the agency that they intend to operate under a general permit.\(^\text{22}\) Clean Water Act regulations state that the notice of intent must, at minimum, specify the “type of facility or discharges, and the receiving stream(s).”\(^\text{23}\) Provided that the agency does not affirmatively rule against such operation, discharges complying with the general permit “are automatically authorized.”\(^\text{24}\)

Under the NPDES program, permit holders violate the Clean Water Act when they exceed the applicable permit’s discharge limits. However, the Clean Water Act provides permit holders with a “permit shield” against “liability for certain discharges of pollutants that the permit does not explicitly mention.”\(^\text{25}\) The permit shield provision, 33 U.S.C. § 1342(k), states that “compliance with a [NPDES] permit . . . shall be deemed compliance” with the Clean Water Act.\(^\text{26}\) This shield serves to “insulate permit holders from changes in various regulations during the period of a permit and to relieve them of having to litigate in an enforcement action the question whether their permits are sufficiently strict.”\(^\text{27}\)

B. The Piney Run Decision

In Piney Run Preservation Association v. County Commissioners of Carroll County, the Fourth Circuit took a two-pronged approach in determining when the permit shield exempts a permittee from liability for discharging pollutants that the individual permit does not expressly mention.\(^\text{28}\) The Piney

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20. ICG Hazard, 781 F.3d at 285.
22. ICG Hazard, 781 F.3d at 285.
23. General permits (applicable to State NPDES programs, see § 123.25), 40 C.F.R. § 122.28 (2015).
24. ICG Hazard, 781 F.3d at 285.
25. Id.
27. ICG Hazard, 781 F.3d at 285.
28. 268 F.3d 255 (4th Cir. 2001).
Run Preservation Association filed suit against Carroll County, Maryland, alleging that discharges of warm water from a county-operated waste treatment plant violated the Clean Water Act. The plant’s NPDES permit did not contain any explicit restrictions on heat discharges. The Commissioners argued on appeal that the Clean Water Act’s permit shield protected them from liability for discharging pollutants not mentioned in the permit.

Finding the permit shield provision ambiguous, the court deferred to EPA’s interpretation of when the shield applies. It relied on *In re Ketchikan Pulp Co.*, an Environmental Appeals Board decision. There, the Environmental Appeals Board found that NPDES permittees were not liable for discharges of the pollutants that they had disclosed to the permitting agency in their applications. It also noted that “discharges . . . are not automatically prohibited just because they are not specifically allowed under an NPDES permit.” This interpretation became the basis for the Fourth Circuit’s two-prong test in *Piney Run*. First, the permit holder must report and disclose discharges in accordance with the Clean Water Act. Second, the permitting authority must have reasonably contemplated that the permitted source might discharge the pollutant.

II. THE ICG HAZARD DECISION

In *Sierra Club v. ICG Hazard*, the Sixth Circuit extended the Clean Water Act’s permit shield provision from individual permits to general permits. Applying the *Piney Run* test, the court held that a general permit holder not in violation of its permit is not liable under the Clean Water Act for discharging a pollutant in violation of state WQS if (1) it discloses such discharges and (2) the discharges were within the “reasonable contemplation” of the respective permitting authority.

A. Case Facts and Procedural History

In the United States, Kentucky ranks third in coal production. Coal mining occurs in “the Central Appalachian Basin of eastern Kentucky and the Illinois Basin of western Kentucky.” Surface coal mining makes up 51

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29. *Id.* at 259.
30. *Id.*
31. *Id.*
32. *Id.* at 268.
33. *Id.* at 267.
35. *Piney Run*, 268 F.3d at 268.
36. *Id.*
38. KY. ENERGY & ENV’T CABINET & DEP’T FOR ENERGY DEV. AND INDEP., supra note 3, at 15.
39. *Id.* at 16.
percent of total coal production in eastern Kentucky and 32 percent of production in western Kentucky.\textsuperscript{40} Since 1991, ICG had operated the Thunder Ridge surface coal mine in eastern Kentucky under the state Coal General Permit.\textsuperscript{41} Kentucky Division of Water (KDOW) renewed this permit for five years in 2009.\textsuperscript{42}

KDOW issues general permits “pursuant to the [NPDES] under the authority of . . . EPA.”\textsuperscript{43} While the Coal General Permit placed limits on discharges of certain pollutants, its conditions did not include effluent limitations for selenium, a “naturally occurring element that endangers aquatic life once it reaches a certain concentration.”\textsuperscript{44} Coal companies deposit mining waste from mountaintop removal in valleys and nearby streams, where selenium leaches out into and contaminates the water.\textsuperscript{45} The concentration of selenium increases as the pollutant moves up the food chain and bioaccumulates in fish and wildlife.\textsuperscript{46} Selenium can lead to spinal deformities in fish as well as “damage to [their] gills and internal organs.”\textsuperscript{47} It can also cause “reproductive failure in aquatic birds” that prey on the fish.\textsuperscript{48} KDOW was aware that mining activities could result in selenium discharges, so the agency incorporated a “one time” sampling requirement to “determine selenium levels in surrounding” water bodies.\textsuperscript{49}

In 2009 ICG applied to KDOW for an expansion of its surface mining capabilities at Thunder Ridge under the general permit.\textsuperscript{50} As part of this “renewal process,” ICG tested the water at a discharge point and discovered selenium levels in violation of Kentucky’s WQS.\textsuperscript{51}

In 2010 Sierra Club sent ICG its notice of intent to file a citizen suit and also supported a private citizen’s request for more testing.\textsuperscript{52} The test results revealed selenium levels above the “chronic” limit\textsuperscript{53} at two of six locations

\textsuperscript{40} Id. at 18.
\textsuperscript{42} Id.
\textsuperscript{43} Sierra Club v. ICG Hazard, 781 F.3d 281, 283 (6th Cir. 2015).
\textsuperscript{44} Id.
\textsuperscript{45} Id.
\textsuperscript{47} A. Dennis Lemly, Aquatic Hazard of Selenium Pollution from Coal Mining, in COAL MINING: RESEARCH, TECHNOLOGY AND SAFETY 167, 168 (Gerald B. Fosdyke ed., 2008).
\textsuperscript{48} Id. at 169–70.
\textsuperscript{49} Id. at 168.
\textsuperscript{50} ICG Hazard, 781 F.3d at 283.
\textsuperscript{51} Id.
\textsuperscript{52} Id.
\textsuperscript{53} Under Kentucky’s Administrative Codes, chronic limits are “protective of aquatic life based on ninety-six (96) hour exposure that does not exceed the criterion of a given pollutant more than once every three (3) years on the average.” Acute limits are “protective of aquatic life based on one (1) hour
near Thunder Ridge. The Kentucky Department of Natural Resources then required ICG to conduct another test for selenium in 2011. Satisfied with the Department’s response, the Office of Surface Mining decided not to pursue the matter further.

Sierra Club filed suit in the Eastern District of Kentucky, arguing that ICG violated the Clean Water Act and the Surface Mining Control and Reclamation Act (Surface Mining Act). The lower court held that the permit shield applied to ICG’s general permit. As such, ICG was not liable for its selenium discharges as long as it properly disclosed them to KDOW. Likewise, ICG did not violate the Surface Mining Act. Sierra Club appealed to the Sixth Circuit.

B. The Sixth Circuit’s ICG Hazard Opinion on Appeal

Noting that no other circuit had considered Piney Run in the context of general permits before, the Sixth Circuit considered if the decision was relevant to ICG’s situation. To begin, the court applied Chevron deference to EPA’s interpretation that the permit shield protects general permit holders. It explained that the Clean Water Act does not clearly delineate the scope of the permit shield provision. Next, it affirmed EPA’s interpretation from In re Ketchikan Pulp Co., emphasizing that compliance with a statute demanding limitations for “every potential compound or chemical in a given discharge . . . would be impossible.” Further, the “potential for litigation” would be “limitless.”

Expressing a similar but deeper concern regarding general permits, the court pointed out that, without a permit shield, “the permitting authority would not only need to identify the many pollutants that a single polluter could discharge, but all of the pollutants and combinations of pollutants that could be exposure that does not exceed the criterion for a given pollutant.”

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54. ICG Hazard, 781 F.3d at 283.
55. Id.
56. Id.
57. Id.
58. Id.
59. Id.
60. Id.
61. Id. at 286.
63. ICG Hazard, 781 F.3d at 286.
64. Id. at 287.
65. Id.
66. Id.
discharged by [any] polluter[] that may later fall under the general permit.”

The court thus found it “anomalous . . . to impose a different standard for general permits.”

Having determined that general permits came within the permit shield’s ambit, the court applied the Piney Run’s two-pronged approach to ICG’s mining permits. First, it concluded that ICG acted consistently with the Clean Water Act’s reporting and disclosure requirements because the company informed KDOW of selenium discharges when it requested a modification to its permit. Second, selenium discharges were “within KDOW’s reasonable contemplation at the time it issued the general permit.” KDOW included a provision recognizing the possibility of such discharges from the mines under its management. This second criterion allowed EPA to “police statutory compliance more effectively by not imposing liability for discharges that would be within the permitting authority’s reasonable contemplation in any event but would overburden the authority to specifically include in the permit.” As the court concluded that ICG adequately disclosed, and KDOW reasonably contemplated, selenium discharges from the Thunder Ridge mine, it held that ICG was not liable for violating Kentucky’s WQS.

C. Epilogue

The 2009 version of Kentucky’s Coal General Permit expired on July 31, 2014. In its place, KDOW issued two separate five-year general permits for eastern and western Kentucky. The agency noted the differences in “geology, mining conditions, and mining practices” in the two coal basins as the reason behind this change. As the Thunder Ridge surface coal mine is located in Leslie County, ICG will likely—if it has not already—apply for coverage under the eastern Kentucky general permit.

Unlike the 2009 permit, both of the two new general permits incorporate a water quality-based effluent limitation for selenium. Instead of simply adopting the previous chronic limits in Kentucky’s WQS, however, KDOW used the chronic limit of 5 µg/l primarily as a trigger for further fish tissue or

67. Id. at 288.
68. Id.
69. Id.
70. Id. at 290.
71. Id.
72. Id. at 289.
74. Id.
75. Id.
egg/ovary analysis. Fish tissue sampling and analyses are only required when selenium levels in the water exceed a 5 µg/l monthly average. Permittees violate the permits if tests show selenium concentrations in excess of 8.6 mg/Kg in the fish tissue. When the permittee cannot collect enough tissue for analysis, the 5 µg/l trigger functions as a regular effluent limitation on selenium discharges. KDOV kept the daily acute limit at 20 µg/l.

Prior to KDOV’s permit issuance in 2014, environmental organizations had challenged EPA’s approval of this new selenium standard. They argued that a fish tissue-based limitation would not provide data on the number of fish already killed or adequately protect sensitive species. The standard would also lead to “unmitigated adverse impacts to non-fish aquatic life.” In October 2015 EPA settled the case and agreed to reassess its approval of Kentucky’s chronic limits. EPA has since approved the fish tissue standard. Anticipating that EPA will “reject the state’s elimination of the chronic standard,” however, KDOV has taken steps to “officially readopt the water column” standard. Although the case is temporarily stayed pending EPA’s reconsideration of KDOV’s selenium standard, the plaintiffs can “revisit the lawsuit” after EPA issues its formal decision.

III. APPLYING THE VAGUE STANDARDS OF THE PINERY RUN TEST TO GENERAL PERMITS RUNS COUNTER TO THE CLEAN WATER ACT’S PURPOSE

In deciding ICG Hazard, the Sixth Circuit overlooked important differences between individual and general permits. Through a comparison of these two types of permits, this Part demonstrates why transposing the Piney Run court’s rationale to the general permit context has grave implications for environmental protection of waters. First, disclosure requirements in general permits would relieve permit holders of liability up to the time of disclosure and may not alert permitting agencies to the need for more stringent regulation.

77. Id.
78. Id.
79. Id.
80. Id.
81. Id.
83. Id.
85. Id.
87. Id.
88. Id.
Second, the umbrella of pollutants in the agency’s “reasonable contemplation” at the time of general permit issuance is much broader because the permit covers many actors and thus exempts a whole range of discharges.

A. Disclosure Under General Permits:
Too Little, Too Late (and Sometimes Misleading)

The Sixth Circuit’s interpretation of “adequate disclosure” gives industrial actors a free pass to pollute. *ICG Hazard* requires only that a permit holder comply with general permit reporting conditions—even if they merely entail a “one-time sample at some time during the life of the permit.”89 According to the court, permitting agencies can issue lax disclosure requirements; industrial actors need simply follow them to absolve themselves of any responsibility for excess pollution. Given this possibility and the outcome in *ICG Hazard*, disclosure should not shield industrial actors from liability for discharges not mentioned in general permits.

Whereas individual permit holders must disclose potential discharges during the application process, general permit holders are not subject to the same requirement. Disclosure under individual permits provides a legitimate solution to a permitting agency’s inability to “identify and rationally limit every chemical or compound” that could be released by a single permittee.90 They allow agencies to “focus on [effectively limiting] chief pollutants,”91 while exempting a compliant permit holder from liability for an agency’s omission of certain limitations. However, the disclosure requirement provides a better check on pollution in the individual permit context because a permit applicant submits crucial information about discharges before permit issuance. This information guides the agency’s permit-writing process because the agency knows what “chief pollutants” to limit.92

This is not necessarily so in the case of a general permit. If disclosure merely requires sampling at some unspecified point in time, as was true in *ICG Hazard*, the permitting authority may not have the information needed to deny an operator’s application to operate under a general permit.93 The anomalous result? The permitting agency may authorize operation without knowing what the permitted facility will discharge into waterways. The agency would remain in the dark until the permit holder sends in its samples.

Moreover, giving permittees the flexibility to choose when to sample would do nothing to prevent violations up to the time of disclosure. If, for example, the permittee decided to conduct a test closer to the permit expiration

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89. Sierra Club v. *ICG Hazard*, 781 F.3d 281, 288 (6th Cir. 2015).
90. *Id.* at 287.
91. *Id.* at 288.
92. *Id.*
93. *Id.* at 285 (detailing the process involved in applying for operation under a general permit).
date, it theoretically could violate WQS throughout the four years leading up to this sampling—and still be a law-abiding actor. The Sixth Circuit’s holding implies that compliance with permit disclosure requirements, no matter how minimal, is enough to trigger permit shield protection. All ICG had to do in this case was conduct a single sampling during a five-year permit term. As long as it provided the agency with this limited information, the public could not hold it liable for excessive selenium discharges through a citizen suit.

To make matters worse, for permits that require only one-time sampling, disclosure may not contribute to water quality in the long term if the single test happens to reveal no violation of state standards. Following Piney Run and ICG Hazard, general permit holders operating under a permit like KDOW’s could conceivably test the water for selenium during a slow period in mining activity and escape liability under the Clean Water Act. In such a case, the one-time sampling would not alert permitting agencies to a need for stricter discharge limitations. By contrast, disclosures made to the agency before it issues an individual permit could shape actual permit content. The permitting agency could include all pertinent limitations to protect the environment against the cumulative effects of permit violations.

KDOW’s new 2014 fish tissue-based selenium standard comes with its own disclosure problems. It will obstruct citizen suit and agency enforcement of selenium limitations. Compared with traditional water quality testing, fish tissue involves “a much more expensive, more difficult, [and] scientifically intensive type of analysis.” Yet, under the previous, “straightforward” WQS, KDOW did not issue a single permit with selenium effluent limitations. This set of circumstances is worrisome. While environmental groups will not be able to conduct comprehensive fish tissue sampling, KDOW’s inaction to date shows the agency lacks both the ability and commitment to enforce its new standard. Who, then, will do the enforcing?

Even if industrial actors could take advantage of the permit shield, satisfying the “adequate disclosure” prong of the Piney Run test should demand more from polluters. First, courts should place limits on the agency’s exercise of discretion in crafting reporting conditions. At the very least, agencies should require periodic tests and specify when samples must take place. Agencies should not trust the polluter to be transparent about its operations. A polluter has every incentive to sample at the time its discharges are low, and very little to no incentive to sample at a time representative of average or high discharges.

94. Id.
97. Letter from Michael Brune to Gina McCarthy, supra note 95.
98. Id.
Second, agencies should not set burdensome standards that they cannot properly implement themselves, and whose cost essentially precludes citizen enforcement.

B. “Reasonable Contemplation” as a Catchall for Various Pollutants

General permits do not contain limitations tailored to individual sources because a permitting authority cannot anticipate from the outset the location of all of the sources that will apply for coverage. The types of discharges within the permitting authority’s “reasonable contemplation” for an individual permit are relatively limited because the permit only applies to one source. On the other hand, the discharges within the permitting authority’s “reasonable contemplation” for a general permit are more extensive because the permit covers a range of sources discharging into widely varying waterways.

A blanket exemption for a multitude of discharges is problematic because pollutants have different effects on the environment depending on geographic location. Consider, for example, the effect of discharges into Mono Lake compared to those same discharges into Lake Tahoe. Just because the permitting authority reasonably contemplates that source X will discharge nitrogen and phosphorus without impairing Mono Lake does not necessarily mean that source Z, covered under the same permit, can release identical pollutants into Lake Tahoe without grave environmental consequences.\(^\text{99}\)

Like nitrogen and phosphorus, selenium has different effects on each waterway. Factors such as aquatic system type (e.g. “stream, reservoir, wetland”), biological productivity, and “the chemical form of selenium” all influence the intensity of impacts from bioaccumulation.\(^\text{100}\) As a result, the specific concentration that triggers harmful effects on fish and wildlife will vary.\(^\text{101}\) General permits do not capture these nuanced effects of selenium on waterways.


\(^{100}\) Lemly, *supra* note 46, at 169.

\(^{101}\) *Id.*
IV. *ICG Hazard*: A Blank Check to the Offshore Oil and Gas Industry

Although *ICG Hazard* concerned coal mining, applying the *Piney Run* test to general permits proves equally—if not more—troubling in another context: offshore use of hydraulic fracturing, or “fracking.”

On January 24, 2014, EPA approved General Permit No. CAG280000, authorizing discharges into federal waters by twenty-three oil and gas production facilities offshore of Southern California. EPA treats discharges differently depending on their category. Category I includes “drilling fluids and cuttings.” Category II covers “produced water.” Category III discharges involve “well treatment, completion and workover fluids,” including fracking chemicals. A month after EPA issued the General Permit, the Center for Biological Diversity (the Center) petitioned EPA for modification or revocation of the permit.

Assessing this General Permit for offshore fracking under the *Piney Run* framework reveals the dangers with adopting the Sixth Circuit’s interpretation of the permit shield provision. According to *ICG Hazard*, any discharges from an oil and gas facility that are (1) adequately disclosed to and (2) reasonably contemplated by the permitting agency would fall within the permit shield protection. As the General Permit covers various well stimulation techniques involving a vast group of pollutants, the permit shield would protect permit holders from liability for discharging a plethora of highly toxic chemicals.
A. The Questionable Utility of Disclosure

Disclosure will not do much to prevent environmental harm from offshore fracking. At the same time that disclosure to EPA is insufficient to ensure adequate protection of the marine environment, incomplete information about discharges stymies public participation in shaping permit terms. The General Permit requires the permittee to “maintain an inventory of the quantities and concentrations of the specific chemicals used . . . [and disclose] the chemical formulation, concentrations and discharge volumes.”

Although this disclosure requirement “provide[s] some information about the toxic fracking chemicals dumped into [the] ocean,” Center attorney Miyoko Sakashita observed, “it [nevertheless] relies on oil companies to be honest and transparent in their self-reporting.” Permit holders also only report this discharge information to EPA. Community members have to “file detailed public information requests” to learn more about discharged chemicals. Even then, industrial actors may prevent complete disclosure by invoking trade secret protections.

Just as in the individual permit context, “the burdensome paperwork involved in such a request militates against the Clean Water Act’s goal of community participation and access to knowledge about pollutants that affect it.” In the case of offshore fracking, the request may not even yield much. Consistent with the goal of community involvement, however, the public has a right to know—and a right to act—if their “waters [are] unsafe for fishing, diving, swimming,” and other uses due to toxic chemicals from offshore fracking operations.

B. The All-Encompassing “Reasonable Contemplation”

When applied to the offshore oil and gas development General Permit, the “reasonable contemplation” prong of the Piney Run test presents troubling and difficult ambiguities. Does the permitting authority have to reasonably contemplate discharges of pollutants for a particular fracking operation?

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110. General Permit No. CAG280000, supra note 102, at 20.
112. Jessica Owley, Piney Run: The Permits Are Not What They Seem, 30 ECOLOGY L.Q. 429, 439–40 (2003) (explaining that discharge permits and watershed information “available to the public through local agencies and . . . EPA . . . do[ ] not include pollutants disclosed to the agency during the permitting process that were not later listed in the final permit”).
114. Owley, supra note 112, at 440.
115. Ctr. for Biological Diversity, supra note 103, at 14.
Alternatively, can it simply claim that it anticipated such discharges for fracking operations generally? If the latter is true, *Piney Run* allows industrial actors to discharge pollutants into the ocean regardless of their impact on different areas.

In practice, the answers to these questions have significant implications for the marine environment. As long as fracking chemicals are within EPA’s broad but “reasonable contemplation,” the oil and gas industry can discharge any combination of them anywhere their operations are located. This means that, under the Clean Water Act, it may not and does not have to consider the relative proximity of each operation to sensitive critical habitat and other protected areas. Several operations lie adjacent to critical habitat for the endangered black abalone; others are close to critical habitat for the threatened western snowy plover. Many operations are in the vicinity of state and federal marine reserves surrounding the Channel Islands of California and Santa Rosa Island. Endangered blue whales live and humpback whales congregate in the Santa Barbara Channel. Depending on the presence of rare species and the role each area plays in the marine ecosystem, the impact of oil and gas industry pollution on species and their habitat ranges from minimal to devastating.

C. Offshore Fracking as a Case-in-Point

The Sixth Circuit’s decision in *ICG Hazard* could have wide-ranging harmful effects on environmental regulation outside of the coal mining industry, as this Part illustrates. It has especially acute consequences for public health when discharges contain known carcinogenic chemicals such as those used in fracking. Furthermore, disclosure will not be enough to prevent degradation of the marine environment from countless toxic pollutants. Meanwhile, allowing discharges in the agency’s reasonable contemplation at the time of general permit issuance could mean indiscriminate pollution of the oceans.

116. This paper does not take into account other federal (i.e. the Endangered Species Act) and state laws that may restrict discharges from offshore fracking operations.


118. *Ctr. for Biological Diversity, supra* note 103, at 25.

119. *Id.* at 26.

120. *Id.* at 24.

121. In a 2009 report, the Committee on Energy and Commerce explained that oil and gas facilities use a wide range of harmful chemicals in their fracking operations. The list included known or possible carcinogens like benzene, diesel, and formaldehyde. It also included hazardous air pollutants and chemicals regulated by the Safe Drinking Water Act “for their risks to human health.” U.S. HOUSE OF REPRESENTATIVES COMM. ON ENERGY & COMMERCE MINORITY STAFF, *supra* note 109, at 10.
In its petition, the Center recommended that EPA come up with narrative and numeric WQS for marine waters within federal jurisdiction that are not yet governed by standards. Yet, these standards would provide little protection in any Circuit that adopts the Sixth Circuit’s reasoning in ICG Hazard. As demonstrated in ICG Hazard, WQS cannot be enforced on their own in the same way permit conditions can be. Relying on the absence of a condition requiring compliance with WQS, the oil and gas industry would be free to violate WQS as long as the Piney Run conditions are satisfied. Furthermore, as EPA has not set effluent limitations “on any chemicals used in the fracking and acidization process,” current limits on pollution from offshore fracking are wanting.

Environmental plaintiffs’ difficulty in holding permittees accountable for WQS violations is a pressing concern when effluent limitations are either inadequate or nonexistent. ICG Hazard is one case in a long line of precedent that contributes to this problem. Alarmingly, despite the disastrous consequences of ICG Hazard on Kentucky’s waterways and potential implications for offshore fracking, citizens seem limited to a few proven ways to enforce WQS.

V. TRIED AND TRUE (BUT VERY LIMITED) LEGAL AVENUES FOR CITIZEN ENFORCEMENT OF WATER QUALITY STANDARDS

A. Improper Disclosure

In Southern Appalachian Mountain Stewards v. A & G Coal Corp., the Fourth Circuit held that a permit holder cannot rely on the permit shield defense to avoid liability for selenium discharges if it did not disclose the pollutant’s presence during the permit application process. The court rejected A & G’s argument that disclosure is necessary only if the applicant “has or should have knowledge” of whether a pollutant is present. Instead, it explained that the Clean Water Act’s implementing regulations “require[d] that an applicant affirmatively disclose after appropriate inquiry its knowledge or lack of knowledge of that presence.” Furthermore, it disregarded A & G’s concern that requiring disclosure of selenium would “expose all permit applicants to the prospect of endless disclosure of countless known pollutants.” Selenium is listed as a toxic pollutant in the Clean Water

122. Ctr. for Biological Diversity, supra note 103, at 41.
123. Id. at 39.
124. 758 F.3d 560, 569 (4th Cir. 2014).
125. Id. at 566.
126. Id. at 567 (citing 40 C.F.R. § 122.21(g)(7)(vi)(B) (2015)) (emphasis added).
127. Id.
Act—it “is not just some obscure pollutant that might happen to show up in a discharger’s wastestream.” 128

While good news for the environmental community, A & G Coal Corp. is a small victory. As industries actively seek to avoid litigation, the probability that they will neglect to disclose pollutants in their discharges after A & G Coal Corp. is very low. Citizens cannot count on this kind of situation as their golden opportunity to challenge activities that degrade water quality. Moreover, for reasons described in Part III, even if industries do adequately disclose their discharged pollutants, disclosure does not ensure adequate protection of the nation’s waters.

B. Violation of WQS When Compliance is a Permit Condition

In Ohio Valley Environmental Coalition v. Fola Coal Co., the Southern District of West Virginia held that the permit shield does not protect a permit holder from liability for discharging ionic pollution in violation of a state WQS. 129 The West Virginia Department of Environmental Protection included in Fola Coal’s permit a condition stating that the permit shield “explicitly authorizes the discharge of [pollutants] only to the extent that it does not cause a violation of water quality standards.” 130 Since the court considered the permit’s language “unambiguous,” it “enforced [the WQS condition] according to its plain meaning,” as required by contract law. 131

The Fola Coal analysis boils down to a simple question with two possible answers. First, has the permitting agency included WQS compliance as a condition in the permit? If not, the permittee is off the hook. If it did, the permittee is liable for exceeding WQS. According to Fola Coal, the ability to challenge a permittee’s violation of WQS rests on the permitting agency’s discretion to include compliance as a permit condition. Similar to A & G Coal Corp., the opportunity for citizen enforcement recognized in Fola Coal is quite limited—no condition, no lawsuit.

VI. ENFORCING STATE WQS THROUGH STATE COURTS

As Part V shows, straightforward reliance on existing precedent only gives environmental plaintiffs very weak tools with which to enforce the Clean Water Act. This reality calls for new legal tactics. State courts are one avenue through which environmental plaintiffs could challenge the adequacy of approved permits.

128. Id.
130. Id. at *35.
131. Id. at *37.
In 1996 EPA amended the requirements for federal authorization of state permit programs under the Clean Water Act to “ensure effective and meaningful public participation in the permit issuance process.”\(^{132}\) 40 C.F.R. § 123.30 stipulates that state programs “shall provide for an opportunity for judicial review in State Court of the final approval or denial of permits by the State that is sufficient to provide for, encourage, and assist public participation in the permitting process.”\(^{133}\) A state meets this standard if it gives a comparable opportunity for judicial review as that offered to those who seek to challenge federal NPDES permits under Clean Water Act section 509.\(^{134}\)

Environmental plaintiffs will likely need to exhaust administrative remedies before judicial review in state court becomes available to them.\(^{135}\) Following the issuance of a draft general permit, environmental plaintiffs should submit comments requesting that the permitting agency include compliance with WQS as a condition.

If the permitting agency does not adopt a condition of WQS compliance as suggested during the comment period, environmental plaintiffs could then seek judicial review in state courts. A viable approach might be to argue that, without an explicit requirement that permittees comply with WQS, the permit would be inconsistent with the Clean Water Act. 40 C.F.R. § 122.4(d) explicitly states that “[n]o permit may be issued . . . when the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States.”\(^{136}\) If the Clean Water Act generally requires that permits be consistent with state WQS, there seems to be no need to include specific but superfluous language that permits may not cause violation of WQS. Nevertheless, environmental plaintiffs can use this requirement to ensure enforcement of WQS.

In a state like Kentucky, where WQS place the sole restriction on certain pollutant discharges, to exclude a condition requiring compliance with WQS is to give permittees free rein to pollute waters with harmful discharges. The argument that a permitting agency must include WQS compliance as a condition in an NPDES permit is, then, at its strongest when the only limitations on certain pollutant discharges are in the form of WQS. Without this

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133. Id.

134. Id.

135. See, e.g., Pickard v. Tenn. Water Quality Control Bd., 424 S.W.3d 511, 525 (Tenn. 2013) (holding that the Court of Appeals should have required the plaintiffs “to exhaust their administrative remedies before the Board before seeking judicial review of the Commissioner’s permitting decision”).

136. Prohibitions (applicable to State NPDES programs, see § 123.25), 40 C.F.R. § 122.4(d) (2016).
condition, the permit would contain no terms that “ensure compliance with applicable water quality requirements.”

Although Kentucky has included a selenium standard in its coal mining general permits, it still has not imposed specific limitations on sulfate or Total Dissolved Solids (TDS), among other pollutants. Both sulfate and TDS can threaten the survival of aquatic species. As the only standards applicable to these pollutants are Kentucky’s WQS, environmental plaintiffs can make the case that KDOW should either incorporate WQS or effluent limitations for sulfate and TDS.

Moreover, environmental plaintiffs could argue that the Clean Water Act does not allow permittees to escape liability simply because a permitting agency failed to set necessary effluent limitations. The difference in facts between Fola Coal and ICG Hazard is simply the West Virginia Department of Environmental Protection’s decision to include a single phrase requiring compliance with state WQS. Put another way, the difference could also be explained as KDOW’s failure to include effluent limitations or Kentucky’s WQS for selenium as permit conditions in ICG’s NPDES permit. The agency’s inaction, in effect, allowed industrial actors to evade liability. Such a result is inconsistent with Clean Water Act precedent.

The Third and Fifth Circuits have both rejected an interpretation of the Clean Water Act that would allow industries to “continually inject[] [dangerous pollutants] into the water” and yet “escape . . . sanctions merely because [] EPA has not established effluent limitations.” The Clean Water Act has a “basic policy” of preventing “uncontrolled discharges of pollutants.” As such, the Third Circuit did not find it “unduly burdensome on business” to require industries to apply for permits even if EPA had not come up with relevant effluent limitations.

In a future lawsuit, environmental plaintiffs could similarly argue that because KDOW has neither “established effluent limitations” for sulfate and TDS nor integrated applicable state WQS as permit conditions, coal industries in Kentucky would be able to “continually inject[]” pollutants into the water

137.  Id.
139.  A high level of sulfate “can be extremely toxic to aquatic species.” Id.
140.  The TDS level determines the balance of water in aquatic species’ cells. It could cause organisms to either “float up or sink down to depths to which [they are] not adapted.” Water Resources, EPA, http://water.epa.gov/type/sl/monitoring/vms58.cfm (last updated Mar. 22, 2016).
141.  Sierra Club v. Cedar Point Oil Co., 73 F.3d 546, 562 (5th Cir. 1996) (quoting United States v. Frezzo Bros., Inc., 602 F.2d 1123, 1128 (3rd Cir. 1979)).
142.  Frezzo Bros., 602 F.2d at 1128.
143.  Id.
while escaping liability for those discharges.\textsuperscript{144} As the \textit{Fola Coal} court and the Ninth Circuit have previously required compliance with WQS as a permit term, at least some courts do not seem to consider this requirement “unduly burdensome on business.”\textsuperscript{145}

\section*{VII. Why State Water Quality Standards Should Be Enforceable in Court Even If They Are Not an Explicit Permit Condition}

Although environmental plaintiffs can make a case for including WQS compliance in NPDES permits, this Part goes further and explains why WQS should be enforceable independently, without any WQS condition in a permit. The Senate Committee on Public Works explained that WQS “are intended to function . . . [a]s a measure of performance . . . [and] to provide an avenue of legal action against polluters. If the wastes discharged by polluters reduce water quality below the standards, action may be begun against the polluters.”\textsuperscript{146}

This quote appeared in the seminal 1995 case, \textit{Northwest Environmental Advocates v. City of Portland}.\textsuperscript{147} There, the Ninth Circuit held that an environmental plaintiff could enforce WQS when incorporated in a NPDES permit as an explicit condition.\textsuperscript{148} The Oregon Department of Environmental Quality included a provision in Portland’s NPDES permit that stated, “no wastes shall be discharged and no activities shall be conducted which will violate WQS . . . except in the following defined mixing zone.”\textsuperscript{149} The Northwest Environmental Advocates successfully sued to enforce Portland’s compliance with this specific provision.\textsuperscript{150}

“By introducing effluent limitations into the [Clean Water Act] scheme,” the court explained, Congress meant to “\textit{improve} enforcement, not supplant the old [WQS] system.”\textsuperscript{151} Noting the state’s lack of applicable effluent limitations, the court stated that a contrary decision would allow Portland to discharge an unlimited amount of raw sewage.\textsuperscript{152} Referring to the Clean Water Act’s legislative history, the court also pointed out that Congress had provided for broad citizen participation in enforcing the Act’s requirements.\textsuperscript{153}

Juxtaposing the outcome in \textit{Northwest Environmental Advocates} with \textit{ICG Hazard} indicates that there is not much of a distinction between WQS standing

\begin{thebibliography}{153}
\bibitem{144} Cedar Point Oil Co., 73 F.3d at 562.
\bibitem{145} Frezzo Bros., 602 F.2d at 1128.
\bibitem{147} Nw. Envtl. Advocates v. City of Portland, 56 F. 3d 979, 987 (9th Cir. 1995).
\bibitem{148} \textit{Id.} at 990.
\bibitem{149} \textit{Id.} at 985.
\bibitem{150} \textit{Id.} at 990.
\bibitem{151} \textit{Id.} at 986 (emphasis added).
\bibitem{152} \textit{Id.} at 989.
\bibitem{153} \textit{Id.} at 987 (citing 1972 U.S.C.C.A.N. at 3745).
\end{thebibliography}
on their own and WQS in NPDES permits. By adding a provision on WQS, the Oregon Department of Environmental Quality merely demands of permittees what the Clean Water Act already requires of NPDES permits—that they ensure compliance with WQS. Independently, a provision on WQS compliance does not give industrial actors any more information on the end-of-pipe limitations on its discharges. It does not give courts any more direction on how to adjudicate enforcement of WQS. The responsibility for detecting violation of and enforcing WQS still rests with the permitting agency. And yet, the Ninth Circuit and other courts insist that the Clean Water Act only allows enforcement of WQS as a permit condition, never as a stand-alone requirement.

This conclusion leaves virtually unregulated those pollutant discharges governed solely by state WQS outside NPDES permits. It does not mesh with Congress’ focus on broad citizen participation or acknowledgement of WQS as important restrictions on pollutant discharges. Prior case law renders compliance with WQS almost discretionary—if they are in an NPDES permit, they are enforceable. If not, industrial actors can violate them without consequence. By refusing to include a condition requiring compliance with WQS, permitting agencies could—and have—preempted citizen enforcement of these standards. It is unlikely that Congress intended such an arbitrary result.

Allowing independent enforcement of WQS could, however, overwhelm permitting authorities. It thus may be necessary to shift the burden of learning about and complying with WQS to applicants who wish to discharge pollutants covered by WQS. Under this system, environmental plaintiffs would be able to directly challenge a permit holder’s discharges that violate WQS, regardless of whether the permit specifically requires compliance.154

**CONCLUSION**

In contrast to the Sixth Circuit’s decision in *ICG Hazard*, EPA’s 2015 version of its Multi-Sector General Permit (MSGP) for industrial stormwater suggests a more cautious approach towards extending permit shield protection to general permits.155 This controversial amendment indicates that the agency understands the dangers of treating individual permits and general permits alike.

The MSGP now explicitly states that discharges not specifically mentioned in the permit “cannot become authorized or shielded by

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154. Besides litigation in state courts, plaintiffs can take administrative measures. For example, they could petition EPA to issue regulations requiring that all permits must comply with WQS.

disclosure.” 156 It will be interesting to see if similar changes appear in other federal and state general permits following ICG Hazard and other current permit shield cases.

Against industry challenge, EPA could likely argue that it has broad discretion when writing permits and can bind permit holders to the conditions within them. As EPA notes, “general permits authorize the discharge of all pollutants within the specified scope of a particular general permit, subject . . . to other conditions within a general permit.” 157 According to EPA’s new stipulation, permit holders who violate the Clean Water Act will be held liable—even if they disclose all discharges not “expressly authorized” by permit to “EPA, state, or local authorities after [the MSGP’s] issuance.” 158 The MSGP will no longer provide any protection against liability simply because permit writers failed to expressly include all relevant limitations. Since the added provision “is itself unambiguous” about revoking permit shield protection from the MSGP, it “must be enforced by the Court according to its plain meaning,” as contract principles dictate. 159 The Ninth Circuit took this same approach in Northwest Environmental Advocates.

Through its amendment, EPA has precluded the courts from applying Piney Run to exempt stormwater general permit holders from liability. In doing so, it softens ICG Hazard’s blow on the Clean Water Act in one area. State permitting agencies should follow EPA’s careful approach in drafting general permits. Through state courts, environmental plaintiffs can compel these agencies to include permit conditions like the one in EPA’s MSGP. This Note has elaborated on a few legal options for precluding application of the permit shield to discharges under a general permit. At its core, the Clean Water Act should not allow agencies to permit away statutory protections.


We welcome responses to this Note. If you are interested in submitting a response for our online companion journal, Ecology Law Currents, please contact cse.elq@law.berkeley.edu. Responses to articles may be viewed at our website, http://www.ecologylawquarterly.org.