

File Name: 06a0162p.06

UNITED STATES COURT OF APPEALS

FOR THE SIXTH CIRCUIT

CITIZENS COAL COUNCIL and KENTUCKY
RESOURCES COUNCIL, INC.,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY,

Respondent.

No. 02-3628

On Appeal from the United States
Environmental Protection Agency.
No. 40 CFR Parts 9 & 434.

Argued: June 1, 2005

Decided and Filed: May 15, 2006

Before: BOGGS, Chief Judge; MARTIN, SUHRHEINRICH, BATCHELDER, DAUGHTREY,
MOORE, COLE, CLAY, GILMAN, GIBBONS, ROGERS, SUTTON, and COOK, Circuit
Judges.

COUNSEL

ARGUED: Thomas J. FitzGerald, KENTUCKY RESOURCES COUNCIL, INC., Frankfort, Kentucky, for Petitioners. David A. Carson, UNITED STATES DEPARTMENT OF JUSTICE, Denver, Colorado, for Respondent. **ON BRIEF:** Thomas J. FitzGerald, KENTUCKY RESOURCES COUNCIL, INC., Frankfort, Kentucky, for Petitioners. David A. Carson, UNITED STATES DEPARTMENT OF JUSTICE, Denver, Colorado, for Respondent. Dennis A. Whitaker, ASSISTANT COUNSEL, COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION, Harrisburg, Pennsylvania, for Amicus Curiae.

SUHRHEINRICH, J., delivered the opinion of the court, in which BOGGS, C. J., BATCHELDER, GILMAN, GIBBONS, ROGERS, SUTTON, and COOK, JJ., joined. MARTIN, J. (pp. 25-39), delivered a separate dissenting opinion in which DAUGHTREY, MOORE, COLE, and CLAY, JJ., joined.

OPINION

SUHRHEINRICH, Circuit Judge. Petitioners Kentucky Resources Council, Inc. (“KRC”) and Citizens Coal Council (“CCC”) (collectively “Petitioners”) challenge a final rule of the Administrator of the United States Environmental Protection Agency (“Administrator” or “EPA”) promulgated under the Federal Water Pollution Control Act, commonly known as the Clean Water Act (“CWA” or the “Act”), 33 U.S.C. §§ 1251- 1387. The rule, found at 67 Fed. Reg. 3370 (Jan. 23, 2002), amends the existing effluent limitations guidelines for the Coal Mining Point Source Category at 40 C.F.R. Part 434 by adding two new subcategories: the Coal Remining Subcategory and the Western Alkaline Coal Mine Subcategory (collectively the “Final Rule”). Petitioners argue that the Coal Remining regulations conflict with the specific language adopted by Congress in the Rahall Amendment, 33 U.S.C. § 1311(p), governing pollution abatement at mining sites abandoned before 1977 that companies want to reopen for mining. Petitioners also argue that the creation of the Western Alkaline Mining Subcategory violates the CWA by eliminating numeric pollution limits and that the EPA Administrator acted arbitrarily and capriciously in preferring best management practices to numeric effluent limits for sediment reduction.

A panel of this Court invalidated the EPA’s final rule establishing effluent limitations under the CWA for the two subcategories. The panel unanimously rejected Petitioners’ arguments that the Rahall Amendment deprived the EPA of the authority to promulgate the Coal Remining regulations. A majority nonetheless held that the Coal Remining regulations were invalid on grounds not raised by Petitioners or addressed by the EPA; namely, that the EPA failed to follow procedures the majority deemed required by law under 33 U.S.C. § 1314. The Court granted en banc review.

For the reasons that follow, we find that the EPA did not act contrary to law or arbitrarily or capriciously in promulgating regulations for the Coal Remining Subcategory.

I. Background

A. Regulatory Landscape

The United States is divided into three major coal producing regions, termed the Appalachian, Interior, and Western regions. Historically, the Appalachian region accounted for approximately three-fourths of the total annual coal production. The Western Coal Region contains extensive deposits of sub-bituminous, low sulfur-content coal, which occurs in thick coal seams and shallow overburden conditions that allow for extraction at relatively low cost. Surface mine coal production has increased by more than ninety percent since 1970, and there have been dramatic changes in the domestic production of coal due to environmental concerns and market demands. The lack of environmental controls, until recently, has produced hundreds of thousands of acres of abandoned mine land. 65 Fed. Reg. 19,440, 19,444 (Apr. 11, 2000). The EPA estimates that there are currently over 1.1 million acres of abandoned coal mine lands in the United States, which have produced over 9,709 miles of streams polluted by acid mine drainage. *Id.* Roughly ninety percent of this acid mine drainage comes from coal mines abandoned prior to the passage of federal laws regulating pollution and reclamation of mined lands. *Id.*

There are two principal pieces of federal legislation governing water pollution caused by coal mines. The Surface Mining Control and Reclamation Act (“SMCRA”), 30 U.S.C. §§ 1201-1328, was enacted on August 3, 1977, to regulate the environmental impacts of coal mining. The SMCRA is administered by the Office of Surface Mining Reclamation and Enforcement (“OSMRE”) within the Department of the Interior. Title V of the statute gives the OSMRE broad authority to regulate specific management practices before, during, and after mining operations. The OSMRE has

promulgated comprehensive regulations to control both surface coal mining and the surface effects of underground coal mining. *See* 30 C.F.R. §§ 700-955 (2005).

The CWA was enacted in 1972 “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a); *see also BP Exploration & Oil, Inc. v. EPA*, 66 F.3d 784, 789 (6th Cir. 1995). The CWA prohibits the “discharge of any pollutant” by “any person” into navigable waters except as authorized by the Act. 33 U.S.C. § 1311(a). The Act is enforced through effluent limitations guidelines and National Pollutant Discharge Elimination System (“NPDES”) permits that set technology-based discharge limits for categories and subcategories of water pollution point sources. *See* 33 U.S.C. § 1342.¹ The EPA is charged with formulating and enforcing effluent limitations guidelines for classes and categories of pollutants. *See* 33 U.S.C. § 1311(b). An “effluent limitation” is “any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance.” 33 U.S.C. § 1362(11).²

The Act sets progressively more stringent technological standards that the EPA must use in setting those discharge limits. 33 U.S.C. § 1311(b)(1);³ *BP Exploration*, 66 F.3d at 789 (“CWA directs EPA to institute progressively more stringent effluent discharge guidelines in stages.”). The EPA is directed to determine the degree of effluent reduction attainable for three levels of technology—best practicable control technology (“BPT”), best available technology economically feasible (“BAT”), and best conventional pollutant control technology (“BCT”). 33 U.S.C. § 1314(b)(1)(A), (b)(2)(A), (b)(4)(A). The EPA must also identify the factors it will consider when it makes these determinations. 33 U.S.C. § 1314(b)(1)(B), (b)(2)(B), (b)(4)(B).

On April 26, 1977, the EPA issued final BPT effluent limitations guidelines for the Coal Mining Point Source Category. *See* 40 C.F.R. § 434. The regulations established limitations for the discharge of iron, manganese, suspended solids, settleable solids, and the pH of wastewaters for existing sources. 42 Fed. Reg. 21,380 (Apr. 26, 1977). In 1985, the EPA amended the effluent limitations guidelines and created four subcategories for the Coal Mining Point Source Category. They were:

- 1) Coal Preparation Plants and Coal Preparation Plant Associated Areas
- 2) Acid or Ferruginous Mine Drainage

¹The CWA also imposes water-quality based requirements. *See generally Arkansas v. Oklahoma*, 503 U.S. 91, 101 (1992). Water-quality based requirements are authorized under section 303 of the Act to protect the quality of all state waters. Water quality standards are based on the desired uses and conditions of the particular waterway involved, and are supplemental to technology-based requirements. *See EPA v. California ex rel. State Water Res. Control Bd.*, 426 U.S. 200, 205 n.12 (1976).

²A “point source” is defined as “any discernible, confined, and discrete conveyance . . . from which pollutants are or may be discharged.” 33 U.S.C. § 1362(14). The CWA requires the EPA to identify and categorize all point sources warranting effluent guidelines. *See* 33 U.S.C. §§ 1314(m), 1316(b)(1)(A).

³Section 301 directs that point sources discharging toxic and nonconventional pollutants apply best available technology economically achievable (“BAT”) to meet BAT effluent limitations. 33 U.S.C. § 1311(b)(2)(A). Similarly, point sources discharging conventional pollutants must apply best conventional pollutant control technology (“BCT”) to meet BCT effluent limitations. 33 U.S.C. § 1311(b)(2)(E). New sources of pollutants must meet best available demonstrated control technology (“BADT”). 33 U.S.C. § 1316(a)(1); (b)(1)(B).

The five conventional pollutants are: biochemical oxygen demand (“BOD”), total suspended solids (“TSS”), fecal coliform, pH, and “oil and grease.” *See* 33 U.S.C. § 1314(a)(4); 40 C.F.R. § 401.16. Toxic pollutants are identified by Congress and the EPA. 33 U.S.C. § 1311(b)(2)(C) & (D). The EPA has published a list of all such pollutants pursuant to section 307(a)(1) of the Act, 33 U.S.C. § 1317(a)(1). It is found at 40 C.F.R. § 401.15.

- 3) Alkaline Mine Drainage
- 4) Post Mining Areas.

50 Fed. Reg. 41,296 (Oct. 9, 1985).

The 1985 regulations did not include a subcategory for coal mining operations that sought to remine previously mined, but later abandoned, lands. Thus, the regulations for mining virgin lands applied to previously mined, abandoned lands. The applicable effluent limitation guideline for remining operations in the Appalachian region was 40 C.F.R. Pt. 434, Subpt. C, Acid or Ferruginous Mine Drainage, and the applicable guideline for reclamation activities in the West was 40 C.F.R. Pt. 434, Subpt. E, Post-Mining Areas. Further, for western coal mining operations, numeric limitations were based on the use of sedimentation pond technology that applied to all reclamation areas throughout the United States, without consideration of differences in climate, topography, or other factors.⁴

Application of these guidelines created a disincentive to potential reminers of abandoned mines because of the prohibitive cost of bringing pre-mined lands to the same standard as virgin lands, often resulting in untreated pollution for “pre-existing discharges.”

B. The Rahall Amendment

To counter this disincentive, Congress added as part of the 1987 amendments to the CWA section 301(p), known as the Rahall Amendment after its sponsor, West Virginia Rep. Nick Rahall. This amendment sought to provide incentives for remining and reclaiming abandoned mine lands that pre-dated the SMCRA in 1977 by exempting certain remining operations from effluent limitations, thereby making remining economically feasible. Section 301(p) provides in pertinent part:

Subject to paragraphs (2) through (4) of this subsection, the Administrator, or the State in any case which the State has an approved permit program under section 1342(b) of this title, may issue a permit under section 1342 of this title which modifies the requirements of subsection (b)(2)(A) of this section with respect to the pH level of any pre-existing discharge, and with respect to pre-existing discharges of iron and manganese from the remined area of any coal remining operation or with respect to the pH level or level of iron or manganese in any pre-existing discharge affected by the remining operation. Such modified requirements shall apply the best available technology economically achievable on a case-by-case basis, using best professional judgment, to set specific numerical effluent limitations in each permit.

33 U.S.C. § 1311(p)(1). In other words, the Rahall Amendment allows the Administrator or a State with an approved NPDES permitting program to issue a discharge permit that modifies the categorical coal mining effluent limitations for pH, iron, and manganese with respect to any “pre-existing discharges” from the remined area of any remining operation or affected by the remining operation. Where such a modified requirement is allowed, BAT is to be determined on a case-by-case basis, using the permit writer’s “best professional judgment” (“BPJ”), “to set the specific numerical effluent limitations in each permit.” *Id.*

At the same time, under the Amendment, the Administrator may not issue a permit unless “the applicant demonstrates . . . that the coal remining operation will result in the potential for improved water quality from the remining operation.” *Id.* § 1311(p)(2). Further, the Administrator

⁴ Sedimentation ponds in reclamation areas are designed to capture and store water from a precipitation event and then slowly release that water in a continuous, low-velocity discharge. 65 Fed. Reg. 19,440, 19,453 (Apr. 11, 2000).

is prohibited from issuing a permit that allows discharges that exceed pre-existing discharge levels. *Id.*⁵ The Rahall Amendment also provides that no discharge “shall exceed State water quality standards established under section 1313 of this title.” *Id.* The Amendment defines “coal remining operation” as one which begins after February 4, 1987, at a site on which coal mining was conducted before August 3, 1977,” *id.* § 1311(p)(3)(A)⁶, and a “remined area” as “only that area of any coal remining operation on which coal mining was conducted before August 3, 1977,” *id.* § 1311(p)(3)(B). Finally, the Amendment states that nothing in the coal remining provision was intended to “affect the application of the Surface Mining Control and Reclamation Act of 1977 to any coal remining operation, including the application of such Act to suspended solids.” 33 U.S.C. § 1311(p)(4).

Congressman Rahall described the Amendment’s purpose as follows:

Throughout the Appalachian region abandoned coal mine lands exist which, due to erosion and acidic discharges, pose a serious threat to water quality.

....

However, in many instances, coal remining is not economically and technically feasible because industry becomes liable for treating the preexisting water discharges under stringent national effluent guidelines. This coal remining provision will enable industry to enter abandoned coal mine sites and engage in mining under modified water quality standards established on a case-by-case basis. The end result of this effort will be the reclamation of the site and as such, as [sic] improvement in water quality over that which existed at the site prior to remining.

133 Cong. Rec. H 168 (daily ed. Jan. 8, 1987) (statement of Rep. Rahall).

C. The Final Rule

Despite the Rahall Amendment, coal mining companies and most states remained reluctant to pursue remining without formal EPA approval and guidelines. Thus, after notice and comment, the EPA promulgated the Final Rule on January 23, 2002.⁷ The Final Rule created two new subcategories under the Coal Mining Point Source Category and promulgated regulations for both.

⁵“Pre-existing discharge” “means any discharge at the time of permit application under this subsection.” 33 U.S.C. § 1311(p)(3)(C).

⁶August 3, 1977 is the effective date of the SMCRA.

⁷On April 11, 2000, 65 Fed. Reg. 19,440, the EPA published proposed amendments to effluent limitations guidelines and new source performance standards for the coal mining point source category. At that time the EPA proposed two new subparts to the existing regulations at 40 C.F.R. Pt. 434 applicable to Coal Remining (Subpt. G) and Western Alkaline Coal Mining (Subpt. H). 65 Fed. Reg. 19,440 (Apr. 11, 2000).

On July 30, 2001, 66 Fed. Reg. 39,300, the EPA published a Notice of Data Availability to discuss options relating to two issues raised by commenters on the Coal Remining Subcategory that had not been presented in the proposal. The EPA presented these comments, data collected since the proposal, and options being considered for the final rulemaking in the notice. The EPA also solicited comment on (1) the expansion of applicability of the Coal Remining Subcategory to sites abandoned after 1977, and (2) alternative effluent limits for solids in pre-existing discharges. 66 Fed. Reg. 39,300 (July 30, 2001).

The final rule was then issued on January 23, 2002, 67 Fed. Reg. 3370. 67 Fed. Reg. 3370 (January 23, 2002).

1. Coal Remining Subcategory

The first subcategory, known as the Coal Remining Subcategory, applies to “pre-existing discharges that are located within or are hydrologically connected to pollution abatement areas of a coal remining operation.” 40 C.F.R. § 434.71(a) (2005). “Pre-existing discharge” is defined as “any discharge resulting from mining activities that have been abandoned prior to the time of a remining permit application.” *Id.* § 434.70(c). A coal remining operation is “a coal mining operation at a site on which coal mining was previously conducted and where the site has been abandoned or the performance bond has been forfeited.” *Id.* § 434.70(a).

The Coal Remining Subcategory requires every remining operator to create a site-specific Pollution Abatement Plan and submit it to the EPA or the authorized state agency. 40 C.F.R. § 434.72(a). The Pollution Abatement Plan must “identify characteristics of the pollution abatement area and the pre-existing discharges,” “be designed to reduce the pollution load from pre-existing discharges,” and “identify the selected best management practices (BMPs) to be used.” *Id.* The regulation further requires the plan to “describe the design specifications, construction specifications, maintenance schedules, criteria for monitoring and inspection, and expected performance of the BMPs.” *Id.*

The Coal Remining Subcategory sets the effluent limitations for four pollutants: total iron, total manganese, net acidity, and TSS. 40 C.F.R. § 434.72(b)(1). The effluent limitation for each pollutant “[m]ay not exceed baseline loadings,” or conditions that exist when remining commences. *Id.* However, if the EPA or state permitting authority finds that measuring baseline pollutant loadings is infeasible, and that remining “will result in significant improvement that would not otherwise occur,” then no measurable effluent limitations apply. *Id.* § 434.72(b)(2).

Under the Final Rule, these Pollution Abatement Plans qualify as BPT, 40 C.F.R. § 434.72, and BAT, 40 C.F.R. § 434.73, and BCT, 40 C.F.R. § 434.74, for remining operators.

Thus, the Coal Remining Subcategory differs from the Rahall Amendment in four ways. First, the definition of “coal remining operation” is broader than the definition found in the Rahall Amendment, which limits sites eligible for the modified effluent limits to those sites on which the coal remining operation began *after* February 4, 1987, on a site where coal mining had been conducted *before* August 3, 1977, the effective date of the SMCRA. The Final Rule allows any coal mining operation at a site on which coal mining was previously conducted and where the site has been abandoned or the performance bond has been forfeited, to be eligible regardless of whether prior mining occurred before August 3, 1977 or thereafter. Second, although the Rahall Amendment lists only three pollutants for which modified requirements are available (pH, iron, and manganese), the Final Rule added suspended solids to the list of requirements that could be modified. Third, the Rahall Amendment bounded the modified requirements by requiring that where the categorical effluent limitations were not required, specific numerical effluent limitations representing a case-by-case determination of the BAT would be required in each permit. On the other hand, the Final Rule allows modified permits without setting numeric limitations representing case-by-case BAT. Finally, the Final Rule differs from the Rahall Amendment by applying the more stringent general standard instead of the modified requirements to pre-existing discharges that reminers commingle with discharges from active mining operations.

2. Western Alkaline Coal Mining Subcategory

The second new subcategory, the Western Alkaline Coal Mining Subcategory, applies to “mine drainage from applicable areas of western coal mining operations.” 40 C.F.R. § 434.82(a). A “western coal mining operation” is “a surface or underground coal mining operation located in

the interior western United States, west of the 100th meridian west longitude, in an arid or semiarid environment with an average annual precipitation of 26.0 inches or less.” 40 C.F.R. § 434.80(f).

The Final Rule requires the operator to submit to the permitting authority “a site-specific Sediment Control Plan . . . designed to prevent an increase in the average annual sediment yield from pre-mined undisturbed conditions.” 40 C.F.R. § 434.82(a). Similar to the Pollution Abatement Plans, each Sediment Control Plan “must identify best management practices (BMPs) and also must describe design specifications, construction specifications, maintenance schedules, criteria for inspection, as well as expected performance and longevity of the best management practices.” *Id.* The Western Alkaline Coal Mining Subcategory does not set any uniform standards for drainage at western coal mining operations; it merely requires a Sediment Control Plan that is incorporated into the NPDES permit. However, operators must demonstrate “[u]sing watershed models,” that the Sediment Control Plans “will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions.” 40 C.F.R. § 434.82(b). The operator’s only other obligation is to implement and maintain the best management practices described in the Sediment Control Plan. *Id.* § 434.82(c). These include BPT, *id.*, § 434.82; BAT, *id.* § 434.83; and BCT, *id.* § 434.84.

The Western Alkaline Coal Mining Subcategory differs from the Rahall Amendment in that the effluent limitations on the concentration of settleable solids and pH have been eliminated, and replaced only with a requirement that the operator submit a site-specific Sediment Control Plan that is designed to prevent an increase in the “average annual sediment yield from pre-mined, undisturbed conditions” using “best management practices.”

D. Litigation

Petitioners brought this appeal under section 509(b) of the CWA, challenging the Final Rule.⁸ Petitioners claimed that the remaining guidelines exceeded EPA’s statutory authority under the Rahall Amendment by expanding both the number of sites and the number of pollutants eligible for modified pollutant limits, and that the new rule impermissibly discourages remaining at Rahall-eligible mines by subjecting commingled waste streams to the most stringent effluent limitation applicable to the constituent waste streams. Regarding the Western Alkaline Coal Mining Subcategory, Petitioners first argued that BMPs are not appropriate effluent limitations because they are not numeric criteria. Second, they claimed that the Administrator has not shown that continued imposition of the currently applicable effluent limitations is infeasible. Third, they argued that the entire subcategory of Western Alkaline Coal Mining is irrational. Finally, Petitioners contended that the EPA’s goal in creating the subcategory is inconsistent with the CWA and the SMCRA.

The EPA defended the Final Rule on the grounds that the Rahall Amendment does not limit its authority to issue the regulations. The EPA argued that the requirement of “best management practices” in lieu of numeric effluent limitations was a reasonable exercise of its authority. As to the Western Alkaline Coal Mining Subcategory, the EPA argued that numeric limitations were infeasible. The EPA also maintained that the creation of the subcategory was not arbitrary or capricious because it had relied on scientific information to support its creation. Finally, the agency asserted that setting effluent limitations at premined background levels was consistent with the CWA and the SMCRA.

⁸This Court has jurisdiction over this appeal pursuant to section 509(b) of the CWA, 33 U.S.C. 1369(b). The petition for review is proper in this Circuit pursuant to 33 U.S.C. § 1369(b)(1), which directs that review may be had by application to the appeals court for the federal judicial district in which a person directly affected by the action resides or transacts business. The Western Alkaline Coal Mining Subcategory applies to reclaimed mining sites in several western states, none in this Circuit. Petitioners state that some of the members of the CCC reside in this Circuit, and that some members are affected by the Western Subcategory rule.

E. Panel Decision

A panel of this Court unanimously rejected Petitioners' arguments that the Rahall Amendment deprived the EPA of authority to promulgate the Coal Remining regulations. *See Citizens Coal Council v. EPA*, 385 F.3d 969 (6th Cir. 2004), *vacated, reh'g en banc granted*, February 23, 2005. It reviewed the EPA's construction of the statute under *Chevron, U.S.A. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837 (1984), and concluded that neither the Rahall Amendment nor the CWA itself addressed whether the EPA could create additional subcategories. The unanimous panel further held that the Amendment was simply an opt-out provision, and that it did not address the EPA's authority to promulgate regulations that are broader than its provisions. The panel therefore held that the EPA's interpretation that 33 U.S.C. § 1314(b) grants it independent authority to issue the regulations was reasonable under *Chevron*.

The majority nonetheless found the regulations invalid on grounds not raised or presented by either party. First, the majority found the regulations invalid because the EPA failed to follow procedures the majority deemed required by law. Specifically, the majority found that, as the very first step in the development of any effluent limitations guidelines under 33 U.S.C. § 1314, the EPA must "identify which control measures and practices are available to the various categories and classes of point sources" under 33 U.S.C. § 1314(b)(3). The majority found that the EPA had impermissibly skipped this mandatory step for the Coal Remining regulations because the EPA first defined the desired level of pollution (baseline conditions) and then worked backwards to find technological tools (site-specific plans) that would achieve this goal. The majority further reasoned that the EPA's approach shirked its obligation under 33 U.S.C. § 1314(b)(1)(A), (b)(2)(A) and (b)(4)(A) to determine the degree of effluent reduction attainable. The majority faulted the EPA for setting the required reduction at zero (the baseline) without determining if a greater reduction was possible. The court held that "where the EPA fails to determine how much reduction in pollution is possible, and to do so by reference to the amounts of pollutants," it deviates from the statutory directive. The majority also faulted the Coal Remining regulations because the regulations impermissibly set effluent limitations through site-specific factors. Finally, the majority invalidated the Coal Remining regulations because the record contained no evidence that the EPA considered each of the factors enumerated in 33 U.S.C. § 1314(b)(1)(B), (b)(2)(B), and (b)(4)(B).

The panel majority invalidated the Western Alkaline Coal Mining Subcategory on the same bases.

One member dissented from those portions of the majority opinion that found the EPA's regulations invalid, and would have upheld the regulations in their entirety.

The EPA sought en banc review, arguing that the court should not have reached the issues upon which the panel majority ruled against the EPA, because those issues were neither raised to the EPA in the underlying notice-and-comment rulemaking proceeding, nor in Petitioners' initial brief. The EPA also contended that the panel erred by not deferring to its reasonable construction of ambiguous provisions of a statute it administers. The EPA therefore asked that this Court vacate those portions of the panel majority's decision in which it found the regulations invalid.⁹

⁹The Interstate Mining Compact Commission ("IMCC") has filed a brief as amicus curiae in support of the EPA in the en banc proceedings. The IMCC is an agency of its party states created to assist those states in the establishment, implementation, and administration of regulatory programs governing coal mining operations and related environmental issues within their respective borders.

The IMCC consists of its member states, which as of 2005 accounted for 70 percent of the total national coal production.

II. Standards of Review

A. Statutory Interpretation

In *Chevron*, the Supreme Court articulated a two-step test for judicial review of an agency's interpretation of a statute. First, the reviewing court must ask "whether Congress has directly spoken to the precise question at issue." *Id.* at 842. If so, "that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress." *Id.* at 842-43 (footnote omitted). If Congress has not directly spoken to the issue at hand, however, the court must decide if the agency's action under the statute is based on a permissible construction of the statute. *Id.* at 843. In this second step, the court must accord considerable weight to the agency's construction of the statute and it may not substitute its own construction of the statute for the agency's reasonable interpretation. *Id.* at 843-44.

B. Agency Discretion

The EPA promulgated the Final Rule through informal rulemaking. The scope of our review over the informal rulemaking process is generally governed by section 10(2)(e) of the Administrative Procedure Act ("APA"), 5 U.S.C. § 706(2) (1996). *BP Exploration*, 66 F.3d at 792. Under § 706(2), a court must invalidate an informal rule if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law"; "in excess of statutory jurisdiction, authority, or limitations, or short of statutory right"; or "without observance of procedure required by law." 5 U.S.C. § 706(2)(A), (C), (D).¹⁰

An agency rule is "arbitrary or capricious"

if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Motor Vehicle Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). The court is required to make a "searching and careful review" in its assessment of the agency action, but "the ultimate standard of review is a narrow one." *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971). Where the rulemaking involves review of the agency's technical or scientific evaluations and determinations, the highest level of deference to the agency is to be applied. *Baltimore Gas & Elec. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 103 (1983); *BP Exploration*, 66 F.3d at 792.

III. Analysis

A. Coal Remining Subcategory

1. *Chevron* Analysis

In their original merits brief, Petitioners contended that, in creating the Final Rule, the Administrator violated step one of *Chevron* by ignoring the language and intent of section 301(p)

¹⁰We recognize that there is support for the proposition that in review of rulemaking the second step of *Chevron* indeed amounts to the same inquiry as arbitrary or capricious review under the APA. See *United States v. Mead Corp.*, 533 U.S. 218, 229 (2001); *Nat'l Ass'n of Reg. Util. Comm'rs v. ICC*, 41 F.3d 721, 726-27 (D.C. Cir. 1994); Ronald M. Levin, see generally *The Anatomy of Chevron: Step Two Reconsidered*, 72 Chi.-Kent L. Rev. 1253 (1997).

of the Rahall Amendment. They claim that the Rahall Amendment precisely defined the limited circumstances in which a modified permit may be issued in lieu of the otherwise-applicable categorical effluent limitations for coal mining operations, and that the Final Rule exceeds these boundaries in numerous respects. Specifically, Petitioners contended that Congress bounded the EPA's authority by specifying *which* pollutants (pH, iron, and manganese) are eligible for relaxed standards, *which* operations (pre-August 3, 1977) are eligible, *what* limits must apply in place of national guideline limits (i.e. specific numerical limits), and *when* the alternative standards would apply.

Thus, the initial question under step one of *Chevron* is whether the Rahall Amendment itself or the CWA otherwise explicitly addresses the Administrator's authority to create a subcategory under the Coal Mining Point Source Category and to promulgate regulations for that subcategory that conflict with the Rahall Amendment. The Rahall Amendment states that the Administrator "may issue a permit under section 1342 of this title which modifies the requirements of subsection (b)(2)(A) of this section" with respect to certain effluents. 33 U.S.C.A. § 1311(p) (emphasis added). Section 301(b)(2)(A) in turn provides for "effluent limitations for categories and classes of point sources . . . which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Administrator." *Id.* § 1311(b)(2)(A). The Rahall Amendment, therefore, provides for modifications of the effluent limitations guidelines determined by the Administrator for categories and classes of point sources pursuant to the requirements of sections 301(b) and 304(b). The Amendment is permissive; it does not *require* remaining operations to seek such modified permits, and remaining operators remain free to seek permits under the generally applicable effluent limitations guidelines promulgated by the EPA pursuant to section 304(b). The Rahall Amendment says nothing about the EPA's ability or inability to regulate national effluent limitations. It simply provides express authority to modify individual NPDES permits on a case-by-case basis to allow effluent limitations for specified pollutants in the pre-existing discharges from remaining operations other than those required in the generally applicable effluent limitation regulations found in 40 C.F.R. § 434, Subpt. C.¹¹

Sections 301(b) and 304(b) also do not provide a definitive answer. Section 304(b) states that the "Administrator *shall* . . . publish . . . regulations . . . providing guidelines for effluent limitations, and, at least annually thereafter, revise, if appropriate, such regulations" for various classes and categories of point sources. 33 U.S.C.A. § 1314(b) (emphasis added). Section 301 gives these guidelines the force of law, *id.* at § 1311(a) ("Except as in compliance with this section . . . the discharge of any pollutant by any person shall be unlawful"); § 1311(e) ("Effluent limitations established pursuant to this section or section 1312 of this title shall be applied to all point sources of discharge of pollutants in accordance with the provisions of this chapter."), and section 402(a) (33 U.S.C. § 1342) directs the Administrator to incorporate these regulations into NPDES permits issued to individual polluters. Neither section 301(b) nor 304(b) contains any restriction vis-a-vis section 301(p) on the Administrator's power to create additional subcategories for the Coal Mining Point Source Category. In short, these sections do not express a clear congressional intent on the issue of whether the EPA has the power to create a subcategory that differs from the Rahall Amendment.

¹¹The EPA also points out that section 301(p)(1) uses the term "best professional judgment" when describing the modified permit requirements, which is utilized for effluent limitations in permits for which no national standard applies. "Best professional judgment" refers to NPDES authority under section 402(a)(1)(B) of the Act, 33 U.S.C. § 1342(a)(1)(B), by application of the regulations at 40 C.F.R. § 125.3(c) and (d). This permit authority applies where the EPA has not promulgated an applicable guideline. *Natural Res. Def. Council v. EPA*, 863 F.2d 1420, 1424 (9th Cir. 1988).

Petitioners assert that the EPA cannot rely on its general rulemaking authority when specific statutory directives define how that standard-setting authority is to be used in a particular instance. *See, e.g., Am. Petroleum Inst. v. EPA*, 52 F.3d 1113, 1119 (D.C. Cir. 1995) (stating that the “EPA cannot rely on its general authority to make rules necessary to carry out its functions when a specific statutory directive defines the relevant functions of EPA in a particular area”) (citations omitted). That is, they claim that the Rahall Amendment’s directives as to which pollutants, which operations, what limits, and when alternative standards apply preclude the EPA from adopting standards that are inconsistent with these limitations. However, because the Rahall Amendment does not contain a specific statutory directive to limit or prevent the EPA from otherwise exercising its statutory authority to establish national standards for the remining subcategory, this argument is unavailing.¹²

Because Congress has not directly addressed the precise question at issue, we move to step two of the *Chevron* analysis. *Chevron*, 467 U.S. at 843. The EPA claims that it was authorized to promulgate regulations for the coal remining subcategory pursuant to its general rulemaking authority under section 304(b), and that nothing in section 301(p) limits that authority, because the Rahall Amendment is simply a permissive, opt-out, rather than a generally applicable, scheme.

As noted, section 304(b) authorizes, indeed requires, the Administrator to create effluent limitation guidelines for various classes and categories of point sources. When considered with the permissive, opt-out nature of the Rahall Amendment, applicable in individual permits, we cannot say that the Administrator’s conclusion that it was authorized to create additional subcategories under the Coal Mining Point Source Category, not identical to the Rahall Amendment, was unreasonable.

We also find that the EPA did not act arbitrarily or capriciously in promulgating the Final Rule. The record reflects that, despite the Rahall Amendment, remining operations were not occurring. The Final Rule was issued fifteen years after the Rahall Amendment. In the first ten years after its enactment, only 330 (out of 1072) Rahall-type permits had been issued, with 300 of those being issued by Pennsylvania.¹³ Many states had not been able to establish the guidelines and procedures required to issue Rahall permits. At the same time, “IMCC member States [had] indicated that they would be able to establish formal remining programs under guidelines set forth under an EPA effluent limitations Coal Remining subcategory,” and that with such guidelines, “mine operators would be more inclined to enter into remining projects.” 65 Fed. Reg. at 19,445. The EPA promulgated the rule in the hopes of providing “better environmental results than the [then-] current requirements.” *Id.* at 19,446. Thus, the EPA had a reasonable basis for its action—namely evidence that the Rahall Amendment was, as a practical matter, not achieving its goal of encouraging remining and, on a larger scale, of restoring the “chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a).

The EPA’s conclusion that remining has many potential benefits is also supported in the record. *Id.* at 3375.¹⁴ Performing statistical analyses to evaluate the effects of remining on water

¹²The EPA also asserts that it enacted the Final Rule in part to implement the Rahall Amendment. This argument must be rejected. The Rahall Amendment authorized the EPA to modify the effluent limitation guidelines in individual permits. It does not authorize the EPA to issue generally applicable rules for coal remining.

¹³Pennsylvania had amended its mining statute to provide for remining incentives three years before Congress amended the CWA. *See* 52 Pa. Stat. Ann. § 1396.4f (West 1998).

¹⁴As the Final Rule notes, the regulations are supported by several key documents:

1. “Coal Remining Best Management Practices Guidance Manual” (EPA 821-B-01-010): This document describes abandoned mine land conditions and the performance of Best Management

quality at thirteen remining sites, the EPA analyzed the adverse environmental impacts of current practices as a basis for assessing the incremental environmental impacts of the proposed rule. *Id.* at 3389; Kristen L. Strellec, Office of Water, Office of Sci. and Tech., Eng'g and Analysis Div., Env'tl. Prot. Agency, EPA 821-B-00-002, Effluent Limitations Guidelines and Standards for the Coal Mining Industry: Remining and Western Alkaline Subcategories 8-1 (Mar. 2000), *available at* <http://www.epa.gov/guide/coal/impact.pdf>. The EPA observed that abandoned mine lands are associated with a wide range of public health and safety problems and aesthetic degradation, including abandoned mine openings, highwalls, unstable spoil piles, and hazardous water bodies. In addition, acid mine drainage from abandoned mine lands causes serious water quality problems because of its high acidity and other contaminants. *Id.* Remining improved water quality through the removal of acid-forming materials and sediment, improved public safety by correcting problems associated with abandoned mines, and improved the aesthetic quality of the land and water resources. *Id.* at 8-1 to 8-3.

In sum, the decision to establish national standards for the remining subcategory was not contrary to the plain language of section 301(p), was within the Administrator's broad discretion under sections 301(b) and 304(b), is supported by the record, and was not unreasonable.

2. Specific Challenges

Having rejected the argument that the EPA lacked authority to promulgate the Final Rule, and further concluded that the EPA's interpretation of the Act as allowing it to create subcategories under the Coal Mining regulation was reasonable,¹⁵ we now address Petitioners' challenges to specific aspects of the remining subcategory rule.

Practices (BMPs) that have been implemented at remining operations. The BMP Guidance Manual is a technical reference document that presents research and data concerning the prediction and prevention of acid mine drainage to the waters of the United States. . . .

2. "Coal Remining Statistical Support Document" (EPA 821-B-01-011): This document describes the statistical methodology for establishing and monitoring baseline conditions and setting discharge limits at remining sites.

3. "Development Document for Final Effluent Limitations Guidelines and Standards for the Western Alkaline Coal Mining Subcategory" (EPA 821-B-01-012): This document presents EPA's technical conclusions concerning the Western Alkaline Coal Mining Subcategory.

4. "Economic and Environmental Impact Assessment of Effluent Limitations Guidelines and Standards for the Coal Mining Industry: Remining and Western Alkaline Subcategories" (EPA 821-B-01-013): This document presents the methodology employed to assess economic and environmental impacts of the final rule and the results of the analysis.

5. "Statistical Analysis of Abandoned Mine Drainage in the Assessment of Pollution Load" (EPA 821-B-01-014): This document describes pollutant characteristics of pre-existing discharges at abandoned mine lands.

67 Fed. Reg. at 3371.

¹⁵ It is not clear to what extent Petitioners sought review of these issues under step two of *Chevron* as to the Coal Remining Subcategory. Thus, our conclusion that the Rahall Amendment did not limit the EPA's authority to issue the subcategories should technically end the matter. However, Petitioners' specific challenges appear to implicate not only this type of review, but review under the APA as well.

a. Definition of “Coal Remining Operation”

Petitioners complain that the EPA exceeded its authority in defining “coal remining operation” to include remining operations on mine lands abandoned after August 3, 1977. For the reasons discussed above, the EPA was not constrained to use a definition identical to the definition of “coal remining operation” in the Rahall Amendment.¹⁶ Furthermore, as explained above, the EPA’s reading of the Act as giving it authority under section 304(b), together with section 301(b), is not unreasonable.

We also find that the EPA did not act arbitrarily or capriciously in deciding to extend the applicability of the coal mining subcategory effluent limitations guidelines beyond those remining operations that had been previously eligible for modified permits under section 301(p). The record reflects that the EPA examined whether the broader definition would cause an increase in abandoned mines in order to take advantage of the remining effluent limitation guidelines for pre-existing discharges at a future remining operation. 67 Fed. Reg. at 3374. However, the EPA concluded that there are strong disincentives under the SMCRA against mine operation abandonments. *Id.* A mine operator not only forfeits the reclamation bond, but is also precluded from receiving further mining permits until reclamation is completed.¹⁷ Thus, it cannot be said that the EPA acted arbitrarily or capriciously in adopting a broader definition of “coal remining operation” than that found in the Rahall Amendment.

b. TSS

Petitioners contend that section 301(p) does not allow modified NPDES permit limits for TSS. In support, they cite section 301(p)(4), which states that “[n]othing in this subsection shall affect the application of the Surface Mining Control and Reclamation Act of 1977 . . . to any coal remining operation, including the application of such Act to suspended solids.” 33 U.S.C. § 1311(p)(4).

Again, nothing in the Rahall Amendment limits or even addresses the EPA’s discretion to promulgate national standards. The quoted language refers to the SMCRA only, and Petitioners offer no explanation as to how including effluent limitations for suspended solids affects the application of SMCRA requirements for suspended solids. Further, the record reflects that the EPA considered whether the alternative limits for solids would square with the SMCRA requirements for suspended solids, and concluded that “the final regulation is consistent with SMCRA which mandates the prevention of additional contribution of suspended solids to streamflow to the extent possible using the best technology currently available.” 67 Fed. Reg. at 3388. The EPA explained that it

has adopted what is essentially a compliance schedule so that, during remining and reclamation activities, the operator cannot contribute sediment levels beyond the baseline discharge loading. After remining and reclamation has been completed, the operator must meet the standards for TSS and SS contained in subpart E–Post

¹⁶In fact, section 301(p)(3) limits the reach of the definitions to the “purposes of this subsection.” 33 U.S.C. § 1311(p)(3).

¹⁷The SMRCA regulates the surface mining industry by requiring surface coal mining operators to obtain mining permits. 30 U.S.C.A. § 1257 (West 1986 & Supp. 2005). The mining permit must be denied unless the permit application contains a reclamation plan, *id.* at § 1257(d), which guarantees that reclamation can be achieved, *id.* at § 1260. The permitting process also requires the permitting authority to postpone issuance of a mining permit until the applicant posts a performance bond. *Id.* at § 1259(e). The amount of the performance bond must be “sufficient to assure the completion of the reclamation plan if the work is to be performed by the regulatory authority in the event of forfeiture.” *Id.* at § 1259(a).

Mining areas prior to bond release. EPA concluded that the implementation of successful sediment control BMPs should, in most cases, be able to meet the BPT standards contained in subpart E—Post Mining areas regardless of whether the area has been disturbed due to remining or virgin mining.

Id.

Nor is including effluent limitations for solids inconsistent with the purpose of section 301(p). The record reflects that the EPA initially did not propose alternative limits for solids, but based on comments and information received on the proposed rule, the EPA decided that alternative limits for pH, iron, and manganese, but not for solids, would not provide sufficient incentives for remining abandoned mine lands. The EPA noted that the alternative limits for suspended solids were consistent with the intent of the Rahall Amendment, “which seeks to encourage remining while ensuring that the remining will potentially improve and reclaim [abandoned mine lands].” *Id.* Thus, the EPA’s inclusion of TSS in the coal remining subcategory was not arbitrary or capricious.

c. BMPs

Petitioners also argue that the EPA lacks authority to promulgate BMPs in place of numerical standards as effluent limitations, because section 301(p) provides that modified permits under the Rahall Amendment apply BAT on a case-by-case basis “to set specific *numerical* effluent limitations in each permit.” 33 U.S.C. § 1311(p)(1) (emphasis added). Again, for the reasons articulated above, section 301(p) does not limit the EPA’s authority to use BMPs.

The EPA contends that its interpretation was reasonable because the CWA does not mandate the use of numeric limitations only. The EPA therefore claims that it reasonably determined that effluent limitations for iron, manganese, acidity, and/or TSS from pre-existing discharges from coal remining operations may take the form of BMPs when a baseline pollutant loading cannot be calculated.

The EPA relies on the definition of “effluent limitation,” which is defined under the Act as

any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance.

33 U.S.C. § 1362(11) (emphasis added); *see also* 33 U.S.C. § 1312(a) (stating that “[w]henver, in the judgment of the Administrator . . . discharges of pollutants from a point source or group of point sources, with the application of effluent limitations required under section 1311(b)(2) of this title, would interfere with the attainment or maintenance of that water quality in a specific portion of navigable waters . . . effluent limitations (*including alternative effluent control strategies*) for such point sources or sources shall be established which can reasonably be expected to contribute to the attainment or maintenance of such water quality”) (emphasis added). Thus, under the Act, effluent limitations are not limited to numeric discharges but encompass “any restriction” on discharges, including “schedules of compliance,” or “a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation.” 33 U.S.C. § 1362(17).

The EPA’s reading of the Act finds support in the language of the Act and is therefore not unreasonable. Other courts have also recognized that the CWA does not require the EPA to set numeric limits where such limits are infeasible. *See, e.g., Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486, 502 (2d Cir. 2005) (stating that site-specific BMPs are effluent limitations under the CWA; holding that the EPA provision regulating the emission of water pollutants by concentrated

animal feeding operations was arbitrary and capricious because it allowed permitting authorities to issue permits that did not include terms of nutrient management plans, in violation of CWA requirement that effluent limitations be included in NPDES permits); *Natural Res. Def. Council, Inc. v. EPA*, 673 F.2d 400, 403 (D.C. Cir. 1982) (noting that “section 502(11) defines ‘effluent limitation’ as ‘any restriction’ on the amounts of pollutants discharged, not just a numerical restriction”; holding that section of CWA authorizing courts of appeals to review promulgation of “any effluent limitation or other limitation” did not confine the court’s review to the EPA’s establishment of numerical limitations on pollutant discharges, but instead authorized review of other limitations under the definition) (emphasis added). In *Natural Res. Def. Council, Inc. v. Costle*, 568 F.2d 1369 (D.C. Cir. 1977), the D.C. Circuit stressed that

when numerical effluent limitations are infeasible, EPA may issue permits with conditions designed to reduce the level of effluent discharges to acceptable levels. This may well mean opting for a gross reduction in pollutant discharge rather than the fine-tuning suggested by numerical limitations.

Id. at 1380 (rejecting the EPA’s argument that where it was infeasible to promulgate numeric effluent limitations, the EPA was authorized to exclude the relevant point source from the NPDES program, because section 402(a) gives the EPA considerable flexibility in framing the permit to achieve a desired reduction in pollutant discharges); *see also id.* at 1380 n.21 (noting the proposition that Congress did not regard numeric effluent limitations as the only permissible limitation was supported by section 302(a) of the Act, 33 U.S.C. § 1312(a)).¹⁸

Petitioners contend that the suggestion that best management practices are the equivalent of effluent limitations “flies in the face of the distinction drawn by Congress in Section 304(e) and 304(b).” Section 304(e) authorizes BMPs as “supplemental” to effluent limitations. *See* 33 U.S.C. § 1314(e) (stating that the EPA “may publish regulations, supplemental to any effluent limitations specified under subsections (b) and (c) of this section for a class or category of point sources, for any specific pollutant which the Administrator is charged with a duty to regulate as a toxic or hazardous pollutant”). Petitioners therefore claim that BMPs alone may not constitute effluent limitations.

The EPA counters that section 304(e) applies specifically to toxic pollutants, and maintains that it derives independent authority under sections 402(a) and 304(b), 33 U.S.C. §§ 1342(a), 1314(b), and section 502(11), 33 U.S.C. § 1362(11) to incorporate BMPs in the effluent guidelines for other pollutants. Thus, the EPA maintains that sections 502(11), 304(b), and 304(e) can be read together as allowing BMPs as supplemental to an effluent limitation under § 304(b), or can each stand as an effluent limitation by itself. This is certainly not an unreasonable interpretation of the Act, and given the ambiguity in the CWA on this point, we will uphold the EPA’s interpretation as reasonable.

In any event, the effluent limitations guidelines are consistent with section 301(p)(1) in that they require numerical limitations to be included in the NPDES permits, unless calculation of such numeric limits is infeasible. *See* 40 C.F.R. § 434.72(b)(1) (“Except as provided in . . . paragraph (b)(2) of this section, the following effluent limits apply to pre-existing discharges . . .”). Further,

¹⁸The EPA’s NPDES permit regulations reflect the EPA’s longstanding interpretation of the CWA as allowing BMPs to take the place of numeric effluent limitations under certain circumstances. 40 C.F.R. § 122.44(k), entitled “Establishing limitations, standards, and other permit conditions (applicable to State NPDES programs . . .),” provides that permits may include BMPs to control or abate the discharge of pollutants when: (1) “[a]uthorized under section 304(e) of the CWA for the control of toxic pollutants and hazardous substances from ancillary industrial activities”; (2) “[a]uthorized under section 402(p) of the CWA for the control of storm water discharges”; (3) “[n]umeric effluent limitations are infeasible”; or (4) “[t]he practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.” 40 C.F.R. § 122.44(k).

the required numerical limitations are consistent with section 301(p)(2), which states that limitations for pH, iron, and manganese cannot allow discharge of such pollutants “to exceed the levels being discharged from the remined area before the coal remining operation begins.” Under the coal remining subcategory, the EPA interpreted the Rahall Amendment’s requirement not to exceed baseline “levels” as a requirement not to exceed a pollutant baseline “loading.”¹⁹ 67 Fed. Reg. at 3384. Thus, determining specific effluent limitations requires calculating baseline pollutant loadings for each pollutant in the pre-existing discharge, using a standardized procedure for the calculation. See 40 C.F.R. § 434, app. B (“Baseline Determination and Compliance Monitoring for Pre-Existing Discharges at Remining Operations”). The calculation becomes the numerical limitation for the pollutant. Non-numeric limits are allowed only when numeric limits are infeasible. Finally, the remining subcategory rule requires non-numeric effluent limitations consisting of a pollution abatement plan, which “must be designed to reduce the pollution load from pre-existing discharges and must identify the selected best management practices (BMPs) to be used.” 40 C.F.R. § 434.72(a). This requirement is consistent with section 301(p), which requires the coal remining operator to demonstrate “that the coal remining operation will result in the potential for improved water quality from the remining operation.”

In sum, the EPA’s inclusion of numeric and non-numeric limitations in the guideline for the coal remining subcategory was a reasonable exercise of its authority under the CWA.

d. Intercepted and Commingled Discharges

Petitioners also complain that the Final Rule ignores the language and intent of the Rahall Amendment by requiring a pre-existing discharge that is “intercepted by active mining or that is commingled with waste streams from active mining areas for treatment” be subject to the higher categorical standards for commingling of waste streams found in 40 C.F.R. § 434.61.²⁰ 40 C.F.R. § 434.71(b). Thus, the availability of the alternative standards under the Final Rule is limited to discharges that are relocated or diverted, and to pre-existing discharges “[a]fter commingling has ceased.” *Id.* Petitioners contend that the Final Rule conflicts with the language in the Rahall Amendment stating that modifications shall be allowed “from the remined area of any coal remining operation . . . or in any pre-existing discharge affected by the remining operation.” 33 U.S.C. § 1311(p)(1). In other words, Petitioners contend that this regulation is too strict.

The EPA responds that this language does not contemplate that active mining discharges will necessarily have to be commingled with the pre-existing discharges at remining sites. Thus, according to the EPA, Petitioners’ reading would actually broaden the scope of permit modifications authorized by section 301(p) by applying the grant of authority to discharges from the entire remining operation rather than to pre-existing discharges only. The EPA further contends that the permit modification authority applies *only* to the pre-existing discharges and not to discharges

¹⁹ A pollutant loading is calculated as a product of a flow measurement and a pollutant’s concentration. 67 Fed. Reg. at 3384.

²⁰ That provision states that

[w]here waste streams from any facility covered by this part [Part 434] are combined for treatment or discharge with waste streams from another facility covered by this part, the concentration of each pollutant in the combined discharge may not exceed the most stringent limitations for that pollutant applicable to any component waste stream of the discharge.

40 C.F.R. § 434.61. This provision was promulgated in its present form when part 434 was substantially amended in October 1982. 47 Fed. Reg. 45,382 (Oct. 13, 1982). Thus, the general requirement that a commingled discharge would be subject to the more stringent requirements was established at the time section 301(p) was introduced.

resulting from the active mining activities of a remining operation, citing 33 U.S.C. § 1311(p)(1), (p)(3)(C).

As previously discussed, the Rahall Amendment does not prohibit the EPA from applying its general commingling rule to commingling of pre-existing discharges. *See* 40 C.F.R. § 434.61. Further, as the EPA notes, the term “pre-existing discharge” is defined in section 301(p)(3)(C) as “any discharge at the time of permit application,” or in other words, those discharges in existence prior to the start of remining. The phrase “in any pre-existing discharge affected by the remining operation” is ambiguous, and we cannot say that the EPA’s interpretation of this provision is inconsistent with section 301(p) and therefore unreasonable. We therefore defer to the EPA’s construction of its own regulations.

Lastly, Petitioners assert that section 402(l)(2), 33 U.S.C. § 1342(l)(2), bars applying effluent limitations guidelines to pre-existing discharges that are diverted in order to avoid interception by or commingling with active mining discharges. This argument makes no sense. Section 402(l)(2) provides an exemption from the requirement for a permit for “discharges of stormwater runoff from mining operations . . . which are not contaminated by contact with, or do not come into contact with, any overburden, raw material, . . . byproduct or waste products located on the site of such operations.” 33 U.S.C. § 1342(l)(2). Pre-existing discharges at remining sites are highly contaminated as a result of contact with the raw materials, overburden, and waste products of prior mining activities. And, section 301(p) inherently recognizes that pre-existing discharges are subject to NPDES permit requirements. In short, the EPA’s decision to apply an existing regulation rather than the Final Rule to waste streams that have been commingled was within its discretion and not unreasonable.

e. Response to Dissent

The dissent’s primary argument is that the EPA’s decision to set effluent reduction attainable at zero for remining areas was arbitrary and capricious. The dissent asserts that, “[b]y requiring remining operators to preserve only the status quo, the EPA undermines the potential for reduction that is available and required under the Clean Water Act.” This argument overlooks the whole point of not only the Final Rule, but the Rahall Amendment itself. The Rahall Amendment was enacted based upon congressional findings that remining and reclamation were not occurring due to prohibitive cost of meeting effluent limitations guidelines applicable to virgin lands. The Final Rule was promulgated because the Rahall Amendment had not proven effective in encouraging remining. In setting the effluent reduction attainable at zero, the Final Rule took its cue from the Rahall Amendment itself, which set the baseline at zero. *See* 33 U.S.C. § 1311(p)(2) (stating that “in no event shall such a permit allow the discharges of iron and manganese, to exceed the levels being discharged from the remined area before the coal remining operation begins”). Furthermore, although the Final Rule sets the effluent limitation for each pollutant as not to exceed “baseline loadings,” the Coal Remining Subcategory at the same time requires every remining operator to create a site-specific Pollution Abatement Plan that is “designed to reduce the pollution load from pre-existing discharges.” 40 C.F.R. § 434.72(a).

The dissent also contends “there is no evidence that the EPA ever explored the prospect of accomplishing more than preserving the status-quo” in attempting to meet the Act’s goal of eliminating the discharge of all pollutants. However, as the EPA points out and the record reflects, the EPA considered available technology in several ways prior to the enactment of the Coal Remining Subcategory. Prior to promulgating the Final Rule, the EPA was aware that the technologies underlying the existing effluent limitations for the Coal Mining Category were not effective in reducing pollution from abandoned mines, because remining under the regulations and

available technology was not occurring, even after the Rahall Amendment. 65 Fed. Reg. at 19,448.²¹

In addition, the EPA performed a specific analysis of forty remining sites to determine if application of the existing effluent limitations would be cost effective. *Id.* at 19,446. The EPA performed a cost comparison analysis of the forty remining sites submitted by the State of Pennsylvania and determined that in all forty cases, remining was deemed not economically feasible if the pre-existing discharges were required to meet the existing effluent limitations. *Id.*

Furthermore, the EPA considered the reductions that could be achieved through BMP technology. Specifically, it reviewed data submitted from the State of Pennsylvania from 112 closed remining sites operating under Rahall permits, representing the most extensive data currently available for assessment of the water quality impacts of BMP implementation at remining operations. *Id.* at 19,447. This study showed that implementation of appropriate BMPs was effective in improving or eliminating acidity loading in 45% of the pre-existing discharges, total iron loading in 44% of the discharges, and total manganese in 42% of the discharges. *Id.* at 19,448. The annual combined reductions in pollutant loadings from the BMPs equaled 5.8 million pounds of acidity, 189,000 pounds of iron, and 11,400 pounds of manganese. *Id.* The EPA also examined thirteen active remining operations included in its Coal Remining Database and determined that roughly 58% showed a decrease in mean pollutant loadings and approximately 50% showed a decrease in pollutant loadings after the implementation of BMPs. 67 Fed. Reg. at 3389.

Finally, the EPA specifically discussed the available technology for coal remining in its consideration of the various levels of control under section 304(b). 67 Fed. Reg. 3370, 3379-80. Regarding BAT, the EPA concluded that there was only one available technology that was more stringent than the BMPs, namely pre-existing treatment, but that it was not economically feasible for remining sites. *Id.* at 3379. This was also true for BPT, where the EPA determined that pollutant abatement plans represented the average of the best technology currently available due to Pennsylvania's experience in employing BMPs in Rahall permits. *Id.* at 3380. As for BCT, the EPA applied its BCT cost-effectiveness test and determined that there are "no technologies that can achieve greater removals of conventional pollutants than established for BPT that are also cost-reasonable under the BCT costs test." *Id.* Finally, as for "elimination" of pollutants, the EPA noted that "zero [pollutant] loadings are expected to occur, at least for some remining sites, after regrading and contouring when discharge flows may be reduced greatly"; and that "zero flows have been observed after remining at some mine sites." *Id.* at 3385. This, however, had occurred in only a small percentage of facilities and was therefore not identified as an attainable effluent limitation for BPT, BAT, or BCT. See Office of Water, Office of Sci. and Tech. Eng'g and Analysis Div. Env'tl. Prot. Agency, *Coal Remining—Best Management Practices Guidance Manual*, EPA 821-B-01-010, at 6-8 (2001), available at <http://epa.gov/guide/coal/bmp/section6.pdf> (last visited May 4, 2006) (chart showing overall percentages of discharges achieving varying levels of water quality improvements from the implementation of BMP technology).

²¹The EPA found:

The current regulations at 40 CFR part 434 create a disincentive for remining because of their high compliance costs. Moreover, the potential of the statutory exemption contained in the Rahall Amendment to overcome this disincentive and derive the maximum environmental benefits from remining operations has not been fully realized in the absence of implementing regulations. If mining companies face substantial potential liability or economic loss from remining, they will continue to focus on mining virgin areas and ignore abandoned mine lands that may contain significant coal resources. Based on information collected in support of this proposal, EPA believes that remining operations are environmentally preferable to ignoring the coal resources in abandoned mine lands.

Thus, contrary to the dissent's position, the EPA determined that the pre-existing technology had resulted in little discharge reductions and therefore no environmental improvement, because the industry was not engaging in re-mining. Because BMP technologies had been proven to reduce pollutant loadings at re-mining sites, the EPA deemed it preferable to allow the use of BMPs rather than no action. This reading is entirely consistent with the CWA's goal of eliminating water pollution. The EPA's decision to set the effluent reduction attainable at zero was not arbitrary or capricious.

B. Western Alkaline Coal Mining Subcategory

The Western Alkaline Coal Mining Subcategory adopts alternative sediment control technologies for reclamation areas²² at coal mining sites in the arid West. Petitioners argued the EPA lacked authority to eliminate effluent limitations and replace them with BMPs, and, even if it has that authority, the EPA failed to demonstrate that continued imposition of the current effluent limitations for settleable solids and pH is infeasible. Petitioners further contend that the subcategory is overbroad, irrational, and inconsistent with the CWA and the SMCRA.

1. Authority

Petitioners contend that allowing BMPs instead of numeric effluent limitations in NPDES permits for Western Alkaline Coal Mine reclamation sites is contrary to the CWA. Again, for the reasons discussed elsewhere in this opinion, this argument is rejected.

2. Infeasibility

Petitioners also contend that the EPA failed to demonstrate that continued use of current effluent limitations for settleable solids and pH is infeasible, and that replacing them with BMPs was not supported by the record and was arbitrary and capricious.

The EPA states that the administrative record supports its determination that numeric limits are infeasible because, in order to comply with these limits, the operator of a reclaimed mine site must use a sedimentation pond, and these ponds have serious non-water quality impacts in the arid West that may harm the environment. In the proposed rule the EPA stated that although sedimentation ponds are proven to be effective at reducing sediment discharge, in some instances they promoted negative environmental impacts in the arid and semiarid western regions. 65 Fed. Reg. at 19,453. Sedimentation ponds in reclamation areas are designed to capture and store water from a precipitation event and then slowly release the water in a continuous, low-velocity discharge. The EPA remarked that the slow release of water containing low amounts of sediment has caused negative environmental impacts in arid regions, including disruption of the natural hydrologic and sediment balance, stream channel instability, and water loss due to evaporation. *Id.*

The EPA explained that, in arid and semiarid western coal mine regions, the natural vegetative cover is sparse and rainfall typically occurs during localized, high-intensity, short-duration storms. These conditions contribute to flash floods and turbulent flows that transport large amounts of sediment that may contain up to several hundred thousand milligrams per liter of total suspended solids. Furthermore, fluvial areas and receiving channels in the arid west have developed according to these natural conditions. The receiving channels consist primarily of ephemeral arroyos that transport large volumes of flow and sediment, and may be affected by the alteration of sediment concentration and flow volume when sedimentation ponds are used. The EPA opined that “[d]ischarge of sediment-free water from a sedimentation pond may actually accelerate channel

²²“Reclamation area” means the surface area of a coal mine which has been returned to required contour and on which revegetation (seeding or planting) work had commenced. 67 Fed. Reg. at 3375.

erosion because the sediment-free water will entrain sediment from the channel immediately below the pond.” *Id.* If the sedimentation pond is later removed upon successful reclamation of the site, drainage from the reclaimed area would flow uninterrupted into the downstream watershed. *Id.* This return to natural flow volumes and concentrations would “shock” the drainage channel, disrupting the fluvial and hydrologic balance that has developed based on the sedimentation pond discharge. This disruption in turn may cause severe channel reconfiguration, making the area more susceptible to instability and erosion than the pre-mining undisturbed conditions. *Id.* Thus, the EPA determined that the most environmentally responsible goal was to reclaim the land such that the natural sediment loadings and hydrologic balance of undisturbed conditions is maintained at post-mined lands. *Id.*

Contrary to Petitioners’ assertions, the EPA’s conclusions are based on data in the administrative record. The administrative record reflects the EPA based its final rule on the results of the coal mining industry study conducted in the arid and semiarid region west of the 100th meridian. In that document, entitled, “Development Document—Proposed Western Alkaline Coal Mining Subcategory,” the EPA studied the problems that have been associated with the use of sedimentation ponds in arid and semiarid regions, examined modeling techniques that aid in BMP design and prediction effectiveness, studied the advantages provided by implementation of a site-specific sediment control BMP system, and looked at case studies showing both the use of mine models to determine sedimentation and the use of BMPs at existing mine sites in the arid and semiarid western coal region. These determinations, involving scientific and technical evaluations, are entitled to special deference, *see BP Exploration*, 66 F.3d at 792, and Petitioners have not challenged the data itself or argued that specific data fails to support the EPA’s conclusions.

Instead, Petitioners assert that the EPA acknowledges throughout the rulemaking record that sedimentation ponds are effective at reducing sediment discharge, and that meeting current numeric effluent limitations is feasible. However, this argument misses the point. As the EPA points out, feasibility, as used in the Act, concerns the establishment of numeric limitations; it does not pertain to whether a particular technology is the most appropriate technology. The EPA determined that sedimentation ponds, although an effective technology for controlling sediment, are not the most appropriate technology to meet the numeric standards for settleable solids in the arid and semiarid West because of the negative impacts in arid and semiarid environments. Further, the EPA in fact noted that numeric limits based on sedimentation ponds are infeasible in arid areas because precipitation is sporadic, intense, and isolated, thereby making it extremely difficult to evaluate overall performance of BMPs. 67 Fed. Reg. at 3381. This conclusion is based on data contained in the administrative record. *See Phase I Report: Technical Information Package: Western Alkaline Mining Subcategory*, dated January 21, 1999.

Thus, the EPA’s determination that alternative controls were appropriate for the new subcategory of reclamation areas is based on several reasons supported in the administrative record, namely that sediment is a natural component of runoff in western watersheds, sediment is typically the only parameter of concern in runoff in western alkaline reclamation areas, BMPs are proven to be effective at controlling sediment, and computer modeling procedures can accurately predict sediment runoff conditions. These reasons amply supported the creation of the new subcategory, and the Administrator’s actions were not arbitrary and capricious. Finally, under the new rule, sediment pond technology is still available; at the same time, states now have the flexibility to develop alternative strategies through application of effluent guidelines in the Western Alkaline Coal Mining Subcategory.

3. Irrationality

Petitioners claim that this subcategory is overbroad and irrational because the perceived problems associated with the use of sedimentation ponds to meet effluent limits do not justify the remedy of eliminating numeric effluent limits for all Western Alkaline mines in arid and semiarid regions. In support, Petitioners note that the EPA acknowledged in its rulemaking that the problem is not universal and that sedimentation ponds are effective at reducing sediment discharge.²³ Again, as a matter within its technical expertise, the EPA's decision to establish the Western Subcategory was reasonable and entitled to deference. See *BP Exploration*, 66 F.3d at 792, 804. As just discussed, the administrative record supports the EPA's decision. Furthermore, as a practical matter, the use of sedimentation ponds is still an option. The new subcategory merely gives operators of reclamation sites and permitting authorities flexibility in designing BMPs to control sediment runoff.

4. Statutory Intent

Petitioners claim that the Administrator's goal of approximating natural conditions is manifestly contrary to the intent of Congress, as expressed in the CWA and SMCRA, and that by redefining the goal for effluent reductions from mining operations in the west, the Administrator has replaced the CWA's goal of "elimination of pollutants" with "not upsetting the natural hydrologic balance." See 67 Fed. Reg. at 3404.

As the EPA points out, this argument ignores the fact that the CWA gives the EPA wide latitude in fashioning effluent limitation guidelines. We addressed a similar argument in *BP Exploration*. There, the NRDC argued that the EPA illegally refused to require a zero discharge of produced waters through reinjection, because the record showed that reinjection was technologically and economically feasible. We stated:

The NRDC mistakenly asserts that BAT must be based on the "best single performer in an industry." To the contrary, the CWA's requirement that EPA choose the "best" technology does not mean that the chosen technology must be the best pollutant removal. Obviously, BAT and NSPS must be acceptable on the basis of numerous factors, only one of which is pollution control.

NRDC ignores the statutory language, which sets up a "'limited' balancing test." *Weyerhaeuser*, 590 F.2d at 1045 (citing Senator Muskie's remarks during debate on the CWA). In enacting the CWA, "Congress did not mandate any particular structure or weight for the many consideration factors. Rather, it left EPA with discretion to decide how to account for the consideration factors, and how much weight to give each factor." *Id.*

BP Exploration, 66 F.3d at 796. The CWA instructs the EPA to consider other factors besides pollution reduction, including costs, non-water quality environmental impacts, and (in the case of BPT and BAT) "such other factors as the Administrator deems appropriate." 33 U.S.C. §§ 1314(b)(1), (b)(2), 1316(b)(1). Thus, contrary to Petitioners' assertion, the subcategory is not inconsistent with the CWA.

²³ Furthermore, "[a]n initial agency interpretation is not instantly carved in stone," and "the agency, to engage in informed rulemaking, must consider varying interpretations and the wisdom of its policy on a continuing basis." *Chevron*, 467 U.S. at 863. Thus, the fact that the EPA has redefined the goal for effluent limitations does not render its action arbitrary and capricious.

Petitioners also cite SMCRA section 515(b)(10)(B)(i), which requires that surface mining be conducted “so as to prevent . . . additional contributions of suspended solids to streamflow.” 30 U.S.C. § 1265(b)(10)(B)(i). Petitioners interpret “additional” in the statute to require the EPA to promulgate regulations designed to remove *all* pollutants from discharge. The EPA counters that the Western Alkaline Mining Subcategory guidelines do not conflict with this provision because “additional contributions” in the SMCRA means contributions in excess of pre-mining conditions, which is the same standard as the subcategory. The EPA argues that this interpretation is supported by SMCRA section 515(b)(10), which requires a mine operator to “minimize the disturbances to the prevailing hydrologic balance at the mine-site and in associated offsite areas.” *Id.* § 1265(b)(10). The EPA asserts that “prevailing hydrological balance” means the balance prevailing before mining began, and that this is the balance that the challenged guideline seeks to restore. Thus, the EPA argues that the guideline is in conformity with the SMCRA. This is not an unreasonable interpretation, and we therefore defer to the EPA’s reading.

Further, the administrative record reflects that the EPA worked with OSMRE to ensure that the EPA’s regulations coordinated with SMCRA requirements. The EPA explained that the SMCRA permit application process requires a coal mining operator to submit an extensive operation and reclamation plan, documentation, and analysis to OSMRE or the permitting authority for approval. The EPA noted that, similar to Western Subcategory guidelines, OSMRE requirements include a description of baseline ground and surface water characteristics under seasonal conditions, and an analysis of the hydrologic and geologic impacts caused by reclamation activity. 67 Fed. Reg. at 3382-83. Specifically, the plan must include a “probable hydrologic consequences” determination of the impacts of the mining on existing hydrologic conditions and a hydrologic reclamation plan to show measures for reducing impact and to meet water quality laws and regulations. The coal mining regulatory authority is also required to conduct a similar analysis. *Id.* at 3383. The EPA concluded that sediment control plans developed to comply with SMCRA requirements will usually fulfill the requirements of the Western Alkaline Coal Mining Subcategory. *Id.* Further, the guidelines’ requirement of using modeling techniques is also consistent with SMCRA permit requirements, because mining facilities already submit a watershed model as part of their SMCRA reclamation plan. Additionally, OSMRE observed in its comments to the proposed rule that, since November 1986, SMCRA regulations no longer require that all runoff from disturbed areas be treated by passing through a sedimentation pond. Instead, the rules require that appropriate sediment control measures be designed, constructed, and maintained using the best technology currently available to prevent additional contributions of sediment outside the permit area, to meet effluent limitations and to minimize erosion to the extent possible. (*Id.*)

In short, Petitioners’ contention that the Western Alkaline Coal Mining Subcategory conflicts with the CWA and SMCRA is without merit.

Thus, based upon the arguments properly presented in the initial appeal, we hold that the EPA did not violate *Chevron* or act arbitrarily or capriciously in promulgating the Final Rule.

C. Panel Majority Decision

The panel majority did not address any of Petitioners’ challenges to individual aspects of the Final Rule, discussed above. Instead, it *sua sponte* found that the Coal Remining and Western Alkaline regulations were promulgated “without procedure required by [§ 304(b) of the Clean Water Act],” failed to consider available technology, and failed to consider site-specific factors in establishing the guidelines. The EPA asserts that the en banc Court should not reach the merits of the issues upon which the panel majority previously ruled *sua sponte* against the EPA, and that if it does decide the merits, uphold the Final Rule.

The EPA argues that we should not reach issues that were not previously raised to the EPA during the course of rulemaking²⁴ or to the Court during the initial appeal.²⁵

The general rule of appellate procedure is that issues not presented in an appellant's initial merits brief are waived. *Brindley v. McCullent*, 61 F.3d 507, 509 (6th Cir. 1995). Petitioners had a full and fair opportunity to make all of their arguments to the Court in the initial merits brief. That they chose not to raise such arguments should be definitive of the matter here. Although this rule is prudential and not jurisdictional, and may be waived "in exceptional cases or to avoid a miscarriage of justice," *Mayhew v. Allsup*, 166 F.3d 821, 823 (6th Cir. 1999); see also *Zhislin v. Reno*, 179 F.3d 810, 813 n.1, 812-14 (6th Cir. 1999); *Dorris v. Absher*, 179 F.3d 420, 425-26 (6th Cir. 1999), this is not such a case. Rather, this case involves a rather typical challenge to an EPA rulemaking. The parties are all sophisticated entities, well-versed in both the subject matter and the administrative and legal process. It is telling that Petitioners did not raise these particular challenges either during notice and comment or in the initial appeal. It can be presumed that they did not make these arguments because they did not have a problem with the manner in which the Administrator promulgated the Final Rule, and only make the arguments now in order to preserve the panel majority's conclusion in their favor. There are no exceptional circumstances in this case to excuse application of the general rule to the issues decided *sua sponte* by the panel majority. Cf. *Zhislin*, 179 F.3d at 813 n.1 (holding that failure to consider controlling Supreme Court decision issued after the appellant had filed his merits brief might result in a miscarriage of justice); *Dorris*, 179 F.3d at 425-26 (ruling that the court could consider the application of a statute favorable to the defendant's position despite the defendant's failure to address it at either the trial or on appeal; concluding that the district court had both incorrectly applied the statute in question against one of the appellants and awarded an excessive judgment based on an erroneous interpretation of the applicable statute and only a pure question of law was presented).

In short, the panel majority erred in ruling on grounds not raised by the parties. Because it was improper for the panel majority to reach issues not briefed by the parties, especially in the context of the deferential *Chevron* analysis, we decline to reach those issues here. We granted en

²⁴In their original brief, Petitioners state that both "CCC and KRC participated in the administrative proceedings in which the Administrator proposed and then adopted the challenged regulation." (Petr.'s Br. at 4.).

²⁵The EPA's argument that we should not consider arguments not raised at the appropriate time in the underlying administrative proceedings implicates the rulemaking/adjudication dichotomy pervasive in administrative law. The waiver rule should not be applied freely in both areas, given the fundamental differences between the two endeavors. See, e.g., *Am. Motorcyclist Ass'n v. Watt*, 543 F. Supp. 789, 794-95 (C.D. Cal. 1982) ("The rule barring assertion of points not previously raised before the agency makes considerable sense where . . . the prior administrative proceeding was adjudicatory in nature, at least in the sense that identifiable parties were involved or application of a rule to specific individuals was considered. However, it would be inappropriate to apply this rule to notice and comment rule making of the type involved in the present case."); see also David Douglas Spencer, Note, *The Duty to Participate in Agency Rulemaking*, 54 Geo. Wash. L. Rev. 628, 660 (1986) ("A sounder approach is taken by those courts that apply the doctrine while taking into account the differences between rulemaking and adjudication. Both the broad applicability and the future perspective of rulemaking decisions should make courts hesitant to apply the review preclusion doctrine to deny judicial review to parties challenging agency rules.").

There are cases involving environmental law determinations that fall on the rulemaking side of the rulemaking/adjudication dichotomy for certain purposes holding that a party challenging a rule can waive an issue by not making a comment on point during the comment period. See, e.g., *Univ. Health Servs. Inc. v. Thompson*, 363 F.3d 1013, 1019-20 (9th Cir. 2004) (and cases cited therein); *Mich. Dep't of Env'tl. Quality v. Browner*, 230 F.3d 181, 183 n.1 (6th Cir. 2000); see also *BP Exploration & Oil, Inc. v. EPA*, 66 F.3d 784, 798 (6th Cir. 1996) (noting that industry petitioners had sufficient notice of issue during rulemaking, but concluding that even if the industry petitioners had the right to raise the issue, the EPA's argument on the merits was dispositive). However, all of these cases nonetheless contain some characteristics of adjudications, and should not be applied broadly.

In any event, we need not resolve this question in this case, because this case is decided on other grounds.

banc review, however, precisely to vacate the panel majority's sua sponte determination of those unbriefed issues. Thus, we end our analysis here and uphold the Final Rule.

IV. Conclusion

The EPA was faced with a situation in which Congress enacted CWA section 301(p) to provide incentives for remining abandoned mine lands by exempting remining operations from certain BAT effluent limits, yet coal mining companies remained hesitant to pursue remining without formal EPA approval and guidelines. The EPA recognized that although available technologies theoretically might reduce effluents at abandoned mines, these reductions were not occurring because they were cost prohibitive. Thus, the Final Rule was a reasonable response to a real problem. Had the EPA done nothing in light of this problem, it would not have been acting to fulfill the mandate of Congress "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251. Nothing in the plain text of the Rahall Amendment, section 304(b), or section 301 prohibits the EPA from promulgating the Final Rule, and the EPA's determination of its authority to establish the new subcategories was not arbitrary or capricious. Finally, the Final Rule accomplishes what the Rahall Amendment sought, but failed, to achieve. For all these reasons, then, we **AFFIRM** the Final Rule for the Coal Remining Subcategory and the Western Alkaline Coal Mining Subcategory and **DENY** the petition.

DISSENT

BOYCE F. MARTIN, JR., Circuit Judge, with whom DAUGHTREY, MOORE, COLE, and CLAY, Circuit Judges, join, dissenting. Because the EPA regulations at issue represent a race to the bottom in conflict with the Clean Water Act's goal of *cleaner* water, I respectfully dissent from the Court's decision upholding the regulations. It is disheartening to see a regulatory agency adopt regulations that effectively undermine its own authority and sell out the environment for the sake of the coal industry. The regulation at issue in this case does just that. The Final Rule that the EPA adopted is inconsistent with Congress's intent and reflects arbitrary and capricious interpretations of the Clean Water Act. I would invalidate the EPA's Final Rule under the Administrative Procedure Act, 5 U.S.C. § 706, and therefore respectfully dissent from the majority's decision to sustain it.

I.

The majority opinion does an admirable job attempting to sort through the complex facts of this case. Nonetheless, the majority has failed to highlight several important aspects of the background of this case. Thus, I will begin with my own short review of the facts in order to properly frame the issues. The original panel majority aptly noted that the Clean Water Act, located at 33 U.S.C. § 1251, *et seq.*, is an enigmatic piece of legislation. *See also Am. Petroleum Institute v. EPA*, 540 F.2d 1023, 1027 (10th Cir. 1976) (“The Act is difficult to understand, construe and apply.”). Its breadth is expansive, its technical terms daunting, and its circuitous cross-references dizzying. It is, to say the least, complex.¹ The Clean Water Act's purpose, however, is simple. The Act seeks to “restore and maintain the chemical, physical, and biological integrity of the Nation's waters.” 33 U.S.C. § 1251; *see also BP Exploration & Oil v. EPA*, 66 F.3d 784, 789 (6th Cir. 1995); *E.I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112 (1977); *see EPA v. State Water Resources Control Bd.*, 426 U.S. 200, 202-09 (1976) (discussing the adoption of the Clean Water Act); *Natural Res. Def. Council v. Train*, 510 F.2d 692, 695-97 (D.C. Cir. 1975) (same). “[T]he guiding star [of the Clean Water Act] is the intent of Congress to improve and preserve the quality of the Nation's waters.” *Am. Petroleum Institute*, 540 F.2d at 1028. Congress's original goal in promulgating the Act was to eliminate the discharge of *all* pollutants into navigable waters by the year 1985. *See* 33 U.S.C. § 1251(a)(1).

To further the Act's goal of restoring and maintaining clean water, Congress established both technology-driven limits and water-quality-based limits on pollution. *See Natural Res. Def. Council v. EPA*, 915 F.2d 1314, 1317 (9th Cir. 1990); *BP Exploration & Oil*, 66 F.3d at 789 (“The CWA directs EPA to formulate national effluent-limitation guidelines for those entities that discharge pollutants into the navigable waters of the United States.”). Technology-based limits are designed to prevent pollution by requiring polluters to install and use various forms of technology designed to reduce the pollution discharged into the nation's waters. *See Texas Oil & Gas Ass'n v. EPA*, 161 F.3d 923, 927 (5th Cir. 1998). Water-quality regulations are triggered when a given body of water's pollution level exceeds the level that a state deems acceptable for the body of water's intended use or function. *Natural Res. Def. Council*, 915 F.2d at 1317 (citing 33 U.S.C. §§ 1312, 1313). Essentially, when the technology-based regulations are insufficient to contain the aggregate impact

¹The Tenth Circuit has noted that “[p]opular demand for legislative action to control water pollution is shown by the fact that on the votes to override the presidential veto [of the Clean Water Act], only 12 senators and 23 representatives voted to sustain the veto. Perhaps the pressure on Congress to do something was a major cause of the unsatisfactory legislation.” *American Petroleum Institute*, 540 F.2d at 1027. The court also noted that “[t]he two volume, 1766 page, legislative history does not help us much.” *Id.*

of polluters' activities despite the polluters' compliance with the regulations, the water-quality regulations kick in. And when they kick in, they tighten the noose on polluters — that is, the pollution controls become stricter and require greater pollution control from the individual polluters. *Id.*

The technology-driven regulations act in terms of “effluent-limitation guidelines.” An “effluent-limitation” is “any restriction [including schedules of compliance] established . . . on the quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into . . . water.” 33 U.S.C. § 1362(11). The EPA’s role in all of this, the Clean Water Act instructs, is to issue effluent-limitation guidelines for various types of “point sources.” A “point source” is “any discernible, confined and discrete conveyance . . . [such as a pipe, ditch, or channel] from which pollutants are or may be discharged.” *Id.* at § 1362(14). In short, a “point source” spews pollutants into the environment. Thus, the EPA’s effluent-limitation guidelines are technology based regulations requiring polluters to adopt certain technologies designed to reduce pollution dispensed into the environment from a point source.

Section 304 of the Clean Water Act charges the EPA with duties related to setting effluent-limitation guidelines for existing sources of pollution. The Clean Water Act “directs [the] EPA to institute progressively *more stringent* effluent discharge guidelines in stages.” *BP Exploration & Oil*, 66 F.3d at 789 (emphasis added). Under section 304(b)(3), the EPA must identify the specific control measures and practices available to the various categories and classes of point sources. 33 U.S.C. § 1314(b)(3). The EPA is required to then take these existing point sources of pollution and identify, in terms of the amount of pollutants, the pollution reduction (or “effluent reduction”) *attainable* through application of the three different sources of technology — best practicable control technology (“BPT”), *id.* at § 1314(b)(1)(A), best available technology economically achievable (“BAT”), *id.* at § 1314(b)(2)(A), and best conventional pollutant control technology (“BCT”), *id.* at § 1314(b)(4)(A).² That is, “[a]t the first stage of pollutant reduction, [the] EPA is to determine the level of effluent reduction achievable within an industry with the implementation of” BPT. *See BP Exploration & Oil*, 66 F.3d at 789 (citing 33 U.S.C. § 1314(b)(1)(A)). In general, BPT is the “average of the best existing performances by [the various types of polluters] of various sizes, ages, and unit processes within the point source category or subcategory.” *Id.* At the second stage of pollutant reduction, the EPA is “to set generally more stringent standards for toxic and conventional pollutants.” *Id.* at 790. For toxic pollutants, the EPA is required to set the standard for the BAT. *Id.* “BAT represents, at a minimum, the best economically achievable performance in the industrial category or subcategory.” *Id.* (citing *Natural Res. Def. Council, Inc. v. EPA*, 863 F.2d 1420, 1426 (9th Cir. 1988) (citing *EPA v. Natural Crushed Stone Ass’n*, 449 U.S. 64, 74 (1980))). Compared to BPT, which is required at the first stage of pollutant reduction, “BAT calls for *more stringent* control technology that is both technically available and economically achievable.” *Id.* (emphasis added). In contrast to the toxic pollutants, conventional pollutants are governed by BCT. “This standard is designed to control conventional pollutants about which much is known but for which stringent BAT standards might require unnecessary treatment.” *BP Exploration & Oil*, 66 F.3d at 790. BCT was intended by Congress to “prevent the implementation of technology for technology’s sake.” *Id.* Thus, BCT is not a third level of pollutant control, but rather replaces BAT for conventional pollutants. *Id.*

Section 301 of the Clean Water Act requires that the effluent-limitations attainable by the various levels of technology “shall be achieved” by various dates, all of which were at least fifteen

²Congress intended for the EPA to consider numerous factors in achieving the goal of pollution reduction: “The Committee believes that there must be a reasonable relationship between costs and benefits if there is to be an effective and workable program.” Clean Water Act of 1972, Pub. L. No. 92-500, 1972 U.S.C.C.A.N. (86 Stat.) 3713.

years past. *Id.* at § 1311(b).³ Polluters discharging toxic and nonconventional pollutants must apply the best available technology economically achievable (BAT) to meet the BAT effluent-limitations. *Id.* at § 1311(b)(2)(A). Point sources discharging conventional pollutants must apply the best conventional pollutant control technology (BCT) to meet the BCT effluent-limitations. *Id.* at § 1311(b)(2)(E).

The effluent-limitations, however, are not self-executing — that is, they create binding obligations on polluters only through the National Pollutant Discharge Elimination System (“NPDES”) permits. *See, e.g., Am. Paper. Indust., Inc. v. EPA*, 996 F.2d 346, 350 (D.C. Cir. 1993). The Clean Water Act provides that: “Except as in compliance with this section and sections 1312, 1316, 1317, 1328, 1342, and 1344 of this title, the discharge of any pollutant by any person shall be unlawful.” 33 U.S.C. § 1311(a). Stated another way, nobody may pollute without a NPDES permit. Further, “[t]hrough the Clean Water Act, Congress has directed the EPA to incorporate into the permits *increasingly stringent* technology-based effluent-limitations.” *Rybachek v. EPA*, 904 F.2d 1276, 1283 (9th Cir. 1990).

The EPA Administrator may issue permits to individual polluters only if the permitted discharges comply with the requirements for effluent-limitations set out in section 301 of the Clean Water Act. *Id.* at § 1342(a). When issuing permits, the EPA determines the polluter’s place within the appropriate point source category and subcategory. The EPA then assigns the appropriate level of technology to the polluter. Finally, the EPA sets limits for various pollutants on how much the polluter may discharge. In setting the limits for individual polluters, the EPA imports standards from the effluent-limitation guidelines issued under section 304(b) of the Clean Water Act. The EPA then applies the numeric limitations to the polluter via the NPDES permit. This process, therefore, implements and executes the effluent-limitations attainable under the various applicable technologies.

To set the effluent-limitation guidelines under section 304(b) of the Clean Water Act, which are then imported into setting the standards for individual polluters pursuant to the NPDES permit process, the EPA broke down the various point sources by the different industries. One of those industries that the EPA established was the Coal Mining Point Source Category. *See* 40 C.F.R. § 434. Then, in 1985, the EPA amended the effluent-limitation guidelines and requirements concerning the Coal Mining Point Source Category by creating four subcategories: (1) Coal Preparation Plants and Coal Preparation Plant Associated Areas; (2) Acid or Ferruginous Mine Draining; (3) Alkaline Mine Draining; and (4) Post Mining Areas. *See* 50 Fed. Reg. 41296 (1985).

Thus, post-1985, any coal mining operator seeking an NPDES permit was placed into one of the four subcategories based on the type of mining operation being conducted. And, from that point on, whenever a coal mining operation applied for a NPDES permit, the EPA incorporated the effluent-limitation guidelines corresponding to the appropriate subcategory for that operation. Under the 1985 regulations, there was no category that encompassed coal mining operations that sought to remine previously mined, but later abandoned, lands. This had heretofore not been much of a problem because it was both technologically and economically infeasible to remine such lands. Advances in technology, however, had recently made it both feasible and potentially profitable to mine such abandoned lands.

From the perspective of the industry there was one problem. The potential for profit from remining was made less likely by the fact that the same regulations for mining virgin lands applied

³Polluters with point sources requiring best practicable control technology were to achieve the goals by July 1, 1977. *Id.* at 1311(b)(1)(A). March 31, 1989 was the date for point sources requiring the best conventional pollutant control technology, *id.* at § 1311(b)(2)(E), and best available technology economically achievable, *id.* At §§ 1311(b)(2)(C)-(D), (F).

also to coal reminers. First time mining of virgin lands is, understandably, less costly, because it is naturally easier to keep virgin lands from exceeding pollution controls than it is for already mined land essentially leaking pollutants to be brought into compliance with the same regulations. Thus, reminers were faced with major and often prohibitive up-front costs in order to bring remining operations into compliance with the same standards for virgin lands. Weighing these costs led many potential reminers to leave abandoned mines to remain fallow, often with resulting untreated pollution from “pre-existing discharges” that could otherwise have been treated and improved.

This often prohibitive up-front cost of remining got Congress’s attention. In 1987, responding to the disincentives for remining, Congress passed several amendments to the Clean Water Act. For our purposes, the relevant amendment was proposed by West Virginia Representative Nick Rahall. The “Rahall Amendment” became section 301(p) of the Clean Water Act. 33 U.S.C. § 1311(p); *see also* Stephen G. Allen, *Special Legal Problems with Other Environmental Laws Under SMCRA*, 7 J. Mineral & L. Pol. 129 (1991/1992) (calling the Rahall Amendment one of the “more fiercely debated provisions of the 1987 Water Quality Amendments”). The purpose of the Rahall Amendment was to stimulate the remining of abandoned coal mines by exempting certain remining operations from the otherwise applicable national effluent-limitations. In short, the Rahall Amendment recognized the disincentive to remining provided by employing the high national standard for effluent-limitations to remining operations. Thus, the Rahall Amendment lowered the bar to a more permissive effluent-limitation standard that Congress determined would provide sufficient incentive to remine the lands in order to restore and maintain the integrity of the nation’s water system.

Under the Rahall Amendment, a remining operation permitted to take advantage of the more permissive effluent-limitation standard is one that began remining *after* February 4, 1987, at a site where coal mining had ceased *prior* to August 3, 1977. *See* 33 U.S.C. § 1311(p)(3)(A). Rather than requiring these remining operations to meet the national effluent-limitation guidelines mandated by the 1985 amendments to the Clean Water Act, the Rahall Amendment allowed the NPDES permit writer — that is, the EPA Administrator or corresponding state administrator⁴ — to waive these requirements in favor of a modified permit.

These modified permits incorporate pollution site-specific numerical limits for pre-existing discharges of iron, manganese, and pH based upon the Administrator’s “best professional judgment.” The Rahall Amendment, however, forbade the EPA or relevant state agency from issuing a permit if remining would cause discharges that exceeded the pre-existing levels of pollutants found in the surrounding waterways. *See* 33 U.S.C. § 1311(p)(2). The Amendment also required that applicants for these permits provide evidence that the remining operations would potentially *improve* the quality of water in the area, and that the permits comply with applicable state water quality standards. Thus, in sum, the Rahall Amendment endeavored to make remining economically feasible, while at the same time furthering the purposes of the Clean Water Act. Congress made the determination that remining would improve the water quality of abandoned mines, and that it would be an improvement that would not have occurred under the more stringent guidelines that applied to all mined lands.

The EPA’s Final Rule

The EPA apparently determined that the progress under the Rahall Amendment was insufficient and began the informal rulemaking process by publishing proposed amendments to effluent-limitation guidelines on April 11, 2000. 65 Fed. Reg. 19440 (April 11, 2000). Following

⁴In jurisdictions where the EPA has authorized a state agency to administer the NPDES program, state agencies may issue NPDES permits. *See* 33 U.S.C. § 1342(a)-(d).

notice and comment procedures, the EPA promulgated the Final Rule on January 23, 2002. 67 Fed. Reg. 3370 (Jan. 23, 2002).

The Final Rule creates two new subcategories under the Coal Mining Point Source Category. The EPA had already created the original four subcategories of point sources following the 1985 Amendments to the Clean Water Act in order to set the standards for individual polluters pursuant to the NPDES permit process. The two new subcategories are: (1) the Coal Remining Subcategory, and (2) the Western Alkaline Coal Mining Subcategory.

The Coal Remining Subcategory

The regulations for the Coal Remining Subcategory apply to all “pre-existing discharges” at “coal remining operations.” Pre-existing discharges are defined as any “discharge resulting from mining activities that have been abandoned prior to the time of a remining permit application.” See 40 C.F.R. § 434.70(b) (2004). A coal remining operation is defined as “a coal mining operation at a site on which coal mining was previously conducted and where the site has been abandoned or the performance bond has been forfeited.” *Id.* at § 434.70(a).

The regulations further require that every remining operator create and submit to the EPA or to the state agency with authority to issue NPDES permits a site-specific Pollution Abatement Plan. *Id.* at § 434.72(a). Remining operators must include within their Pollution Abatement Plans “best management practices,” and they must design the plans “to reduce the pollution load from pre-existing discharges.” *Id.* Further, each Pollution Abatement Plan “must describe the design specifications, construction specifications, maintenance schedules, criteria for monitoring and inspection, and expected performance of [best management practices].” *Id.* Under the Final Rule, these Pollution Abatement Plans qualify as “best practicable control technology currently available” or BPT, *id.* at § 434.72, the “best available technology economically achievable” or BAT, *id.* at § 434.73, and the “best conventional pollutant control technology” or BCT, *id.* at § 434.74, for remining operators. Stated another way, by creating and submitting these Plans, the Final Rule allows polluters to meet the Clean Water Act’s requirements in section 304(b)(3), which requires the EPA to identify the effluent reduction *attainable* under BPT, BAT, and BCT. See 33 U.S.C. § 1314(b)(1)(A)-(b)(4)(A) (also requiring the EPA to identify the facts it will consider when deciding which control measures and practices apply to each of the various point source classes and categories).

The Final Rule also sets the effluent-limitations for four pollutants: (1) total iron; (2) total manganese; (3) net acidity; and (4) total suspended solids. For each of these four pollutants, the discharger’s effluent-limitation is that it “[m]ay not exceed baseline loadings.” See 40 C.F.R. § 434.72(b)(1). Baseline loadings are defined as background conditions or the status quo — that is, those conditions that exist when remining commences. The Final Rule prescribes the procedures for determining what these background conditions are. *Id.* at § 434 App. B. There is, however, an exception to the requirement of determining these background conditions. If the EPA or state permitting authority concludes that collecting samples to measure the baseline pollutant loadings is “infeasible”⁵ and that remining “will result in significant improvement that would not otherwise occur,” then *no measurable effluent-limitations apply*. *Id.* at § 434.72(b)(2). Stated another way, if the EPA determines that it cannot measure how bad the pollution currently is at a remining site,

⁵The Final Rule provides several examples of when such measurements would be infeasible: Pre-existing discharges for which it is infeasible to collect samples for determination of baseline pollutant levels include, but are not limited to, discharges that exist as a diffuse groundwater flow that cannot be assessed via sample collection; a base flow to a receiving stream that cannot be monitored separate from the receiving stream; a discharge on a steep or hazardous slope that is inaccessible for sample collection; or, a number of pre-existing discharges so extensive that monitoring of individual discharges is infeasible. See 40 C.F.R. § 434.72(b)(2).

and makes the determination that re-mining will improve the site, then no measurable effluent-limitations apply to the polluter. There appear to be no guidelines upon which the EPA's determinations here must be based; rather, it appears to be within the complete discretion of the EPA or state agency. These regulations apply to all three levels of technology. *Id.* at §§ 434.72, 434.73, 434.74.

Western Alkaline Coal Mining Subcategory

The EPA's Final Rule also creates and establishes effluent-limitations for the Western Alkaline Coal Mining Subcategory. The rule regulates certain types of draining in certain areas of "western coal mining operations." *See* 40 C.F.R. § 434.81.⁶ "Western coal mining operations" are defined as "surface or underground coal mining operation[s] located in the interior western United States, west of the 100th meridian west longitude, in an arid or semiarid environment with an average annual precipitation of 26.0 inches or less." *Id.* at § 434.80(f).

There are no uniform standards for drainage under the Rule. Instead, western alkaline coal mining operators are required to create "a site-specific Sediment Control Plan . . . designed to prevent *an increase* in the average annual sediment yield from pre-mined undisturbed conditions." *Id.* at § 434.82(a) (emphasis added). Like the Pollution Abatement Plans required under the Coal Remining Subcategory, each Sediment Control Plan "must identify best management practices (BMPs) and also must describe design specifications, construction specifications, maintenance schedules, criteria for inspection, as well as expected performance and longevity of the best management practices." *Id.* The Rule does *not* require Sediment Plans to include numerical limitations on sediment. Instead, operators must demonstrate "[u]sing watershed models" that the Sediment Control Plans "will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions." *Id.* at § 434.82(b). Essentially, the Rule is a do-no-harm rule. Beyond that, the operators' only obligation is to implement and maintain the best management practices described in the Sediment Control Plan. *Id.* at § 434(c). Under the Final Rule, this obligation satisfies the Clean Water Act's requirements of BPT, *id.* at § 434.82, BAT, *id.* at § 434.83, and BCT, *id.* at § 434.84.

II.

Standard of Review

The majority speeds through the standard of review and its intricacies, but I believe that it is necessary to consider, in some detail, the function we serve here. There are two separate and distinct inquiries in this case: First, we determine whether the EPA's interpretation of the Clean Water Act — that the EPA has authority to promulgate regulations with regard to coal re-mining — complies with *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837 (1984). The second inquiry, separate and distinct from *Chevron*, is under the Administrative Procedure Act where we determine whether the agency's rule may stand. *See United States v. Mead Corp.*, 533 U.S. 218, 227 (2001) ("When Congress has explicitly left a gap for an agency to fill, there is an express delegation of authority to the agency to elucidate a specific provision of the statute by regulation, *Chevron*, 467 U.S., at 843-844, and any ensuing regulation is binding in the courts unless procedurally defective, arbitrary or capricious in substance, or manifestly contrary to the statute." (citing APA, 5 U.S.C. §§ 706(2)(A), (D))).

⁶The Rule's regulations apply to "alkaline mine draining," *see* 40 C.F.R. § 434.81(a), and to draining with: (1) pH equal to or greater than 6.0; (2) dissolved iron concentration less than 10 mg/L; and (3) net alkalinity greater than zero, *id.* at § 434.81(b). Further, the regulation applies *only* to reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, and regraded areas. *Id.* at § 434.82; *see also id.* at § 434.80 (providing definitions of the regulated areas).

When we review an agency's interpretation of a congressional statute, we engage in a two-step process — the *Chevron*-two-step. The *Chevron* analysis is designed to determine whether agency action under a statute, here the Clean Water Act, is based on a permissible interpretation of the statute. The first step of this two-step dance requires us to determine whether Congress has directly spoken with regard to the matter at issue. *Id.* at 842; *Nations Bank of N.C., N.A. v. Variable Annuity Life Ins. Co.*, 513 U.S. 251, 257 (1995) (asking “whether the intent of Congress is clear as to the precise question at issue”); *Wachovia Bank, N.A. and Wachovia Mortgage Corp. v. Watters*, 431 F.3d 556, 560-61 (6th Cir. 2005). “If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.” *Chevron*, 467 U.S. at 842-43 (footnote omitted). If we determine that Congress has not directly addressed the specific issue in dispute, we proceed to step two of the dance. At step two, we may not simply impose our own view as to our construction of the statute. *Id.* at 843. “Rather, if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute.” *Id.* (footnote omitted); *Clarke v. Sec. Indus. Ass'n*, 479 U.S. 388, 403 (1987) (instructing courts to “give great weight to any reasonable construction” by the agency); *Wachovia Bank*, 431 F.3d at 562 (noting that if the agency's “interpretation is reasonable, we must defer to its construction of the statute”); *Hospital Corp. of America & Subsidiaries v. Commissioner of Internal Revenue*, 348 F.3d 146, 140 (6th Cir. 2003) (noting that “regulations are appropriately accorded *Chevron* deference when they constitute an exercise of implicitly delegated power to give content to ambiguous statutory terms”).

Separate and distinct from *Chevron*, because the EPA promulgated the regulations at issue through informal rulemaking, the scope of review over the informal rulemaking process is generally governed by section 10(2)(e) of the Administrative Procedure Act, 5 U.S.C. § 706(2); *see also Weyerhaeuser Co. v. Costle*, 590 F.2d 1011, 1024 (D.C. Cir. 1978). The APA precisely states that a court must “hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law” 5 U.S.C. § 706(2)(A); *see also generally Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415-17 (1971). In conducting our review, we require that

the agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts and the choice made. . . . Normally, an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency experience.

Motor Vehicle Manuf. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). Moreover, this Court has adopted the D.C. Circuit's approach dividing the review process into three categories: “statutory, procedural, and substantive.” *BP Exploration & Oil*, 66 F.3d at 792 (citing *Weyerhaeuser*, 590 F.2d at 1024). In conducting our review, we

intervene not merely in case of procedural inadequacies, or bypassing of the mandate in the legislative charter, but more broadly if the court becomes aware, especially from a combination of danger signals, that the agency has not really taken a ‘hard look’ at the salient problems, and has not genuinely engaged in reasoned decision-making.

Greater Boston Television Corp. v. FCC, 444 F.2d 841, 851-52 (D.C. Cir. 1970), *cert. denied*, 403 U.S. 923 (1971); *Thomas Jefferson Univ. v. Shalala*, 512 U.S. 504 (1994) (determining that

reviewing courts must “hold unlawful and set aside” agency action that is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law”) (quoting 5 U.S.C. § 706(2)(A)).

Analysis

“The language of the [Clean Water] Act clearly manifests Congress’[s] intention that [the] EPA formulate BPT, BAT, [and] BCT [] within certain time deadlines and having considered various factors.” *BP Exploration & Oil*, 66 F.3d at 791 (citing 33 U.S.C. § 1311(b)). Further, Congress obviously intended for the Clean Water Act to reduce pollutants and clean up the nation’s waters. For the most part, I agree with the majority and the original panel that the EPA has reasonably interpreted the Clean Water Act with respect to its authority to regulate in the coal remining area. The opt-in measures created by the Rahall Amendment do not necessarily limit the EPA’s authority to create and regulate subcategories as it did here. Nevertheless, in doing so, those regulations must also satisfy the requirements of the Administrative Procedure Act. The majority, in error I believe, devotes its analysis nearly exclusively to *Chevron*. At the end of each section of the majority’s analysis, it does make the perfunctory conclusion that the EPA did not act arbitrarily or capriciously in adopting the provisions of the Final Rule. The sum total of its analysis, however, appears to conflate the review under *Chevron* and the APA, seemingly suggesting that as long as *Chevron* is not violated, then no problems exist under the APA. This view is legally erroneous and fails to take into account the myriad of additional requirements the APA places upon agency regulations not implicated under *Chevron*. As a result, the majority’s analysis under the APA is surely not the “searching and careful review” of agency action required by *Citizens to Preserve Overton Park*, 401 U.S. at 416. For that reason and the reasons set forth below, I dissent from the majority’s opinion and would hold that the EPA’s Final Rule is arbitrary and capricious and not otherwise in accordance with law.

III.

The Final Rule With Respect to the Coal Remining Subcategory Violates the Administrative Procedure Act

Prior to 1987, with the stringent national effluent-limitation standards applicable to virgin lands as well as abandoned lands available for remining, it became clear that the higher standards provided a disincentive for remining. The cost to remine and bring the abandoned lands into compliance with the stringent national effluent-limitations standards was essentially cost-prohibitive in most circumstances and led to the acknowledgment that operators were passing up the opportunities to remine abandoned lands. Thus, Congress sought to counter this disincentive with the passage of the 1987 Amendments to the Clean Water Act — specifically, the Rahall Amendment. As described above, the Rahall Amendment incentivized remining abandoned lands by exempting certain remining operations and allowing them to operate under a more permissive standard. Nevertheless, the goal under the Clean Water Act, including the Rahall Amendment, remained improvement in the nation’s waters over that which existed prior to remining. *See* 133 Cong. Rec. H 168 (daily ed. Jan. 8, 1987) (statement of Rep. Rahall) (“The end result of this effort will be the reclamation of the site and as such, as [sic] improvement in water quality over that which existed at the site prior to remining.”).

I agree with the majority that the Rahall Amendment sets up a permissive opt-in scheme. The Amendment states that the EPA “may issue” modified permits under the Amendment, 33 U.S.C. § 1311(p), so long as the more permissive limitations “result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants,” *Id.* at § 1311(b)(2)(A). The more permissive limitations under the Rahall Amendment are optional; nothing in the Amendment *requires* remining operations to take advantage of the more lenient pollution controls and nothing prevents remining operations from seeking permits under the otherwise generally applicable

effluent-limitations. In sum, all that the Amendment does is permit the EPA to modify individual NPDES permits on a case-by-case basis to allow certain remining operations to take advantage of a more permissive effluent-limitations structure instead of abiding by the otherwise applicable national effluent-limitations. In other words, all coal mining polluters are required to comply with the more stringent effluent-limitation standards *unless* they qualify under the Rahall Amendment, which provides a more permissive structure for those meeting the qualifications set out by Congress.

Thus, it is true that there is nothing in the Rahall Amendment that either grants the EPA additional authority to promulgate regulations for coal remining or restricts that authority. The Rahall Amendment merely presents another option for coal remining effluent-limitations. Thus, the EPA has the authority to issue regulations for the remining industry. That the EPA has the *power* to issue rules in this area does not *ipso facto* mean that any rule that it does issue is in compliance with the APA. This is where we must determine whether the Final Rule complies with the APA.

In 1992, the EPA adopted the Final Rule. The Final Rule, as the majority notes, differs from the Rahall Amendment in four ways: First, the EPA's rule includes a much broader definition of "coal mining operation" than the Rahall Amendment. As a result, the rule permits a greater number of operations to take advantage of the more permissive effluent-limitation standards. Second, the Final Rule adds "suspended solids" as an additional pollutant eligible for more permissive discharge treatment. Third, the Final Rule allows the EPA to issue discharge permits without setting numeric effluent-limitations. Fourth, the Final Rule applies a more stringent standard to commingled discharges.

The EPA's Decision to Set Effluent Reduction Attainable at Zero Is Arbitrary & Capricious

Congress adopted the Clean Water Act to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251; *see also BP Exploration & Oil v. EPA*, 66 F.3d 784, 789 (6th Cir. 1995); *E.I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112 (1977). "[T]he guiding star [of the Act] is the intent of Congress to improve and preserve the quality of the Nation's waters." *Am. Petroleum Institute*, 540 F.2d at 1028. Congress's original goal in promulgating the Act was to eliminate the discharge of *all* pollutants into navigable waters by the year 1985. *See* 33 U.S.C. § 1251(a)(1). Congress recognized, however, that the goal would not be achieved overnight. *Id.* at 1031. Nevertheless, it adopted a system of regulation wherein *increasingly stringent* pollution controls would be imposed on polluters. *BP Exploration & Oil*, 66 F.3d at 789 (noting that the Clean Water Act "directs [the] EPA to institute progressively *more stringent* effluent discharge guidelines in stages") (emphasis added); *Rybachek*, 904 F.2d at 1283 ("Through the Clean Water Act, Congress has directed the EPA to incorporate into the permits *increasingly stringent* technology-based effluent-limitations.") (emphasis added).

The EPA's decision to set effluent reduction attainable at zero for remining areas, if not in direct conflict with congressional intent, at the very least raises a red flag. The Final Rule, while ensuring that remined sites are not further polluted, does little to further the Clean Water Act's guiding star to improve the quality of our nation's waterways. It also shirks the EPA's duty to determine the degree of effluent reduction *attainable*. In fact, there is no evidence that the EPA ever explored the prospect of accomplishing more than preserving the status-quo in order to make "reasonable further progress toward the national goal of eliminating the discharge of all pollutants." 33 U.S.C. § 1311(b)(2)(A). By requiring remining operators to preserve only the status quo, the EPA undermines the potential for reduction that is available and required under the Clean Water Act. *See Am. Petroleum Institute*, 540 F.2d at 1030 ("The Act is ineffective unless somebody fixes effluent-limitations.").

As discussed above, we must be convinced that the EPA “examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts and the choices made.” *State Farm Mut. Auto. Ins. Co.*, 463 U.S. at 43. In my opinion, there is no evidence that the EPA considered the relevant technological data or sought data on the types of technology that would result in a *reduction* of effluent-limitations beyond that which existed when the land was abandoned. Further, the EPA has failed to articulate a satisfactory reason for why effluent reduction is not *attainable*. See also *Natural Res. Def. Council, Inc. v. Costle*, 568 F.2d 1369, 1380 (D.C. Cir. 1977) (noting that if numerical effluent-limitations are infeasible, the EPA may opt for “a gross reduction in pollutant discharge rather than the fine-tuning suggested by numerical limitations”). In fact, the D.C. Circuit rejected the EPA’s argument that, where it was infeasible to establish numerical effluent-limitations, the EPA could exclude certain point sources from the NPDES program, because the Clean Water Act gives the EPA a fair amount of flexibility in framing the permits to achieve its desired *reduction* of pollutant discharges. *Id.* The EPA, however, has not put forth any evidence as to why its desired reduction of pollutant discharges in this context is *zero*. But, to avoid being arbitrary and capricious in this context, an EPA rule must seek some sort of reduction in effluent-limitations or adequately explain why such a limitation is not attainable.

We must hold that an agency rule is arbitrary and capricious if the agency “entirely failed to consider an important aspect of the problem.” *State Farm Mut. Auto. Ins. Co.*, 463 U.S. at 43. Part of the major problem that led Congress to enact the Rahall Amendment to encourage remining was the fact that abandoned mines were emitting pollutants at an unacceptable rate. The goal was to make remining economically feasible — thus, the environment benefits from pollution reduction and industry benefits from profitable remining. The EPA’s Final Rule, however, effectively subverts the goal of pollution reduction by demanding only the status quo and disregards the reason Congress initially got involved in the problem and delegated regulatory authority to the EPA.⁷ These regulations preserve the status quo and, therefore, effectively freeze the lands at the pre-remining pollution rates.⁸

In my opinion, these “leave it the way you found it” remining regulations also provide a disincentive to employ newer and better technologies. Many of these abandoned lands, specifically those that qualified under the Rahall Amendment, were abandoned prior to the mid-1970s. Thus, at the time they were mined, these operations utilized technology that was at least thirty years old at the time the EPA’s Final Rule was adopted. The Final Rule effectively tells remining operators not to make it any worse than it already is. Technology, however, has significantly advanced in the past thirty years and is certainly capable of outperforming the thirty-year-old technology and is certainly capable of reducing effluent-limitations. For whatever reason (because the EPA has not articulated one), the EPA has required remining operations only to utilize BMP such that the polluter’s effluent-limitations “[m]ay not exceed baseline loadings.” 40 C.F.R. § 432.72(b)(1). And, there is even an exception to this toothless standard if the EPA determines that measuring baseline loadings is “infeasible.” For these reasons, I believe that the EPA’s decision not to consider

⁷ According to the majority, “the EPA determined that pre-existing technology had resulted in little discharge reductions and therefore no environmental improvement.” Maj. Op. at 19. The EPA, however, stated that “[m]ore than ten years of remining under the Rahall Amendment have demonstrated success in improving abandoned mine land and acid mine damage.” 65 Fed. Reg. at 19445. Unfortunately, the EPA, based on that situation, decided the best remedy was to lower the environmental standards even further to allow more remining than the Rahall Amendment permitted without adhering to the purpose of the Clean Water Act. To that effect, this Final Rule fails.

⁸ The EPA suggests that remining by itself improves pollution rates at remining sites, however, there is no evidence in the record to support this claim. Moreover, if this fact is true then it begs the question why the EPA did not set the effluent reduction for remining sites at a numerical requirement higher than zero.

the effluent-limitation reduction *attainable* is arbitrary and capricious, and I would invalidate the Final Rule.⁹

The EPA's Argument That Non-Numeric Effluent-Limitations are Infeasible is Without Merit and, therefore, the Limitations are Arbitrary and Capricious

An “effluent-limitation” is “any restriction established . . . on the quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point source into . . . water.” 33 U.S.C. § 1362(11). The Federal Register states that the “EPA interprets the definition of ‘effluent-limitation’ in section 502 of the CWA to include non-numeric effluent-limitations where it is not feasible to establish numeric effluent-limitations.” 67 Fed. Reg. 3378. Therefore, the EPA acknowledges that the Clean Water Act requires *numerical* effluent-limitations, unless it is *not feasible* to establish numeric effluent-limitations. This requirement is based on Congress’s findings that numerical effluent-limitations are the best way to quantifiably ensure industry compliance and to make reasonable further progress toward the goal of eliminating pollutants into the nation’s waters. Unnecessarily removing the numerical burden for remining areas makes it exceedingly difficult to determine whether reminers are complying with the Clean Water Act and naively places faith in the ability of the mining community to self-regulate.

Assuming the correctness of the EPA’s determination that numeric effluent-limitations are required unless it is not “feasible” to establish such numeric limits requires us to determine what the term “feasible” actually means. Feasible, according to Black’s Dictionary means “capable of being done.” BLACK’S LAW DICTIONARY 609 (6th ed. 1990). The EPA has put forth no evidence in the record to substantiate a determination that establishing numerical effluent-limitations for remining is not capable of being done. I can sympathize with the suggestion that setting numerical limits may be difficult. Perhaps the EPA would argue that setting numerical guidelines for remining is more difficult than for virgin lands because there are more variations in lands that have been mined and abandoned. But, it is always “difficult” to determine the best numerical effluent-limitation, even for virgin sites and for other industries. The EPA, however, has not put forth any evidence that would distinguish remining from the other categories and subcategories of point sources that the EPA regulates, leading to the conclusion that setting numeric limits for remining is not capable of being done. This is not to say that the EPA is required to employ the same rigid numerical limitation for every remining site. The EPA could require a percentage effluent reduction to be shown in order to approve a NDPES permit. The EPA does not put forth any evidence why, even with variations site-by-site, it is inconsistent with the Clean Water Act to require certain percentage reductions in order to make reasonable further progress toward the elimination of discharges into the nation’s waters. Percentage reductions would also have the benefit of allowing some site-by-site deviations, thus maintaining some flexibility to the regulatory scheme. *See Am. Petroleum Institute*, 540 F.2d at 1030 (“The balance of general rule and narrow exceptions assures all possible uniformity without sacrifice of the flexibility needed to adjust for disparate plans in dissimilar circumstances.”). Likewise, the D.C. Circuit has stressed that “when numerical effluent-limitations are infeasible, [the] EPA may issue permits with conditions designed to *reduce* the level of effluent discharges to acceptable levels. This may well mean opting for a *gross reduction* in pollutant discharge rather than the fine-tuning suggested by numerical limitations.” *Natural Res. Def. Council, Inc.*, 568 F.2d

⁹The majority, in section III-A-2-e, states that we have “overlook[ed] the whole point of not only the Final Rule, but the Rahall Amendment itself,” when in fact it is the majority who is committing the very same mistake as the EPA in this case. Maj. Op. at 18. The majority believes the EPA followed the Rahall Amendment by setting the baseline of pollution reduction at zero. The Amendment states that “in no event shall such a permit allow the pH level of any discharge, and in no event shall such a permit allow the discharges of iron and manganese, to exceed the levels being discharged from the remined area before the coal mining operation begins.” 33 U.S.C. § 1311(p)(2). This is the absolute minimum that the Amendment requires of reminers, but the EPA interpreted this to mean the maximum attainable pollution levels for remining operations were the levels at which they found the site. In sum, the Rahall Amendment gave an inch and the EPA took a mile. That is arbitrary and capricious.

at 1380 (emphasis added). Thus, courts have recognized that where it is truly *infeasible* to set numeric limits, other types of limitations designed to achieve *gross reductions* are sufficient. Here, however, the EPA has not demonstrated either that fine-tuned numerical limits are infeasible or that some other type of *gross reduction* is not feasible either. Instead, the EPA has simply adopted a rule designed to maintain the status-quo.

Thus, I would hold that the EPA acted arbitrarily and capriciously in failing to set numeric effluent-limitations or put forth evidence that numeric limitations are not capable of being imposed. Had the agency put forth sufficient evidence in the record to demonstrate that numeric limitations are infeasible, the Clean Water Act still requires some type of limit designed to achieve a gross reduction in effluent-limitations. The EPA's decision to set non-numeric limitations that do nothing but preserve the status quo is arbitrary and capricious.

The EPA's Decision to Set Non-Numerical Effluent-Limitations is Arbitrary and Capricious

The EPA's Final Rule effectively substitutes best management practices or BMPs for numerical effluent-limitations. This substitution is arbitrary and capricious for two reasons: (1) under the Clean Water Act and the EPA's own regulations, BMPs may be promulgated as supplemental to effluent-limitations, but may rarely if ever take the place of effluent-limitations; and (2) the Clean Water Act requires the EPA to consider numerous factors when establishing control measures that become BPT, BAT, and BCT, but there is no evidence in the record to support the claim that the EPA actually considered these factors in reaching its conclusion that BMPs were sufficient to satisfy BPT, BAT, and BCT.

First, I agree with the original panel majority's conclusion that the language of the Clean Water Act strongly suggests that the drafters of the Clean Water Act did not envision BMPs replacing numerical effluent-limitations. Specifically, section 304(e) of the Clean Water Act permits the EPA to publish best management practices that are "supplemental to any effluent-limitations." 33 U.S.C. § 1314(e). Black's defines "supplemental" as "that which is added to a thing or act to complete it." BLACK'S LAW DICTIONARY 1438 (6th ed. 1991). Thus, this provision of the Clean Water Act strongly indicates that BMPs are different from effluent-limitations, and although BMPs may be used to *add to* effluent-limitations, Congress did not intend for them to *replace* effluent-limitations. Congress was likely aware that BMPs are insufficient to result in reasonable further reduction in pollutant discharges.

Furthermore, the EPA has interpreted the NPDES permit regulations to allow BMPs to be used in specific delineated circumstances. The majority opinion suggests that "[t]he EPA's NPDES permit regulations reflect the EPA's longstanding interpretation of the CWA as allowing BMPs to take the place of numeric effluent limitations under certain circumstances." Maj. Op. at 16, n.18. This is an erroneous interpretation of the NPDES permit regulations. Rather, the regulations do reflect the EPA's policy of allowing BMPs to *supplement* effluent-limitations but the regulations allow BMPs to *replace* effluent-limitations only under rare circumstances. Contrary to the majority's assertions, these rare circumstances are not present here.

According to 40 C.F.R. § 122(k), permits may *include* BMPs to control or abate the discharge of pollutants when: (1) "[a]uthorized under section 304(e) of the CWA for the control of toxic pollutants and hazardous substances from ancillary industrial activities"; (2) "[a]uthorized under section 402(p) of the CWA for the control of storm water discharges"; (3) "[n]umeric effluent-limitations are infeasible"; or (4) "[t]he practices are reasonable necessary to achieve effluent-limitations and standards or to carry out the purposes and intent of the CWA." Only one of these circumstances, 40 C.F.R. §122(k)(3), allows BMPs to replace numeric effluent-limitations. Moreover, none of the facts here justify replacing effluent-limitations with BMPs under this regulation. The majority opinion suggests that the EPA's "longstanding interpretation" is that BMPs

may “take the place of numeric effluent-limitations under certain circumstances.” Even if this were true (and I dispute that it is), none of the circumstances in which this is allegedly permissible under section 122.44(k) are present here. The majority opinion’s suggestion misreads section 122.44(k), and its reading is not supported by the text of section 122.44(k). The text of three of the four subsections of 122.44(k) contemplates use of BMPs to supplement, not replace as the majority alleges, effluent-limitations. First, subsection 122.44(k)(1) suggests that BMPs may be used where section 304(e) authorizes such use. Section 304(e) states, of course, that BMPs, are permitted as “supplemental to any effluent-limitations.” Second, the majority opinion’s reading gains no support from subsection two. We are not dealing here with storm water draining. And, subsection four states that “[t]he [best management] practices are reasonably necessary to *achieve* effluent-limitations,” which clearly implies that effluent-limitations themselves exist and BMPs are reasonably necessary to help achieve those limitations. There is, in fact, only one circumstance under section 122.44(k) that contemplates a replacement of effluent-limitations with BMPs — that is where “[n]umeric effluent-limitations are infeasible.” As the preceding argument demonstrates, however, there is no evidence whatsoever to support the conclusion that numeric effluent-limitations are infeasible for coal remining. Even if the Clean Water Act authorizes BMPs to be used in place of effluent-limitations under certain rare circumstances, the EPA’s own regulation, section 122.44(k), belies the suggestion that it is appropriate here. Thus, the EPA’s Final Rule is arbitrary and capricious for allowing BMPs to replace numeric effluent-limitations.

The EPA’s Final Rule is also arbitrary and capricious because the Clean Water Act *requires* the EPA to consider numerous factors when establishing control measures that become BPT, BAT, and BCT, but there is no evidence in the record to support the claim that the EPA actually considered these factors in this case. Subsections 304(b)(1)(B), (b)(2)(B), and (b)(4)(B) require the EPA to consider a list of factors when establishing which control measures shall become BPT, BAT, and BCT. 33 U.S.C. § 1314(b)(1)(B), (b)(2)(B), (b)(4)(B). The factors in Subsections 304(b)(1)(B) and (b)(4)(B) include the age of the equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and other such factors as the Administrator deems appropriate. 33 U.S.C. § 1314(b)(1)(B), (b)(4)(B). Subsection 304(b)(2)(B) contains all of the above, and also includes an additional factor — “the cost of achieving such effluent reduction” after “process changes.” 33 U.S.C. § 1314(b)(2)(B). Although the EPA has broad discretion in determining the amount of weight it assigns to each of the factors, *see Texas Oil & Gas Ass’n v. EPA*, 161 F.3d 923, 928 (5th Cir. 1998) (citing *Natural Res. Def. Council v. EPA*, 863 F.2d 1420, 1426 (9th Cir. 1988)), the EPA may not ignore a factor altogether, *id.* at 934 (holding that an agency abuses its discretion when it ignores a statutory factor).

The record in this case, however, contains *no evidence* that the EPA analyzed these factors when concluding that BMPs satisfy BPT, BAT and BCT for the two new subcategories. The EPA’s Proposed Rule, located at 65 Fed. Reg. 19440 (April 11, 2000), lists the factors in its discussion of BPT for the Coal Remining Subcategory, *id.* at 19450-51, but it contains *no evidence* in the form of scientific data or otherwise that the EPA actually considered the factors it listed. For instance, the Proposed Rule contains no discussion or even information about the age of the equipment or facilities or of “the engineering aspects of the application of various types of control techniques.” The Rule’s discussion of BCT and BAT are worse — they do not even bother to list the factors. *Id.* at 19452. The Final Rule fares no better. *See* 67 Fed. Reg. 3370-3410 (Jan. 23, 2002).

It cannot be disputed that the statute requires the EPA to include a “consideration” of the factors listed. The statute uses the language “shall include.” It cannot reasonably be contended that “shall” vests the EPA with discretion as to whether it actually considers the factors. The “assertion that ‘shall’ does not create a mandatory command simply flies in the face of standard interpretation.” *United States v. Ostrander*, 411 F.3d 684, 688 (6th Cir. 2005) (citing *Lopez v. Davis*, 531 U.S. 230, 241 (2001) (“a mandatory ‘shall’ . . . impose[s] discretionless obligations”)); *see also Lexecon Inc.*

v. *Milberg Weiss Bershad Hynes & Lerach*, 523 U.S. 26, 35 (1998) (concluding that “the mandatory ‘shall’ . . . normally creates an obligation impervious to judicial discretion”); *Hewitt v. Helms*, 459 U.S. 460, 471 (1983) (calling shall “language of an unmistakably mandatory character”).

The nature of the rulemaking process requires that rules are based on sufficient evidence in the record, including scientific evidence. We will “defer in large part to [the] EPA’s scientific findings,” *BP Exploration & Oil*, 66 F.3d at 792; *Baltimore Gas & Elec. Co. v. NRDC, Inc.*, 462 U.S. 87, 103 (1983) (recognizing that a reviewing court should be at its most deferential in reviewing an agency’s scientific conclusions in an area within the agency’s expertise), but will not do so when there are no scientific findings to defer to.

Therefore, on the record before us, I cannot conclude that the EPA followed Congress’s statutory directives in determining the appropriate pollution controls to assign to point sources in the two new subcategories. Thus, the EPA’s Final Rule is arbitrary and capricious and not supported by substantial evidence within the meaning of the APA.

The EPA’s Decision to Use Background Conditions As Effluent-Limitations Is Arbitrary and Capricious

The Final Rule utilizes background conditions — those conditions that exist prior to the start of reming — as effluent-limitations. At the outset, this procedure is inherently suspect and in tension with Congress’s declaration that any reming is intended to *improve* the quality of water via reduced effluent-limitations. The use of background conditions is problematic for the additional reason that it results in different effluent-limitations for each site. This do-no-harm approach fails to approximate needed uniformity in the regulations without any persuasive reasoning from the EPA. The Clean Water Act does not mandate strict uniformity. But it also does not contemplate the type of site-by-site regulations adopted by the EPA in this case. *See Am. Petroleum Institute*, 540 F.2d at 1030 (“The balance of general rule and narrow exceptions assures all possible uniformity without sacrifice of the flexibility needed to adjust for disparate plans in dissimilar circumstances.”). The Tenth Circuit has recognized that: “The intent of Congress was to clean up the Nation’s waters. This cannot be done overnight. On the road to attainment of the no discharge objective some flexibility is needed. The extent of that flexibility may be determined by Congress through precise amendments to the Act.” *Id.* at 1031-32. Further, in *Texas Oil & Gas Ass’n v. EPA*, 161 F.3d 923, 937-38 (5th Cir. 1998), the Fifth Circuit held that the Clean Water Act does not require absolute uniformity among effluent-limitations within a single category or subcategory of sources. The court also recognized “the textual mandate of the CWA that [effluent-limitation guidelines] be established for ‘categories and classes’ rather than individual point sources” and “agree[d] that Congress intended to foreclose plant-by-plant evaluation of facilities within a subcategory.” *Id.* at 938-39. Here, the EPA’s decision to set effluent-limitations through *sole* reliance on site-specific factors runs afoul of this policy against site-specific regulations.

I also find it arbitrary and capricious because the EPA has set forth no limiting principle to its rationale for relying on site-specific factors. There is nothing inherently different about coal reming that makes uniformity infeasible or undesirable. In fact, even with virgin lands, site-specific factors *could* be used because there will always be some difference in soil content and other factors. Congress’s policy, while not demanding absolute uniformity, certainly seeks uniformity in this context and the EPA has put forth no reasonable rationale for why site-specific factors should be determinative here (but not in other areas of regulation). In my opinion, the EPA has not “articulate[d] a satisfactory explanation for its action” and has “entirely failed to consider an important aspect of the problem.” *State Farm Mut. Auto. Ins. Co.*, 463 U.S. at 43. Thus, the EPA’s decision is arbitrary and capricious.

IV.

The Western Alkaline Coal Mining Subcategory

I would apply the same reasoning to invalidate the Final Rule with respect to the Western Alkaline Coal Mining Subcategory. These regulations again contain no numeric effluent-limitations for total suspended solids and no effluent-limitations *at all* for settleable solids and pH. Under the regulations, each polluter “must submit a site-specific Sediment Control Plan . . . designed to prevent an increase in the average annual sediment yield from pre-mined, undisturbed conditions.” 40 C.F.R. § 434.82(a). Like the Pollution Abatement Plans required under the Coal Remining Subcategory, these Sediment Plans feature BMPs. *Id.* Additionally, the operators are required to demonstrate the plans’ effectiveness “[u]sing watershed models.” *Id.* at § 434.82(b). These Sediment Control Plans, submitted by the operators, constitute the only effluent-limitation required for all three levels of technology, and they contain no numeric limits on sediment whatsoever. *See id.* at § 434.82 (BPT); § 434.83 (BAT); § 434.84 (BCT). Beyond the initial models, there are no measurable checks on sediment levels at all.

Thus, I would apply the same reasoning from the Coal Remining Subcategory to hold invalid the Rules here. The EPA’s decision to adopt non-numeric effluent-limitations is arbitrary and capricious as failing to consider an important aspect of the problem, *State Farm Mut. Auto. Ins. Co.*, 463 U.S. at 43 — i.e., Congress’s goal of pollution *reduction* — and by failing to determine the degree of effluent reduction *attainable*. Additionally, the EPA failed to consider the factors required of it by the Clean Water Act in deciding which control measures would become BPT, BAT, and BCT. For these reasons, I would invalidate the Rule and respectfully dissent from the majority opinion’s decision to sustain it.

V.

In conclusion, the EPA’s new remining regulations violate the APA in that they are arbitrary and capricious and also not in accordance with the law. The regulations irrationally violate the spirit of the Clean Water Act in that they are not designed to improve the quality of our nation’s waters. This conclusion is borne out in the EPA’s abdication of its regulatory responsibility by eliminating numerical effluents limitations in favor of weakened requirements. I can only hope that this regulation represents an isolated regulatory decision by the EPA and not a sign of things to come in future environmental regulations. As political winds shift, so too sometimes do administrative agency’s priorities. Here, however, with respect to the Clean Water Act, Congress’s intent has remained fixed and clear. *See Am. Petroleum Institute*, 540 F.2d at 1028 (“[T]he guiding star [of the Clean Water Act] is the intent of Congress to improve and preserve the quality of the Nation’s waters.”). The EPA’s Final Rule, which lessens the controls on polluting industries and inflicts a self-imposed wound on the regulatory authority of the EPA, is arbitrary and capricious under the Administrative Procedure Act. I would invalidate the Rule and therefore respectfully dissent from the majority’s misguided decision to uphold it.