

RECOMMENDED FOR FULL-TEXT PUBLICATION
Pursuant to Sixth Circuit Rule 206

File Name: 08a0333p.06

UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

KENTUCKY WATERWAYS ALLIANCE; SIERRA CLUB
CUMBERLAND CHAPTER; KENTUCKIANS FOR THE
COMMONWEALTH; FLOYDS FORK ENVIRONMENTAL
ASSOCIATION,

Plaintiffs-Appellants,

v.

STEPHEN L. JOHNSON, in his official capacity as
ADMINISTRATOR OF THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY,

Defendant-Appellee,

COMMONWEALTH OF KENTUCKY; KENTUCKY COAL
ASSOCIATION; ASSOCIATED INDUSTRIES OF
KENTUCKY; KENTUCKY CHAMBER OF COMMERCE;
KENTUCKY LEAGUE OF CITIES,

Intervening Defendants-Appellees.

No. 06-5614

Appeal from the United States District Court
for the Western District of Kentucky at Bowling Green.
No. 04-00145—Thomas B. Russell, District Judge.

Argued: January 30, 2008

Decided and Filed: September 3, 2008

Before: SILER, CLAY, and COOK, Circuit Judges.

COUNSEL

ARGUED: Albert F. Ettinger, ENVIRONMENTAL LAW & POLICY CENTER, Chicago, Illinois, for Appellants. Robert J. Lundman, UNITED STATES DEPARTMENT OF JUSTICE, Washington, D.C., for Appellees. **ON BRIEF:** Albert F. Ettinger, ENVIRONMENTAL LAW & POLICY CENTER, Chicago, Illinois, Thomas J. FitzGerald, KENTUCKY RESOURCES COUNCIL, INC., Frankfort, Kentucky, for Appellants. Robert J. Lundman, UNITED STATES DEPARTMENT OF JUSTICE, Washington, D.C., Sharon R. Vriesenga, Brenda Gail Lowe, KENTUCKY ENVIRONMENTAL AND PUBLIC PROTECTION CABINET, Frankfort, Kentucky, Timothy J.

Hagerty, FROST BROWN TODD, LLC, Louisville, Kentucky, Carolyn M. Brown, John C. Bender, GREENEBAUM, DOLL & McDONALD, PLLC, Lexington, Kentucky, Mark S. Riddle, GREENEBAUM, DOLL & McDONALD, PLLC, Louisville, Kentucky, Culver V. Halliday, Kenneth T. Williams, STOLL KEENON OGDEN, PLLC, Louisville, Kentucky, Ronald R. Van Stockum, Jr., Louisville, Kentucky, for Appellees. Kevin Reuther, MINNESOTA CENTER FOR ENVIRONMENTAL ADVOCACY, St. Paul, Minnesota, Nancy K. Stoner, NATURAL RESOURCES DEFENSE COUNCIL, INC., Washington, D.C., Karla Raettig, Michele Merkel, ENVIRONMENTAL INTEGRITY PROJECT, Washington, D.C., Scott L. Long, BROWN, WINICK, GRAVES, GROSS, BASKERVILLE & SCHOENEBAUM, Des Moines, Iowa, for Amici Curiae.

CLAY, J., delivered the opinion of the court. COOK, J. (pp. 21-24), delivered the remainder of the court's opinion in a separate concurring opinion, in which SILER, J., joined.

OPINION

CLAY, Circuit Judge. Plaintiffs, Kentucky Waterways Alliance, Sierra Club Cumberland Chapter, Kentuckians for the Commonwealth, and Floyds Fork Environmental Association, appeal the district court's grant of summary judgment in favor of Defendants, Stephen L. Johnson, in his official capacity as Administrator of the United States Environmental Protection Agency ("EPA"), the Commonwealth of Kentucky, the Kentucky Coal Association, Associated Industries of Kentucky, the Kentucky Chamber of Commerce, and the Kentucky League of Cities, on Plaintiffs' challenge, brought pursuant to the Administrative Procedures Act ("APA"), 5 U.S.C. § 701 *et seq.* (2000), of the EPA's approval, under § 303(c) of the Clean Water Act, 33 U.S.C. § 1313(c) (2000), of Kentucky's regulatory implementation of its Tier II water quality antidegradation rules. For the reasons set forth in parts I, II, and III-A of this opinion as well as for the reasons expressed in Judge Cook's concurring opinion, we **AFFIRM** in part and **REVERSE** in part the district court's opinion and order, **VACATE** in part the EPA's approval of Kentucky's Tier II antidegradation rules, and **REMAND** the matter to the EPA for further proceedings consistent with these opinions.¹

I. BACKGROUND

A. Statutory and Regulatory Framework

The Federal Water Pollution Control Act, commonly known as the Clean Water Act ("CWA"), 33 U.S.C. § 1251 *et seq.*, "is a comprehensive water quality statute designed to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters.'" *PUD No. 1 of Jefferson County v. Wash. Dept. of Ecology*, 511 U.S. 700, 704 (1994) (quoting 33 U.S.C. § 1251(a)). In passing the CWA, Congress sought to eliminate "the discharge of pollutants into the [nation's] navigable waters"² and to attain "an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife." 33 U.S.C. § 1251(a)(1)-(2).

¹Part III-A of this opinion contains the Court's holding with respect to Plaintiffs' first argument. The Court's holding with respect to Plaintiff's second claim is set forth in Judge Cook's concurring opinion. Part III-B of this opinion expresses the views of Judge Clay only.

²The CWA defines "pollutant" as "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water." 33 U.S.C. § 1362(6).

To achieve these goals, the CWA “provides for two sets of water quality measures.” *Arkansas v. Oklahoma*, 503 U.S. 91, 101 (1992). First, the CWA requires the EPA “to establish and enforce technology-based limitations on individual discharges into the country’s navigable waters from point-sources.”³ *PUD No. 1 of Jefferson County*, 511 U.S. at 704 (citing 33 U.S.C. §§ 1311, 1314). These effluent limitations “restrict the quantities, rates, and concentrations of specified substances which are discharged from point sources.” *Arkansas v. Oklahoma*, 503 U.S. at 101. In order to comply with the CWA, an individual point-source discharger must obtain and adhere to the terms of a National Pollutant Discharge Elimination System (“NPDES”) permit issued by the EPA or an EPA-authorized state agency. 33 U.S.C. § 1342(a)-(d). The EPA has authorized Kentucky to issue NPDES permits for waters within the Commonwealth, *see* Approval of Kentucky’s NPDES Program, 48 Fed. Reg. 45,597 (Oct. 6, 1983), under a program referred to as the Kentucky Pollution Discharge Elimination System (“KPDES”). 401 Ky. Admin. Regs. 5:050 (2007).

Second, § 303 of the CWA “requires each State, subject to federal approval, to institute comprehensive water quality standards establishing water quality goals for all intrastate waters.” *PUD No. 1 of Jefferson County*, 511 U.S. at 704 (citing 33 U.S.C. §§ 1311(b)(1)(C), 1313). The statute provides that these water quality standards “shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses. Such standards shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of [the CWA].” 33 U.S.C. § 1313(c)(2)(A). The Supreme Court has further explained that “[t]hese state water quality standards provide ‘a supplementary basis . . . so that numerous point sources, despite individual compliance with effluent limitations, may be further regulated to prevent water quality from falling below acceptable levels.’” *PUD No. 1 of Jefferson County*, 511 U.S. at 704 (quoting *EPA v. California ex rel. State Water Resources Control Bd.*, 426 U.S. 200, 205 n.12 (1976)).

Pursuant to a 1987 amendment to the CWA, these state-established water quality standards must include an antidegradation policy, which is “a policy requiring that state standards be sufficient to maintain existing beneficial uses of navigable waters, preventing their further degradation.” *Id.* at 705. Specifically, the CWA permits the revision of certain effluent limitations or water quality standards “only if such revision is subject to and consistent with the antidegradation policy established under [the CWA].” 33 U.S.C. § 1313(d)(4)(B). Accordingly, the EPA’s regulations implementing the CWA require each State to “develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy.” 40 C.F.R. § 131.12(a) (2008).

The EPA regulations further provide that “[t]he antidegradation policy and implementation methods shall, at a minimum, be consistent with” certain federal standards provided for in the regulation. 40 C.F.R. § 131.12(a). These federal standards establish three levels of water quality protection: Tier I, Tier II, and Tier III.

Tier I protection establishes the minimum water quality standard for all of a State’s waters and requires that “[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.” 40 C.F.R. § 131.12(a)(1).

³The CWA defines “point source” as “any discernible, confined and discrete conveyance, including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.” 33 U.S.C. § 1362(14). The CWA does not define non-point source pollution and does not appear to regulate such pollution. *See Defenders of Wildlife v. EPA*, 415 F.3d 1121, 1124 (10th Cir. 2005); *American Wildlands v. Browner*, 260 F.3d 1192, 1193-1194 (10th Cir. 2001). One court has described non-point source pollution as “nothing more than a pollution problem *not* involving a discharge from a point source.” *Nat’l Wildlife Fed’n v. Gorsuch*, 693 F.2d 156, 166 n.28 (D.C. Cir. 1982).

Tier II protection applies when “the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water.” 40 C.F.R. § 131.12(a)(2). For such waters, the regulation requires that their “quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State’s continuing planning process, that allowing lower water quality is necessary to accommodate important economic and social development in the area in which the waters are located.” 40 C.F.R. § 131.12(a)(2). However, “[i]n allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully.”⁴ 40 C.F.R. § 131.12(a)(2).

Finally, Tier III protection provides that “[w]here high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.” 40 C.F.R. § 131.12(a)(3).

Once a State adopts or revises its water quality standards, including its antidegradation policy, the CWA requires the State to submit these standards to the EPA for review. 33 U.S.C. § 1313(c)(1). If the State’s standards and implementation procedures are consistent with the minimum federal standards required by the CWA and the EPA’s implementing regulations, then the EPA must approve the state standards within sixty days. 33 U.S.C. § 1313(c)(3). However, if the state water quality standards do not satisfy the CWA’s requirements, the EPA must, within ninety days, “notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the [EPA] shall promulgate such standard[s].” 33 U.S.C. § 1313(c)(3).

B. Factual and Procedural History

Kentucky adopted its original antidegradation policy in 1979.⁵ In 1995, the Kentucky Environmental and Public Protection Cabinet (the “Cabinet”) established implementation procedures for this policy by adopting 401 Ky. Admin. Regs. 5:030.⁶ On August 11, 1995, the Cabinet submitted these antidegradation implementation procedures to the EPA for approval. Two years later, on August 7, 1997, the EPA disapproved a portion of Kentucky’s antidegradation program because it found that the selection criteria for water bodies that would be given Tier II protection were not sufficiently inclusive and, therefore, did not meet the requirements of 40 C.F.R. § 131.12.

On December 8, 1999, in response to this disapproval, Kentucky adopted revisions to its water quality standards, including revisions to 401 Ky. Admin. Regs. 5:030. The Cabinet submitted

⁴This Tier II standard may also be described as protecting the water body’s “assimilative capacity” which is the amount by which the water body exceeds the quality level necessary to support its designated uses. Under the regulation, a pollution increase that would decrease a water body’s assimilative capacity would need to be justified by the necessity of the pollution for achieving important economic and social development. However, the regulation prohibits any pollution increase that would create negative assimilative capacity, regardless of the economic or social necessity for the pollution.

⁵Kentucky’s antidegradation policy, which provides for the type of protection afforded to various qualitative categories of water bodies, is found in 401 Ky. Admin. Regs. 5:029.

⁶While Kentucky’s general antidegradation policy is contained in 401 Ky. Admin. Regs. 5:029, the implementation procedures specifying which particular water bodies fall within each protection category are contained in 401 Ky. Admin. Regs. 5:030. Thus, Plaintiffs’ challenge regarding the EPA’s approval of the Cabinet’s revision of 401 Ky. Admin. Regs. 5:030 is not technically a challenge to Kentucky’s antidegradation policy, but rather is a challenge to Kentucky’s implementation of this policy through its selection of which waters merit Tier II protection and its categorical exclusion of certain types of discharges from Tier II review.

these revisions to the EPA for approval on December 15, 1999. On August 30, 2000, the EPA notified the Cabinet that these revised Tier II rules failed to fully address the concerns identified in the EPA's 1997 disapproval.

On May 19, 2001, Plaintiffs served notice of their intent to commence a civil action under the citizen suit provision of the CWA, 33 U.S.C. § 1365, for the alleged failure of the EPA Administrator to perform his mandatory duty under 33 U.S.C. § 1313(c)(4) to promulgate a federal standard implementing antidegradation requirements for Kentucky. In November 2002, the EPA proposed a federal antidegradation implementation procedure for Kentucky to adopt. Plaintiffs, however, advised the EPA that the proposal was inadequate to ensure compliance with the CWA.

On February 17, 2004, Plaintiffs renewed their 60-day notice, demanding that the EPA perform its duty to finalize Tier II antidegradation rules for Kentucky that comply with the CWA. On September 8, 2004, the Cabinet adopted a revised version of its antidegradation implementation procedure regulation, 401 Ky. Admin. Reg. 5:030, and submitted it to the EPA for approval on September 23, 2004. However, two days prior to this submission, on September 21, 2004, Plaintiffs commenced the instant action against the EPA in the United States District Court for the Western District of Kentucky. Plaintiffs' initial two-count complaint alleged that: (1) the EPA had failed to comply with its mandatory duty under the CWA to finalize federal water quality Tier II antidegradation standards for Kentucky; and (2) this failure to comply with a mandatory CWA duty was arbitrary, capricious, and contrary to law, in violation of the APA.

On January 29, 2005, Plaintiffs filed a motion for summary judgment requesting that the district court order the EPA to promulgate antidegradation regulations for Kentucky. However, on April 12, 2005, prior to the district court's issuance of a ruling on Plaintiffs' summary judgment motion, the EPA approved Kentucky's revised antidegradation implementation procedures, based on its extensive evaluation of those procedures. *See* J.A. at 176-233 (EPA Determination Under Section 303(c) of the Clean Water Act, Review of Regulation 401 KAR 5:030, Kentucky Antidegradation Policy Implementation Methodology (Apr. 12, 2005) (hereinafter "EPA Approval Document")).

In response to this development, Plaintiffs amended their complaint on May 27, 2005 to include a third count—that the EPA's approval of Kentucky's revised antidegradation implementation procedures was arbitrary, capricious, and otherwise contrary to law. On June 6, 2005, Plaintiffs moved to dismiss counts I and II of their amended complaint. Thereafter, the Commonwealth of Kentucky, the Kentucky Coal Association, Associated Industries of Kentucky, the Kentucky Chamber of Commerce, and the Kentucky League of Cities intervened as defendants. On June 13, 2005, the district court approved Plaintiffs' voluntary dismissal of counts I and II of the amended complaint, leaving only Plaintiffs' count III claim that the EPA acted arbitrarily and capriciously in approving Kentucky's revised antidegradation implementation procedures.

On September 6, 2005, Plaintiffs filed a motion for summary judgment on count III of their amended complaint. Defendants responded by filing a cross-motion for summary judgment on October 31, 2005. On March 31, 2006, the district court issued an opinion and order denying Plaintiffs' motion for summary judgment and granting Defendants' motion for summary judgment. *See Kentucky Waterways Alliance v. Johnson*, 426 F. Supp. 2d 612, 616 (W.D. Ky. 2006). This timely appeal followed.

II. STANDARD OF REVIEW

A. Review Under the APA

When a district court upholds on summary judgment an administrative agency's final decision under the APA, we review the district court's summary judgment decision *de novo*, while reviewing the agency's decision under the APA's arbitrary and capricious standard. *City of Cleveland v. Ohio*, 508 F.3d 827, 838 (6th Cir. 2007) (quoting *Coalition for Gov't Procurement v. Fed. Prison Indus., Inc.*, 365 F.3d 435, 457 (6th Cir. 2004)). The APA directs that when reviewing the decision of an administrative agency, a court shall "hold unlawful and set aside the agency action" if the action is "arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). "A court reviewing an agency's adjudicative action should accept the agency's factual findings if those findings are supported by substantial evidence on the record as a whole." *Arkansas v. Oklahoma*, 503 U.S. at 113 (emphasis altered).

Under this APA standard, the reviewing court "must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378 (1989) (quoting *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971)). An agency decision is "arbitrary and capricious" when the agency:

has relied on factors which Congress had 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.

Nat'l Ass'n of Home Builders v. Defenders of Wildlife, 127 S. Ct. 2518, 2529 (2007) (quoting *Motor Vehicle Mfrs. Ass'n of United States, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)). The reviewing court "may not supply a reasoned basis for the agency's action that the agency itself has not given." *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43. However, "[e]ven when an agency explains its decision with less than ideal clarity, a reviewing court will not upset the decision on that account if the agency's path may be reasonably discerned." *Alaska Dep't of Env't Conservation v. EPA*, 540 U.S. 461, 497 (2004).

The Supreme Court has explained that "[r]eview under the arbitrary and capricious standard is deferential." *Nat'l Ass'n of Home Builders*, 127 S. Ct. at 2529. "Nevertheless, merely because our review must be deferential does not mean that [it] must also be inconsequential." *Moon v. Unum Provident Corp.*, 405 F.3d 373, 379 (6th Cir. 2005). "The arbitrary-and-capricious standard . . . does not require us merely to rubber stamp the [agency's] decision." *Jones v. Metropolitan Life Ins. Co.*, 385 F.3d 654, 661 (6th Cir. 2004). Indeed, "[d]eferential review is not no review, and deference need not be abject." *McDonald v. Western-Southern Life Ins. Co.*, 347 F.3d 161, 172 (6th Cir. 2003).

B. Deference to Agency Interpretation of Statutes and Regulations

In reviewing a federal agency's interpretation of a statute that it administers, a reviewing court must first ask "whether Congress has directly spoken to the precise question at issue." *Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842 (1984). "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." *Id.* at 842-43. However, if "Congress has not directly addressed the precise question at issue" and "the statute is silent or ambiguous with respect to the specific issue," then "the question for the court is whether the agency's answer is based on a permissible construction of the statute." *Id.* at 843. If the agency's construction is a permissible one, even if it is not "the reading the court would have reached if the question initially had arisen

in a judicial proceeding,” then the court must defer to the agency’s interpretation. *Id.* at 843 n.11. “In such a case, a court may not substitute its own construction of a statutory provision for a reasonable interpretation made by the administrator of an agency.” *Id.* at 843.

When interpreting an agency regulation, a court should also defer to the agency’s interpretation of the regulation unless it is plainly erroneous or inconsistent with the regulation. *Auer v. Robbins*, 519 U.S. 452, 461 (1997). However, “deference is warranted only when the language of the regulation is ambiguous.” *Christensen v. Harris County*, 529 U.S. 576, 588 (2000). If the language of the regulation is clear, then “[t]o defer to the agency’s position would be to permit the agency, under the guise of interpreting a regulation, to create a *de facto* new regulation.” *Id.*

III. DISCUSSION

On appeal, Plaintiffs raise two challenges to the EPA’s approval of Kentucky’s antidegradation implementation regulation, 401 Ky. Admin. Regs. 5:030. First, Plaintiffs contend that the EPA’s approval of Kentucky’s classification of certain waters as eligible for Tier I protection rather than Tier II protection was arbitrary, capricious, and contrary to law. Second, Plaintiffs argue that the EPA’s approval of Kentucky’s categorical exemption of six types of pollution discharges from the Tier II review procedure was arbitrary, capricious, and contrary to law. We consider each of these challenges in turn.

A. EPA’s Approval of Kentucky’s Selection of Waters for Tier II Protection

Plaintiffs first challenge concerns the EPA’s approval of the way in which Kentucky designates waters for Tier II protection. Kentucky’s antidegradation implementation procedures divide Kentucky’s water bodies into four categories: (1) outstanding national resource water (“ONRW”); (2) exceptional water; (3) high quality water; and (4) impaired water. *See* 401 Ky. Admin. Regs. 5:030. ONRWs, which consist of about 30 miles of two streams and all of the underground rivers in Mammoth Cave National Park, are afforded Tier III protection. *See* 401 Ky. Admin. Regs. 5:030 § 1(1)(a)-(b). Exceptional water, which consists of water bodies satisfying the criteria set forth in 401 Ky. Admin. Regs. 5:030 § 1(2)(a), receives Tier II protection. *See* 401 Ky. Admin. Regs. 5:030 § 1(2)(b). High quality water, which is defined as all water that is not designated as ONRW, exceptional water, or impaired water, is also afforded Tier II protection. *See* 401 Ky. Admin. Regs. 5:030 § 1(3)(a)-(b). Finally, impaired water, which consists of those water bodies for which one or more designated uses are listed as impaired by Kentucky in its biennial report required under 33 U.S.C. § 1315, is afforded Tier I protection. *See* 401 Ky. Admin. Regs. 5:030 § 1(4)(a)-(b).

Plaintiffs contend that the EPA’s approval of Kentucky’s exclusion of impaired waters from Tier II protection was arbitrary and capricious for three reasons. First, Plaintiffs maintain that Kentucky’s use of a water body-by-water body approach instead of a parameter-by-parameter approach for determining which waters merit Tier II protection was inconsistent with the goals of the CWA and the language of 40 C.F.R. § 131.12(a)(2). Second, Plaintiffs claim that, even if the regulations permitted Kentucky to use a water body-by-water body approach, Kentucky’s categorical exclusion of waters listed as “impaired” under 33 U.S.C. § 1315 is arbitrary and unsupported by the evidence in the record. Third, and finally, Plaintiffs argue that exclusion of impaired water from Tier II protection results in the exclusion of a substantial number of Kentucky’s water bodies from Tier II protection. We find none of these arguments to have merit.

1. Water Body-by-Water Body Approach vs. Parameter-by-Parameter Approach

Plaintiffs first contend that the EPA contradicted the CWA by approving Kentucky's water body-by-water body approach to antidegradation policy implementation because both the CWA and 40 C.F.R. § 131.12(a)(2) require States to adopt a parameter-by-parameter approach in designating which waters receive Tier II protection. The district court rejected a similar argument, *see Kentucky Waterways*, 426 F. Supp. 2d at 631-33, and we likewise find the argument unpersuasive.

The EPA's CWA-implementing regulations require States to ensure that waters whose quality "exceed[s] levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water" receive Tier II protection, *i.e.*, their existing high water quality must be maintained and protected unless it is demonstrated that a lowering of water quality is necessary to accommodate important economic or social development. 40 C.F.R. § 131.12(a)(2). However, as the EPA itself has publicly noted in its advance notice of proposed rule-making, "the regulation does not include specific guidelines for identifying [these] high quality waters." Water Quality Standards Regulation, 63 Fed. Reg. 36,742, 36,782 (proposed July 7, 1998) (to be codified at 40 C.F.R. pt. 131).⁷ Instead, "States and Tribes have developed various ways to identify their [T]ier [II] waters." *Id.*

These "approaches for identifying high quality waters fall into two basic categories: (1) pollutant-by-pollutant approaches, and (2) water body-by-water body approaches." *Id.* Under the pollutant-by-pollutant approach (which is the same as Plaintiffs' parameter-by-parameter approach), "the State makes a classification for each pollutant in a given water body." *Ohio Valley Environmental Coalition v. Horinko*, 279 F. Supp. 2d 732, 747 (S.D. W.Va. 2003). The water body is then given Tier II protection against those pollutants for which "water quality is better than applicable criteria." Water Quality Standards Regulation, 63 Fed. Reg. at 36,782. "[A]vailable assimilative capacity for any given pollutant is always subject to [Tier II] protection, regardless of whether the criteria for other pollutants are satisfied." *Id.* Thus, under this approach, the same water body could be classified as Tier II for certain pollutants and Tier I for other pollutants. *See Ohio Valley*, 279 F. Supp. 2d at 747.

Under the water body-by-water body approach (also known as the designational approach), States "weigh a variety of factors to judge a water body segment's overall quality." Water Quality Standards Regulation, 63 Fed. Reg. at 36,782. Tier II classification is then "based on the overall quality of the water body segment, not on individual pollutants." *Ohio Valley*, 279 F. Supp. 2d at 747. "Under this approach, assimilative capacity for a given pollutant may not be subject to [Tier II] protection if, overall, the segment is not deemed 'high quality.'" Water Quality Standards Regulation, 63 Fed. Reg. at 36,782.

The EPA has not found either of these approaches to be compelled by the language of 40 C.F.R. § 131.12(a)(2) or the CWA. *See id.* On the contrary, the EPA has found that "[t]here are advantages and disadvantages to each approach." *Id.* The pollutant-by-pollutant approach is easier to implement for some States "because the need for an overall assessment considering various factors is avoided." *Id.* This approach might also have the benefit of generally including more waters within Tier II protection "because it would cover waters that are clearly not attaining goal uses (*i.e.*, waters which are not supporting 'fishable/swimmable' goal uses but that possess assimilative capacity for one or more pollutant [*sic*])." *Id.* at 36,782-36,783. "The water body-by-water body approach, on the other hand, allows for a weighted assessment of chemical, physical,

⁷ As noted previously, an administrative agency's interpretation of its own regulation is entitled to great deference, *see Auer*, 519 U.S. at 461 (1997), and thus provides useful guidance to this Court in assessing the merits of Plaintiffs' argument in this case.

biological, and other information (e.g., unique ecological or scientific attributes).” *Id.* at 36, 783. By allowing the high quality water decision to be made in advance of the antidegradation review, this approach may facilitate implementation. *Id.* The approach “also allows States and Tribes to focus limited resources on protecting higher-value State or Tribal waters.” *Id.* Accordingly, the EPA has concluded that “neither approach is clearly superior and that either, when properly implemented, is acceptable.” *Id.* at 36, 782.

Likewise, the United States District Court for the Southern District of West Virginia, the only court which has previously considered this issue, has also concluded that the federal statute and regulations do not require States to choose the pollutant-by-pollutant approach over the water body-by-water body approach. *See Ohio Valley*, 279 F. Supp. 2d at 747. On the contrary, in *Ohio Valley Environmental Coalition v. Horinko*, that court found that “the EPA’s regulations permit a State to adopt a water body-by-water body approach to classification, assuming that this approach is implemented adequately.” *Id.*

Plaintiffs nevertheless contend that the language of 40 C.F.R. § 131.12(a) requires a pollutant-by-pollutant approach. They emphasize “the fact that the regulation speaks of protecting *levels* of *quality* rather than protecting ‘high quality waters.’” Pl. Br. at 23. They argue that, because the regulation protects the quality of waters when that quality “exceeds *levels* necessary to support” fish and recreation, a water body with safe levels of one or more pollutant must be protected from unnecessary new loadings of that pollutant, even if the water body is suffering from excess loadings of a different pollutant. *Id.* at 21 (quoting 40 C.F.R. § 131.12(a)(2)). Thus, they conclude that the regulation requires Tier II protection be determined according to a pollutant-by-pollutant approach.

We find Plaintiffs’ argument to demonstrate only that a pollutant-by-pollutant approach is consistent with the regulation, not that it is required by the regulation. Plaintiffs’ focus on the plural “levels” ignores the rest of the phrase in which that word appears. The regulation requires protection of water quality when “the quality of the waters exceed levels necessary to support the propagation of fish, shellfish, and wildlife and recreation in and on the water.” 40 C.F.R. § 131.12(a)(2). This language is susceptible to two interpretations. The first is that offered by Plaintiffs, *i.e.*, that “levels” refers to the levels of various pollutants in the water body. However, the word “levels” here could also refer to the overall quality levels necessary to support the various water uses mentioned in the regulation. For any particular water body there could be one quality level necessary to support the propagation of fish, a different quality level necessary to support the propagation of wildlife, and finally a third quality level necessary to support recreation. Either reading seems consistent with the plain language of the regulation and neither reading seems compelled by the language. Given this ambiguity in the regulation, we defer to the EPA’s interpretation, *see Auer*, 519 U.S. at 461, which holds that either approach is permissible. Thus, we do not find the EPA’s approval of Kentucky’s use of a water body-by-water body approach to be arbitrary, capricious, or contrary to law.

2. Evidence Supporting the Categorical Exclusion of “Impaired Waters” From Tier II Protection

Plaintiffs next argue that, even if Kentucky’s use of a water body-by-water body approach in classifying waters for Tier II protection is permissible, “the Kentucky rules cannot be upheld because the method for selecting waters to be left unprotected is arbitrary and without support in the record.” Pl. Br. at 24. Relying on *Ohio Valley*, Plaintiffs claim that merely listing a water body as “impaired” is insufficient to justify denial of Tier II protection. They maintain that “[t]he fact that a water body fails to meet one or more water quality criteria is not determinative of the *overall* quality of its water or whether existing ‘quality of the waters exceed[s] levels necessary to support propagation of fish shellfish, and wildlife and recreation in and on the water.’” *Id.* at 26 (quoting

40 C.F.R. § 131.12(a)(2)). Instead of focusing on whether the water is impaired, Plaintiffs argue, Kentucky “must look at a full range of ‘qualification criteria’ to determine if a water body is of sufficient quality for Tier II protection.” *Id.* at 25. Because the Kentucky implementation procedures fail to classify Tier II waters on this basis, Plaintiffs contend that the EPA erred in approving them.

Defendants counter that exclusion of Tier II protection from impaired waters is consistent with 40 C.F.R. § 131.12(a)(2). They argue that, because the regulation requires Tier II protection only for waters whose quality supports both aquatic life-based uses and recreation-based uses, Kentucky may reasonably exclude bodies of water from Tier II protection if the water is impaired for any of those uses.⁸ We agree with Defendants that Kentucky’s exclusion of “impaired” waters from Tier II protection is consistent with the requirements of 40 C.F.R. § 131.12(a).

Kentucky’s antidegradation implementation procedures provide Tier II protection to the State’s “exceptional waters” and its “high quality waters.” 401 Ky. Admin. Regs. 5:030 §§ 1(2)(b) and (3)(b). In contrast, Kentucky extends only Tier I protection to “surface water categorized as impaired for applicable designated uses” unless “the surface water is listed as an outstanding state resource water in 401 KAR 5:026.” 401 Ky. Admin. Regs. 5:030 § 1(4)(a). The Kentucky regulation clarifies that “a surface water categorized as impaired for applicable designated uses shall be a water identified pursuant to 33 U.S.C. § 1315.” *Id.* Section 1315 (§ 305 of the CWA), however, does not provide a definition of impaired water. Rather, § 1315 requires each State to submit a biennial report to the EPA (“§ 305 report”) which includes, *inter alia*:

(A) a description of the water quality of all navigable waters in [the] State during the preceding year . . . (B) an analysis of the extent to which all navigable waters of [the] State provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities in and on the water; [and] (C) an analysis of the extent to which the elimination of the discharge of pollutants and a level of water quality which provides for the protection and propagation of a balanced population of shellfish, fish, and wildlife and allows recreational activities in and on the water, have been or will be achieved by the requirements of [the CWA], together with recommendations as to additional action necessary to achieve such objectives and for what waters such additional action is necessary.

33 U.S.C. § 1315(b)(1). Section 1315 does not require this report to include an identification of impaired waters. Instead, the requirement to identify impaired waters in this § 305 report seems to come from 33 U.S.C. § 1313(d)(1) (§ 303(d) of the CWA) which requires each State to “identify those waters within its boundaries for which the effluent limitations required by [the CWA] are not

⁸ Defendant Commonwealth of Kentucky further argues that excluding impaired waters from Tier II protection is consistent with 33 U.S.C. § 1313(d)(4)(B). The Commonwealth interprets this provision of the CWA as requiring States to apply antidegradation review only to waters whose applicable water quality standard has been attained. As impaired waters, by definition, have not attained their applicable water quality standard, the Commonwealth argues that it is appropriate not to afford them Tier II antidegradation protection.

We find the Commonwealth’s statutory argument to be misguided. A careful reading of 33 U.S.C. § 1313(d) reveals that the section has nothing to do with identifying which water bodies should receive Tier II protection. Rather, this section sets out the conditions that must be satisfied prior to modifying NPDES permits to include less stringent effluent limitations. *See* 33 U.S.C. § 1313(d). Section 1313(d)(4)(b) provides that, for water bodies whose quality “equals or exceeds levels necessary to protect [their] designated uses,” any revisions to the effluent limitations placed on that water body must be “consistent with the antidegradation policy established under this section.” The section does not address the question of how States must determine which waters receive Tier II antidegradation protection and is thus not helpful in resolving the parties’ dispute on this point.

stringent enough to implement any water quality standard applicable to such waters.” 33 U.S.C. § 1313(d)(1)(A). Kentucky submits its § 303(d) list of such impaired waters as part of its annual § 305 report. *See, e.g.*, J.A. at 788 (2004 Kentucky Report to Congress on Water Quality). This list of impaired waters includes “all waters not supporting one or more designated uses.” Final 2006 Integrated Report to Congress on the Condition of Water Resources in Kentucky, Volume II, p.1 (April 4, 2007). Thus, the Kentucky antidegradation implementation regulation clarifies that “[s]urface water categorized as impaired shall be assessed by the [C]abinet as not fully supporting any applicable designated uses.” 401 Ky. Admin. Regs. 5:030 § 1(4)(a).

The EPA approved Kentucky’s exclusion of impaired waters from Tier II protection, finding it to be “consistent with the federal requirement that high quality waters have water quality that supports both aquatic life-based uses and recreation-based uses.” J.A. at 184 (EPA Approval Document). In approving Kentucky’s classification of Tier II waters, the EPA noted that, as Plaintiffs have argued, Kentucky did not implement a strict water body-by-water body approach:

Kentucky’s combined selection criteria for classification of waters for antidegradation purposes combines some elements of the designational approach and some elements of the pollutant-by-pollutant approach. Qualification for the exceptional waters category [which receive Tier II protection] is based on meeting certain criteria, which include high levels of biological diversity, recognition of outstanding values through other statutory provisions, exceptional aesthetic or ecological values, historical significance, or high levels of water quality. This is typically considered a designational approach.

However, in adopting the category high quality waters [which are also afforded Tier II protection], Kentucky has chosen to create a “default” category that contains *all* other waters of the Commonwealth, unless the water is an ONRW or has been shown to be impaired for a designated use. This approach is clearly not a “designational” approach, since no data are required for a water to be placed in the high quality waters category, and Kentucky does not maintain a listing of high quality waters that have been classified in that category.

Qualification for the impaired waters category (i.e., the only waters of the Commonwealth that are not considered for [Tier II] protection, at a minimum) is based solely on a determination by Kentucky that a water body does not meet the 40 C.F.R. § 131.12(a)(2) requirement for waters that “exceed levels necessary to support propagation of fish, shellfish, and wildlife **and** recreation in and on the water.” (emphasis added). This method of exclusion of waters from consideration as [Tier II] waters combines some concepts of both approaches, in that chemical and biological data are evaluated in making an impairment decision, but the final decision to include waters in this category is based on whether each designated use for the water body is being attained.

J.A. at 185-86 (EPA Approval Document) (emphasis in original). The EPA found that Kentucky’s use of this hybrid approach for classifying Tier II waters is consistent with 40 C.F.R. § 131.12(a)(2). The EPA also noted that “Kentucky’s categorization approach is similar to the approach approved by EPA Region 4 in Alabama and Tennessee.” J.A. at 186 (EPA Approval Document).

Plaintiffs nevertheless contend that merely listing a water as “impaired” for its designated uses is insufficient to justify denial of Tier II protection. Plaintiffs rely on *Ohio Valley* for support. This reliance, however, is misplaced. In *Ohio Valley*, the issue faced by the court was whether there was sufficient evidence in the record to permit the EPA’s approval of West Virginia’s exclusion of Tier II protection from particular segments of the Monongahela and Kanawha rivers. 279 F. Supp. 2d at 746. The court found that the administrative record was insufficient to support the EPA’s decision because the only evidence pertaining to the water quality of those river segments was “the

fact that both river segments [were] on a list of impaired waters prepared by the WVDEP for submission to the EPA under section 303(d) of the Clean Water Act.” *Id.* at 748. The court noted that other waters on that list had been classified as Tier II and that the EPA had provided no justification for why the particular impairments to Monongahela and Kanawha river segments rendered those rivers Tier I “as opposed to other listed waters with similar impairments.” *Id.* at 749. In other words, the problem that the court found with the EPA’s evidence was not that it classified the rivers as Tier I based upon their impairment, but rather that the EPA did not have any evidence to justify treating some impaired waters as Tier I while classifying others as Tier II. Accordingly, *Ohio Valley* cannot properly be read to stand for the proposition that a water’s impairment is not enough to exclude it from Tier II protection when all impaired waters are treated the same for antidegradation purposes.

Perhaps recognizing the flimsy support provided by *Ohio Valley*, Plaintiffs alternatively argue that excluding impaired waters from Tier II protection is arbitrary because, under such an approach, a water body’s exclusion from Tier II protection is determined by the designated uses of the water rather than by the water’s overall quality. However, this argument overlooks the fact that 40 C.F.R. § 131.12(a)(2) links a water body’s relevant quality level to its designated uses. Under this regulation, Kentucky’s implementation procedures must provide Tier II protection to all of Kentucky’s waters whose quality “exceed levels *necessary to support* propagation of fish, shellfish, and wildlife *and* recreation in and on the water.” 40 C.F.R. § 131.12(a)(2) (emphasis added). In other words, Kentucky must provide Tier II protection to waters whose quality is better than the minimum level of quality needed to support aquatic-life based uses, wildlife uses, and recreational uses. Impaired waters, which, by definition do not have the quality needed to support their uses and must “be assessed by the [C]abinet as *not* fully supporting *any* designated uses,” 401 Ky. Admin. Regs. 5:030 § 1(4)(a) (emphasis added), do not fall within this category of Tier II waters. Impaired waters do not even have the minimum quality level that is necessary to support their designated uses, let alone a quality that is better than necessary to support aquatic-life based uses, wildlife uses, *and* recreational uses. Plaintiffs have failed to convincingly explain how the exclusion of such waters from Tier II protection is problematic under 40 C.F.R. § 131.12(a)(2). Accordingly, we are not persuaded that the EPA’s approval of Kentucky’s exclusion of impaired waters from Tier II protection was arbitrary, capricious, or contrary to law.

3. Percentage of Kentucky Water Bodies Receiving Tier II Protection

Finally, Plaintiffs argue that the district court’s decision should be reversed because it is “based on the misunderstanding that the approach [the] EPA approved provided for 90% of Kentucky’s waters with Tier II protection.” Pl. Br. at 27. Plaintiffs contend that “the record only shows that 90% of the stream miles that had been studied as of the time of the decision were not listed as impaired” and that “the 90% stream mile figure does not address the extent to which lakes would be protected.” *Id.* at 28. Plaintiffs maintain that “[a]s Kentucky continues to collect data, the percentage of waters found to be impaired is likely to be much higher.” *Id.*

We find this final argument to be misguided. While Plaintiffs’ criticisms of the district court’s calculation of the percentage of Kentucky waters afforded Tier II protection may be well-founded—the record only indicates that 90% of the stream miles *that had been studied at the time of the EPA’s decision* are afforded Tier II protection, *see* J.A. at 187 (EPA Approval Document)—Plaintiffs fail to explain how the district court’s factual mischaracterization of the record is relevant to our *de novo* evaluation of whether the EPA’s approval of Kentucky’s antidegradation regulations was arbitrary, capricious, or contrary to law. Kentucky’s criteria for identifying waters afforded Tier II protection are not to be evaluated based on the percentage of waters for which they provide Tier II protection, but rather upon their consistency with 40 C.F.R. § 131.12(a)(2). Neither the CWA nor its implementing regulations specify that a certain percentage

of a State's waters must be afforded Tier II protection. As long as all waters whose quality "exceed[s] levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water" are granted Tier II protection, the regulation is satisfied. 40 C.F.R. § 131.12(a)(2). Plaintiffs' contention that less than 90% of Kentucky's waters are afforded Tier II protection does not, by itself, demonstrate that the EPA's approval of Kentucky's antidegradation implementation procedures was arbitrary, capricious, or contrary to law.

For the foregoing reasons, we **AFFIRM** the district court's grant of summary judgment to Defendants with respect to the EPA's approval of Kentucky's method of selecting which waters merit Tier II protection.

B. EPA's Approval of Kentucky's Multiple Exceptions to Tier II Review⁹

Plaintiffs' second challenge concerns the EPA's approval of specific exemptions to the Tier II review procedure which applies to new discharges into Tier II waters. While Kentucky's antidegradation implementation regulation generally affords Tier II protection to "exceptional water" and "high quality water," the regulation exempts pollution discharges resulting from specific categories of activity from Tier II review and allows dischargers in other categories of activity to avoid Tier II review by accepting specified permit effluent limitations. In particular, the regulation provides categorical exemptions from the Tier II review process specified in 401 Ky. Admin. Regs. 5:029 for: (1) discharges issued pursuant to storm water general permits;¹⁰ (2) coal mining discharges; (3) domestic sewage discharges from single-family residences; (4) concentrated animal feeding operation ("CAFO") discharges;¹¹ and (5) discharges pursuant to KPDES permit renewals and modifications that result in less than a twenty percent increase in pollutant loading. *See* 401 Ky. Admin. Regs. 5:030 §§ 1(2)(b)(1)(a)-(e), (3)(b)(1)(a)-(e). The regulation also allows non-domestic dischargers (*e.g.*, factories) to opt out of Tier II review for new KPDES permits if they accept permit limits that are "restricted to no more than one-half (1/2) of the water quality based limitations that would have been permitted at standard design conditions." 401 Ky. Admin. Regs. 5:030

⁹This portion of the opinion expresses only the views of Judge Clay. For the Court's holding with respect to Plaintiffs' second claim, the reader should refer to Judge Cook's concurring opinion.

¹⁰The EPA and States often use general permits for classes of dischargers where there is a basis for the agency to establish the same permit conditions for all dischargers in the class. *See, e.g.*, 40 C.F.R. § 122.28. "With a general permit, the [agency] issues a permit for specific types of activities and establishes specific rules for complying with the permit. Then, rather than apply for an individual permit, operators must file a Notice of Intent ("NOI") stating that they plan to operate under the general permit, and absent a negative ruling by the [agency], discharges that comply with the terms of the general permit are automatically authorized." *Texas Indep. Producers & Royalty Owners Assoc. v. EPA*, 410 F.3d 964, 968 (7th Cir. 2005). Both the EPA and States have found general permits particularly useful for discharges of storm water. *See id.* Kentucky has established general permits for several different categories of storm water discharges.

¹¹Under 40 C.F.R. § 122.23(b)(1), an animal feeding operation ("AFO") is defined as "a lot or facility (other than an aquatic animal production facility)" in which:

- (i) Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period, and
- (ii) Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

The regulation defines a CAFO as a large or medium AFO. 40 C.F.R. § 122.23(b)(2). In other words, "CAFOs are large-scale industrial operations that raise extraordinary numbers of livestock. For example, a 'Medium CAFO' raises as many as 9,999 sheep, 54,999 turkeys, or 124,999 chickens (other than laying hens). 'Large CAFOs' raise even more staggering numbers of livestock—sometimes, raising literally millions of animals in one location." *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486, 492 (2d Cir. 2005).

§§ 1(2)(b)(5), (3)(b)(5). The EPA approved most of these exemptions from Tier II review because it found them to be *de minimus*.

Plaintiffs argue that the EPA's approval of Kentucky's categorical exemption of these six types of pollution discharges from the Tier II review procedure was arbitrary, capricious and contrary to law. In particular, Plaintiffs contend that the EPA acted contrary to law by: (1) failing to ensure that each exemption only allowed individual pollution discharges that would not reduce more than ten percent of a Tier II water body's assimilative capacity; (2) failing to provide for a cumulative cap on the loss of assimilative capacity caused by the combined effect of discharges allowed under these exemptions; and (3) basing its determination of the effect of these exemptions on non-binding assurances made by the Cabinet, rather than on the text of the Kentucky regulation itself. Unlike the majority, I find each of these arguments persuasive.

1. Limit of Ten Percent Destruction of Assimilative Capacity for *De Minimus* Discharges

The text of 40 C.F.R. § 131.12(a)(2) does not provide for any exceptions to Tier II review based on the type or quantity of new sources of pollution, but rather requires that, for waters whose quality is better than necessary to support the propagation of fish and wildlife as well as recreation, *i.e.*, Tier II waters, "that quality *shall* be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located." (emphasis added). Likewise, the CWA does not provide for any exceptions to Tier II antidegradation review but instead demands that any revision to effluent limitation standards for Tier II waters be "consistent with the antidegradation policy established under this section." 33 U.S.C. § 1313(d)(4)(B).

Despite this lack of text-based exceptions to Tier II antidegradation review, the EPA approved most of Kentucky's categorical exemptions to Tier II review for certain types of discharges under the administrative law principle which allows an agency to create unwritten exceptions to a statute or rule for insignificant or "*de minimus*" matters. Under this well-established principle, it is "permissible as an exercise of agency power, inherent in most statutory schemes," to create categorical exemptions "to overlook circumstances that in context may fairly be considered *de minimus*." *Alabama Power Co. v. Costle*, 636 F.2d 323, 360 (D.C. Cir. 1979). This authority to create exemptions "is not an ability to depart from the statute, but rather a tool to be used in implementing the legislative design." *Id.* In other words, "this exemption authority is narrow in reach and tightly bounded by the need to show that the situation is genuinely *de minimus* or one of administrative necessity." *Id.* at 361. Accordingly, an agency only has implied authority to create an exemption "when the burdens of regulation yield a gain of trivial or no value." *Greenbaum v. EPA*, 370 F.3d 527, 534 (6th Cir. 2004) (quoting *Alabama Power*, 636 F.2d at 360-61). This "implied authority is not available for a situation where the regulatory function does provide benefits, in the sense of furthering the regulatory objectives, but the agency concludes that the acknowledged benefits are exceeded by the costs." *Alabama Power*, 636 F.2d at 361. "Determination of when matters are truly *de minimus* naturally will turn on the assessment of particular circumstances, and the agency will bear the burden of making the required showing." *Greenbaum*, 370 F.3d at 534 (quoting *Alabama Power*, 636 F.2d at 360).

Plaintiffs contend that, in the context of Tier II review, "a narrow reading of the *de minimus* doctrine is appropriate given the clear intent of the federal antidegradation requirements to allow for the lowering of water quality only when *necessary* to accommodate important economic or social development in the area." Pl. Br. at 31 (citing 40 C.F.R. § 131.12(a)(2)). I agree with this suggestion and would hold that the EPA's approval of any exemptions from the Tier II review

process must be based upon a well-founded determination that the pollution discharges permitted under such exemptions will have a truly *de minimus* impact upon the water quality of Tier II waters.¹²

In their primary challenge to the EPA's approval of Kentucky's categorical Tier II exemptions, Plaintiffs contend that the EPA should have ensured that individual discharges allowed under these exemptions would not cause more than a specified decrease in water quality. In particular, Plaintiffs argue that an exemption for an individual pollution discharge that would use up more than ten percent of a water's remaining assimilative capacity cannot be *de minimus*.¹³ By approving Kentucky's categorical exemptions without ensuring that they would only exempt new discharges that would have an insignificant effect on water quality, Plaintiffs argue, the EPA exceeded its legal authority under the CWA and 40 C.F.R. § 131.12(a) to allow *de minimus* exceptions. I agree.

The EPA has previously indicated that the central purpose of the federal Tier II antidegradation regulations is to protect a water body's assimilative capacity, which is "the difference between the applicable water quality criterion for a pollutant parameter and the ambient water quality for that parameter when it is better than the criterion." J.A. at 922 (Memorandum from Ephraim S. King, Director of EPA Office of Science and Technology, to Water Management Division Directors, Regions 1-10 (Aug. 10, 2005) (hereinafter "King Memorandum")); accord J.A. at 208 (EPA Approval Document). In short, a water body's assimilative capacity is a measurement of the amount by which its quality exceeds levels necessary to support fish, wildlife, and recreation. The Tier II review process ensures that this assimilative capacity is maintained so as to avoid further degradation of the high quality of Tier II waters. Thus, any exceptions to Tier II review cannot be deemed *de minimus* if they permit new discharges which significantly decrease a Tier II water body's assimilative capacity. Indeed, the EPA has cautioned States against using "a high threshold of significance" for creating categorical exemptions, because such an approach could "unduly restrict[] the number of proposed activities that are subject to a full antidegradation review" and "may not adequately prevent cumulative water quality degradation on a watershed scale." Water Quality Standards Regulation, 63 Fed. Reg. at 36,783. The EPA has likewise indicated that, while "the current regulation does not specify a significance threshold below which antidegradation review would not be required[, the] EPA's current thinking is that a clear national norm regarding this 'significance test' is necessary and should be developed and established in either the regulation or national guidance." *Id.*

¹² As an initial matter, I question whether such *de minimus* exceptions should even be allowed for Tier II review. The Tier II review process, required by 40 C.F.R. § 131.12(a)(2), does not create a situation where "the burdens of regulation yield a gain of trivial or no value." *Greenbaum*, 370 F.3d at 534 (6th Cir. 2004) (quoting *Alabama Power*, 636 F.2d at 360-61). On the contrary, this Tier II review process directly furthers Congress' regulatory objective "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a) (emphasis added). This acknowledged benefit of the protection afforded by the Tier II review procedures cannot be ignored by the EPA simply because Tier II review also imposes some economic costs on certain pollutant dischargers.

Nevertheless, the only court to have considered this issue has not found *de minimus* exceptions to be impermissible in this context. See *Ohio Valley*, 279 F. Supp. 2d at 769 (finding that "nothing in the EPA's regulation prohibits a *de minimus* exception from Tier 2 review when water quality is lowered only a 'trivial' amount"). Likewise, the EPA has permitted States to create categorical exemptions from Tier II review for discharges whose effect on Tier II waters is deemed trivial. See, e.g., Water Quality Standards Regulation, 63 Fed. Reg. at 36,783. Finally, Plaintiffs do not directly challenge on appeal the EPA's authority to permit *de minimus* exceptions to the requirements of 40 C.F.R. § 131.12(a). Given this apparent acceptance of the EPA's authority to approve *de minimus* exemptions, I am hesitant to conclude that the EPA has acted contrary to law simply by allowing Kentucky to provide for some exemptions to Tier II review. However, I agree with Plaintiffs that the EPA's authority to approve Kentucky's exemptions from Tier II review as *de minimus* is quite limited.

¹³ Plaintiffs actually seem to argue for a lower threshold, but insist that, regardless, ten percent is the outer limit of permissible reduction of assimilative capacity.

Neither the EPA nor any federal court has previously determined the precise threshold between significant and insignificant decreases in assimilative capacity. Nevertheless, the EPA's prior guidance statements indicate that more than a ten percent reduction in assimilative capacity would be significant, and thus not *de minimus*. In its Water Quality Guidance for the Great Lakes System Supplementary Information Document ("Great Lakes SID"), issued in 1995, the EPA addressed *de minimus* water degradation in the Great Lakes ecosystem. In particular, the EPA allowed States to categorize as *de minimus* any discharge of non-bioaccumulative chemicals ("non-BCCs") that caused a loss of less than ten percent of the available assimilative capacity. The EPA stated:

Although *de minimus* provisions do involve non-conservative assumptions, the *de minimus* provisions included in the proposed Guidance are not likely to seriously undermine the protection afforded a high quality water body through antidegradation. *De minimus* provisions provide a means for States and Tribes to differentiate between actions that will result in an increased loading of a pollutant to a receiving water that is likely to have a significant impact on water quality and those that are unlikely to do so and focus review efforts on actions that will degrade water quality. It is reasonable to assume that loading increases of non-BCCs that will use less than ten percent of the remaining assimilative capacity in a water body will have a negligible effect on ambient water quality.

J.A. at 698 (Great Lakes SID) (emphasis added). More recently, the EPA embraced this ten percent threshold in the context of Tier II review generally. In a memorandum to the EPA's Water Management Division Directors, the Director of the EPA's Office of Science and Technology stated:

EPA has afforded the states and tribes some discretion in determining what constitutes a significant lowering of water quality. EPA has accepted a range of approaches to defining a "significance threshold" over which a full antidegradation review is required. This issue was considered at length in the process of developing the Water Quality Guidance for the Great Lakes. Relying on input offered during a four-year open public process involving environmental groups, industry representatives, and other experts, with numerous opportunities for public input, the directors of the eight Great Lakes states and EPA technical experts reached a consensus on a significance threshold value of ten percent (10%) of the available assimilative capacity, coupled with a cumulative cap. . . . A ten percent (10%) value is within the range of values for significance thresholds that EPA has approved in other states as well. *EPA considers this approach to be workable and protective in identifying those significant lowerings of water quality that should receive a full tier 2 antidegradation review, including public participation.*

J.A. at 923 (King Memorandum) (emphasis added). The only court to have considered this issue has likewise suggested that a ten percent reduction in assimilative capacity is the outer limit for any *de minimus* exception. See *Ohio Valley*, 279 F. Supp. 2d at 770 (finding that the EPA's approval of West Virginia's exception from Tier II review for individual discharges causing up to a ten percent loss of available assimilative capacity was reasonable, but failing to indorse the EPA's approval of West Virginia's twenty percent *de minimus* provision for cumulative discharges).

Based on these authorities' interpretations of the amount of loss of assimilative capacity that would be considered significant, I would find that, in order to be considered *de minimus* (and thus permissible as an exception to 40 C.F.R. § 131.12(a)(2)'s requirement that all Tier II waters be afforded Tier II review), a categorical exemption from Tier II review must not permit any individual discharge that would destroy more than ten percent of a Tier II water's available assimilative capacity. While discharges causing less than a ten percent loss of assimilative capacity might also

be too significant to be considered *de minimus*, I find this the ten percent outer limit to be clearly supported by the EPA's own practice. As the EPA in this case did not even consider whether Kentucky's categorical exemptions could allow individual discharges that would cause a significant, *i.e.*, more than ten percent, loss of assimilative capacity in Tier II waters, I would hold that the EPA acted contrary to law in approving these exemptions as *de minimus*. For this reason alone, I find reversal required and would remand the matter to the EPA, so that it could consider whether Kentucky's categorical exemptions would permit individual discharges that would cause more than a ten percent loss of a Tier II water's assimilative capacity.

2. Cumulative Cap on *De Minimus* Discharges

Plaintiffs next argue that "[a] second requirement for any *de minimus* exemption from Tier II antidegradation requirements is that such exemption be subject to a cumulative cap, so that individual discharges allowed to pass as trivial do not end up having a significant combined impact." Pl. Br. at 34. Again, I agree that such a cumulative cap is required in order for a discharge exemption to be permitted as *de minimus*.

As already noted, in order to qualify as *de minimus*, any exemption to the strict requirements of Tier II review must only exempt pollution discharges whose combined effect does not lead to a significant degradation of a Tier II water body's quality. While the limit of ten percent destruction of assimilative capacity for individual exempted discharges helps to ensure that the exemptions have only a trivial impact on water quality, a cumulative cap is necessary to ensure that the combined effect of the many discharges allowed under the exemption is truly *de minimus*. See *Shays v. FEC*, 414 F.3d 76, 115 (D.C. Cir. 2005) (rejecting the Federal Election Commission's approval of a *de minimus* exemption of \$5000 from a campaign finance reform regulation because it was not "an obviously trivial amount, considering that donors could give that amount to each and every state, district, and local party organization"); *Alabama Power*, 636 F.2d at 360 (indicating that an agency's power to find categorical exemptions to statutory schemes is designed to "overlook circumstances that in context may fairly be considered *de minimus*"). Indeed, if a significant degradation of Tier II water quality were allowed to occur because of numerous individually exempted *de minimus* discharges, then the non-textual *de minimus* exception would be allowed to swallow the rule set forth in 40 C.F.R. § 131.12(a)'s plain language that a Tier II water's quality "*shall* be maintained and protected unless" the State determines, after engaging in the Tier II review process, that "allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located." (emphasis added).

Accordingly, the only court to have considered this issue has found that a cumulative cap is necessary in order for an exemption to be permitted as *de minimus*. *Ohio Valley*, 279 F. Supp. 2d at 770. The *Ohio Valley* court persuasively articulated the rationale for such a cap:

From the perspective of maintaining the water quality of a Tier 2 water body (which is the focus of § 131.12(a)(2)), the *de minimus* standard for cumulative discharges is more important than the *de minimus* standard for individual discharges; it is the former that will dictate the total reduction in available assimilative capacity that a water body may undergo without any Tier 2 review. Without a cumulative cap on *de minimus* discharges, individual *de minimus* discharges could easily consume all of the available assimilative capacity for a given pollutant parameter, reducing water quality to the minimum level necessary to support existing uses without ever having undergone Tier 2 review.

Id. at 770-771. Likewise, the EPA has indicated that in order to qualify as *de minimus* an exemption must have a cumulative cap on the reduction of assimilative capacity that may be caused by exempted discharges. See J.A. at 923 (King Memorandum) (noting that in defining a "sufficiency threshold"

for discharges into the Great Lakes the “EPA technical experts reached a consensus on a significance threshold value of ten percent (10%) of the available assimilative capacity, *coupled with a cumulative cap*” (emphasis added)).

In light of the foregoing concerns, I would hold that a cumulative cap on the allowable reduction of assimilative capacity is required in order for a categorical exemption to Tier II review to be approved as *de minimus*. Neither party has suggested an appropriate limit for this cumulative cap. However, given the previous discussion regarding the significant negative impact on water quality caused by the loss of more than ten percent of a water body’s assimilative capacity, I am convinced that an exemption that would allow for combined discharges to cause more than a ten percent loss of assimilative capacity, *i.e.*, a significant loss of Tier II water quality, cannot, under the EPA’s own scientific standards, be considered *de minimus*. As the EPA never even considered whether a cumulative cap is necessary when approving Kentucky’s categorical exemptions, let alone whether the combined effect of the individual discharges allowed under such exemptions would fall below the requirements of such a cap, I would find that the EPA acted contrary to law in approving these exemptions as *de minimus*. Accordingly, I would reverse the district court’s grant of summary judgment to Defendants on Plaintiffs’ challenge to Kentucky’s Tier II review exemptions and remand the matter to the EPA. On remand, in addition to considering whether Kentucky’s categorical exemptions would permit individual discharges that would cause more than a ten percent loss of a Tier II water’s assimilative capacity, I would also require the EPA to evaluate the potential cumulative effect of these individual discharges so as to ensure that they do not cause a combined loss of more than ten percent of the assimilative capacity of Kentucky’s Tier II waters.

3. EPA’s Reliance on Kentucky’s Commitments Regarding Its Regulations When Assessing Their Impact as *De Minimus*

Finally, Plaintiffs argue that in determining whether Kentucky’s exemptions are in fact *de minimus*, the EPA was not entitled to rely on Kentucky’s unenforceable commitments regarding these exemptions, but rather was required to assess the impact of each exemption based solely on the language of the exemption itself. I agree that this conclusion is compelled by the federal regulations.

The EPA’s CWA implementing regulations require each State to include, as part of its water quality standards submitted to the EPA for review, “[a]n antidegradation policy consistent with [40 C.F.R.] § 131.12.” 40 C.F.R. § 131.6(d). These federal regulations further require the State to provide “[c]ertification by the State Attorney General or other appropriate legal authority within the State that the [submitted] water quality standards were duly adopted pursuant to State law.” 40 C.F.R. § 131.6(e). Thus, in reviewing Kentucky’s antidegradation rules for compliance with 40 C.F.R. § 131.12, the EPA must consider only the Kentucky water quality regulations that “were duly adopted pursuant to State law.” 40 C.F.R. § 131.6(e).

Commitments by state agencies, such as the Cabinet, regarding the application of Kentucky’s antidegradation implementation procedures do not have the force of law in Kentucky. *See* Ky. Rev. Stat. Ann. § 13A.130(1) (2006) (“An administrative body shall not by internal policy, memorandum, or other form of action . . . [m]odify . . . [or] [e]xpand upon or limit a statute or administrative regulation.”); *Hagan v. Farris*, 807 S.W.2d 488, 490 (Ky. 1991) (“An agency must be bound by the regulations it promulgates. . . . KRS 13A.130 prohibits an administrative body from modifying an administrative regulation by internal policy or another form of action.”); *Kerr v. Ky. State Bd. of Registration for Prof’l Eng’rs & Land Surveyors*, 797 S.W.2d 714, 717 (Ky. Ct. App. 1990) (“Regulatory agencies are creatures of statute, and have not powers of their own; [their] internally adopted policies are null and void, and of no effect whatsoever.”). Accordingly, they may not be considered by the EPA when evaluating whether Kentucky’s Tier II review exemptions will have a *de minimus* impact on the quality of Kentucky’s Tier II waters. *See Northwest Envtl. Advocates v. EPA*, 268 F. Supp. 2d 1255, 1268-69 (D. Or. 2003) (finding that the EPA was not entitled to rely on

unenforceable commitment from the State when approving state-promulgated environmental standards).

While the Cabinet's promises or commitments regarding the way in which it will apply Kentucky's antidegradation policies should not be considered when assessing the *de minimus* effects of the categorical exemptions contained in Kentucky's antidegradation regulations, the Cabinet's interpretations of those regulations may be useful in understanding the effects of their application. Kentucky's duly adopted antidegradation rules and implementation policy are found in 401 Ky. Admin. Regs. 5:029 and 5:030. In interpreting these regulations, the EPA must first look to the plain language of the regulations themselves. See *Baptist Physician Hosp. Org., Inc. v. Humana Military Healthcare Serv., Inc.*, 481 F.3d 337, 344 (6th Cir. 2007) ("As with all matters of regulatory interpretation, we look first to the plain and unambiguous meaning of the regulation, if any."). If the EPA reasonably concludes that Kentucky's regulations are ambiguous, then it may rely on the Cabinet's interpretation of these regulations, which, if reasonable in light of the regulations' plain language, is entitled to deference. See *Auer*, 519 U.S. at 462; *Defenders of Wildlife v. EPA*, 415 F.3d 1121, 1127 (10th Cir. 2005) (finding it permissible for the EPA to rely on a state environmental agency's interpretation of the State's antidegradation provisions when reviewing them for compliance with 40 C.F.R. § 131.12); *Hagan*, 807 S.W.2d at 490 ("In most cases, an agency's interpretation of its own regulations is entitled to substantial deference."). However, "the EPA may not [permit the Cabinet to] effectively rewrite or amend existing state regulations, nor may it 'escape the notice and comment requirements . . . by labeling a major substantive addition to a rule a mere interpretation.'" *Defenders of Wildlife*, 415 F.3d at 1127 (citing *Riverside Cement Co. v. Thomas*, 843 F.2d 1246, 1248 (9th Cir. 1988), and quoting *Appalachian Power Co. v. EPA*, 208 F.3d 1015, 1024 (D.C. Cir. 2000)). See also *Hagan*, 807 S.W.2d at 490 ("An agency's interpretation of a regulation is valid, however, only if the interpretation complies with the actual language of the regulation."). Thus, the EPA may rely on the Cabinet's reasonable interpretation of Kentucky's categorical exemptions from Tier II review to the extent that it finds the regulation ambiguous, but it may not rely on the Cabinet's substantive additions to those exemptions when determining their compliance with the requirements of 40 C.F.R. § 131.12.

In the instant case, the EPA relied upon unenforceable commitments made by the Cabinet in determining whether the exemptions at issue would have an insignificant effect on the quality of Kentucky's Tier II waters. The language of Kentucky's antidegradation implementation regulation clearly provides that the Tier II review process specified in the regulation "shall not apply" to certain specified dischargers. See 401 Ky. Admin. Regs. 5:030 §§ 1(2)(b)(1)(a)-(e), (3)(b)(1)(a)-(e). The regulation does not, on its face, provide for an exception to these exemptions in cases where the exempted discharge would cause a significant lowering of water quality. Nevertheless, in approving these exemptions, the EPA relied on the Cabinet's commitments that it would not issue discharge permits under these exemptions for discharges that would cause a significant lowering of water quality. For example, the EPA approved Kentucky's exemption for discharges subject to storm water general permits, in part, because of Kentucky's indication that "the Commonwealth has determined that it will . . . assure that such permits only allow discharges that will not cause a significant lowering of water quality." J.A. at 191 (EPA Approval Document). Likewise in approving the exemption for domestic sewage dischargers who accept certain pollutant limits, the EPA noted:

Kentucky has represented that these default [pollutant] limits will prevent any [significant lowering of water quality]. In those rare instances where these default limits are not protective of water quality, [the Kentucky Department of Water ("KDOW")] has required more stringent options for permit applicants in the form of more stringent limits or a prohibition on discharge. The effect of this provision and its implementation by KDOW is to prevent any significant lowering of water quality.

J.A. at 215 (EPA Approval Document). Finally, in approving the exemptions for CAFO discharges and discharges pursuant to KPDES permit renewals that result in less than a twenty percent pollution expansion, the EPA explicitly stated that it was relying on the Cabinet's assurances that it would not allow such exemptions to cause a significant lowering of water quality without applying Tier II review. *See* J.A. at 206 (EPA Approval Document) ("By providing that antidegradation review is not required for discharges from CAFOs, Kentucky has represented that it will assure that these KPDES permits (both individual and general permits) will authorize only those new or increased discharges that will not cause significant lowering of water quality. Based on that understanding, EPA approves these provisions as revisions to Kentucky's water quality standards."); J.A. at 209 (EPA Approval Document) ("EPA's analysis shows that it is possible that, in limited situations, a 20% expansion could use more than 10% of the available assimilative capacity of the receiving water, or could leave little assimilative capacity after the expansion. However, Kentucky stated in its April 11, 2005, letter that if such situations arise, the Commonwealth would require an antidegradation review. In light of EPA's analyses and Kentucky's assurances, EPA is approving this provision."). These commitments made by the Cabinet cannot reasonably be construed as mere interpretations of 401 Ky. Admin. Regs. 5:030, and the EPA was not entitled to rely upon them in evaluating the *de minimus* impact of the regulation on the quality of Kentucky's Tier II waters.

In my view, the EPA acted contrary to law by relying on these unenforceable commitments. Accordingly, I would find this last contention by Plaintiffs to be a third reason to reverse the district court's grant of summary judgment to Defendants with respect to the EPA's approval of Kentucky's six categorical exemptions from Tier II review and to remand the matter to the EPA. In determining, on remand, whether Kentucky's regulatory exemptions to Tier II review only exempt discharges that have an insignificant effect on Tier II water quality, I would require the EPA to focus primarily on the language of 401 Ky. Admin. Regs. 5:030. In particular, I would prohibit the EPA from relying on unenforceable commitments from the Cabinet concerning its methods for implementing that regulation.

IV. CONCLUSION

For the reasons expressed in parts I, II, and III-A of this opinion as well as for the reasons expressed in Judge Cook's concurring opinion below, we **AFFIRM** in part and **REVERSE** in part the opinion and order of the district court. We **AFFIRM** the district court's grant of summary judgment to Defendants on Plaintiffs' challenge to the EPA's approval of Kentucky's selection of Tier II waters. However, we **REVERSE** the district court's grant of summary judgment to Defendants with respect to Plaintiffs' challenge to the EPA's approval of Kentucky's categorical exemption of six types of pollution discharges from Tier II review. We thus **VACATE** that portion of the EPA's decision approving Kentucky's categorical exemption of certain discharges from Tier II review, and **REMAND** this matter to the EPA so that it may review this aspect of Kentucky's antidegradation implementation procedures in a manner that is consistent with Judge Cook's concurring opinion.

CONCURRENCE

COOK, Circuit Judge, concurring, joined by SILER, Circuit Judge. While we join parts I, II, III-A, and IV of Judge Clay’s opinion, we write separately to express the Court’s holding with respect to Plaintiffs’ second claim—that the EPA erred in approving Kentucky’s six exemptions from Tier II review. For the reasons that follow, we find that the EPA did err in approving these exemptions, and thus **REVERSE** the district court’s grant of summary judgment to the EPA on this point and **REMAND** the matter to the EPA for further proceedings consistent with this opinion.

I.**A.**

Kentucky’s antidegradation regulations require new or expanded discharges into “exceptional” or “high quality” waters to pass Tier II review, but exempt five categories of discharges, designating them as causing insignificant water-quality loss. These discharges are:

1. Any expanded discharge under a renewed or modified KPDES permit, so long as the expansion does not increase pollutant loading by 20% or more;
2. Industrial discharges if the emitter discharges pollutants at less than half the concentration authorized by a normal KPDES water permit;
3. Domestic discharges if the emitter limits seven pollutants below certain targets—for example, residual chlorine to “no greater than 0.010 milligrams per liter”;
4. Discharges under storm water general permits;¹ and
5. Discharges from concentrated animal feeding operations (“CAFOs”).²

See 401 Ky. Admin. Reg. 5:030 §§ 1(2)(b)(1)(a),(d),(e); 1(2)(b)(4)-(6); 1(3)(b)(1)(a),(d),(e); 1(3)(b)(2)-(4).

Unless a statute or regulation employs “extraordinarily rigid” language, courts recognize an administrative law principle that allows agencies to create unwritten exceptions to a statute or rule for “*de minimis*” matters. *Greenbaum v. EPA*, 370 F.3d 527, 534 (6th Cir. 2004); see also *Ober v. Whitman*, 243 F.3d 1190, 1193–95 (9th Cir. 2001) (finding that the EPA may “exempt *de minimis* sources of [a pollutant] from [Clean Air Act] pollution controls”). Under this principle, it is

¹“With a general permit, the EPA issues a permit for specific types of activities and establishes specific rules for complying with the permit. Then, rather than apply for an individual permit, operators must file a Notice of Intent (‘NOI’) stating that they plan to operate under the general permit, and absent a negative ruling by the EPA, discharges that comply with the terms of the general permit are automatically authorized.” *Tex. Indep. Producers & Royalty Owners Ass’n v. EPA*, 410 F.3d 964, 968 (7th Cir. 2005).

²“CAFOs are large-scale industrial operations that raise extraordinary numbers of livestock. For example, a ‘Medium CAFO’ raises as many as 9,999 sheep, 54,999 turkeys, or 124,999 chickens (other than laying hens). ‘Large CAFOs’ raise even more staggering numbers of livestock—sometimes, raising literally millions of animals in one location.” *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486, 492 (2d Cir. 2005) (footnotes omitted).

“permissible as an exercise of agency power, inherent in most statutory schemes, to overlook circumstances that in context may fairly be considered *de minimis*.” *Ala. Power Co. v. Costle*, 636 F.2d 323, 360 (D.C. Cir. 1979). This authority “is not an ability to depart from the statute, but rather a tool to be used in implementing the legislative design.” *Id.* An agency thus has the implied authority to exempt “‘when the burdens of regulation yield a gain of trivial or no value.’” *Greenbaum*, 370 F.3d at 534 (quoting *Ala. Power*, 636 F.2d at 360–61). “‘Determination of when matters are truly *de minimis* naturally will turn on the assessment of particular circumstances, and the agency will bear the burden of making the required showing.’” *Id.* (quoting *Ala. Power*, 636 F.2d at 360).

Though Plaintiffs accept the EPA’s authority to approve *de minimis* exemptions to § 131.12, they challenge the EPA’s conclusion that the five exemptions listed above will result in only “insignificant” water degradation; Plaintiffs contend that these exemptions eviscerate Kentucky’s Tier II review process, allowing significant degradations in water quality without demonstrated necessity.

To assess whether Kentucky’s regulations permit significant degradation, we normally turn to the EPA’s calculations. *See Citizens Coal Council*, 447 F.3d at 890 (reiterating that courts must afford the highest level of deference to the EPA’s technical or scientific evaluations). Because § 131.12 protects assimilative capacity, we necessarily focus on how much assimilative capacity would be lost by utilization of the five Tier II exemptions. *See* JA 922 (Memorandum from Ephraim S. King, Director of EPA Office of Science and Technology, to Water Management Division Directors, Regions 1-10 (Aug. 10, 2005)) (stating proposed regulations “need to be very carefully evaluated to determine how they translate to reduction in assimilative capacity in order to understand whether a significant decrease in assimilative capacity will occur”). Relying on the EPA’s assimilative-capacity-loss estimates, we must determine *de novo* whether this loss is significant or merely *de minimis*.

While the EPA’s decision document in this case offers detailed technical analysis, it fails to aim its analysis at the legally operative question: will the extent to which various emitters avail themselves of the exemptions result in significant, rather than *de minimis*, degradation? The EPA measured Kentucky’s § 131.12 compliance by assessing whether each individual exemption resulted in “significant” or “insignificant” degradation, but that approach avoids assessing the exemptions’ cumulative effects on the State’s antidegradation compliance. Because § 131.12 regulates degradation, not individual sources of degradation, *see id.* (“The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart.”), the legally relevant inquiry is whether Kentucky’s Tier-II-review exemptions together permit significant degradation, *see Ohio Valley*, 279 F. Supp. 2d at 770 n.3 (“From the perspective of water quality . . . it does not matter whether the number of discharges is one or one hundred; the relevant question is how much water quality is lowered by any and all discharges into a water body”). The EPA’s decision document avoids answering this question, and we accordingly lack the information needed to meaningfully review the EPA’s decision to approve Kentucky’s regulations. *See Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 43 (holding that an agency action is arbitrary and capricious if the agency has “entirely failed to consider an important aspect of the problem”).

Moreover, though the EPA’s decision document details the tests conducted to measure each exemption’s impact, the document often fails to include the resulting measurements—i.e., the EPA’s estimate as to how much assimilative capacity would be lost. Instead, the EPA concludes only that the tests show “insignificant” degradation will occur. We cannot review this legal conclusion’s reasonableness without the EPA’s first discussing its assimilative-capacity loss estimates and explaining why it deems them insignificant. *See id.* (stating that a reviewing court “may not supply a reasoned basis for the agency’s action that the agency itself has not given”). We thus find a remand

to the EPA necessary so that it may address these deficiencies in its consideration of Kentucky's *de minimis* exemptions.

B.

Having determined that the EPA's approval of five of Kentucky's six exemptions must be reconsidered, we turn to the remaining exemption for coal-mining discharges. Unlike the *de minimis* exemptions, Kentucky carved this exception out of its general antidegradation provisions believing that its existing coal-mining regulations satisfy § 131.12's requirements. JA 192–93. The EPA evaluated these existing regulations and agreed that they complied with § 131.12, acknowledging the five steps Kentucky takes before issuing a permit for a coal-mining discharge into Tier II waters. Taking issue with one discrete aspect of the EPA's approval, Plaintiffs contend that the EPA erroneously credited Kentucky's existing regulations as requiring coal-mining dischargers to demonstrate economic or social necessity when, in fact, the regulations do not. Indeed, Kentucky's "socioeconomic review" is found not in its water-quality regulations, but in an informal commitment to the EPA. See JA 253. The Plaintiffs insist that the EPA may not rely on such promises, and we agree.

Kentucky agreed to subject proposed coal-mining discharges to socioeconomic review during the EPA's audit of its antidegradation procedures. When the EPA probed Kentucky about how it determined socioeconomic necessity for coal-mining discharges, the Cabinet replied that Kentucky "believes that the socioeconomic importance of coal mining is well documented . . . and supported by sufficient data, so that a demonstration of importance for each coal mining activity is not required." JA 298. Finding this explanation unsatisfactory, the EPA pressed for more. See 40 C.F.R. § 131.12(a)(2) (requiring a demonstration that degradation in Tier II waters is "necessary to accommodate important economic or social development *in the area in which the waters are located*" (emphasis added)). Through a response letter, the Cabinet assured the EPA that prior to issuing KPDES coal-mining permits to discharge into Tier II waters, it would "interpret" its existing regulations governing such permits to require a showing that the "discharge is from an activity of important social or economic development to the area in which the waters are located." JA 253. Relying on this commitment, the EPA approved the coal-mining exemption. JA 194–95.

The Plaintiffs maintain that Kentucky's response letter "effectively amended" the regulations outside the State's procedure for promulgating or modifying administrative rules. See Ky. Rev. Stat. Ann. § 13A.130(1) ("An administrative body shall not by internal policy, memorandum, or other form of action . . . [m]odify . . . [or] [e]xpand upon or limit a statute or administrative regulation.")). The EPA counters that Kentucky's letter did not amend its regulations but merely furnished the State's interpretation.

The EPA may clarify ambiguous state regulations by consulting with the state and relying on authorized state interpretations, see *Defenders of Wildlife v. EPA*, 415 F.3d 1121, 1127–28 (10th Cir. 2005) (holding that the EPA could rely on a state's interpretation of an ambiguous water quality standard, so long as the EPA did not "effectively rewrite or amend" it), but that is not what happened here. Kentucky's Tier II exemption for coal-mining discharges was not ambiguous. The antidegradation regulations stated, in explicit terms, that Tier II review "shall not apply" to coal-mining discharges regulated under existing regulations. See 401 Ky. Admin. Reg. 5:030 §§ 1(2)(b)(1)(b), 1(3)(b)(1)(b). Those existing regulations do not require socioeconomic review. Indeed, when the EPA first queried the State on socioeconomic review for coal-mining discharges, the State responded that there was no such review. JA 298. Only after further inquiries from the EPA did Kentucky adopt a starkly different position—that its regulations (it did not cite a particular one) compelled a socioeconomic review for each proposed discharge. JA 253.

This securing an informal commitment from a state agency rather than requiring the state to amend its regulations violates the federal approval procedure established by 33 U.S.C. § 1313(c)(3)—the EPA either approves or disapproves the regulations proposed by a state. *See Riverside Cement Co. v. Thomas*, 843 F.2d 1246, 1248 (9th Cir. 1988); *Ohio Valley*, 279 F. Supp. 2d at 756 (finding the EPA’s strained reading of an unambiguous West Virginia regulation to be “an impermissible attempt to amend the regulation”); *Natural Res. Defense Council v. EPA*, 16 F.3d 1395, 1399 (4th Cir. 1993) (“EPA sits in a reviewing capacity of the state-implemented standards, with approval and rejection powers only.”) (citing 33 U.S.C. § 1313(c)). Short-circuiting the normal promulgation process by addressing deficiencies through agency commitments not only contravenes § 1313(c)(3), but also hinders an important objective—public participation in the rule-making process. *See generally Appalachian Power Co. v. EPA*, 208 F.3d 1015, 1024 (D.C. Cir. 2000) (stating the EPA may not “escape the notice and comment requirements . . . by labeling a major substantive legal addition to a rule a mere interpretation”). Enforceability also argues against the EPA’s reliance on informal state commitments. *See, e.g., Riverside Cement*, 843 F.2d at 1247 (an informal state interpretation at odds with a regulation’s text is the “bureaucratic equivalent of an illusory contract”); *Nw. Envtl. Advocates v. EPA*, 268 F. Supp. 2d 1255, 1269 (D. Or. 2003) (finding the EPA erred by relying on an “unenforceable promise”—the state’s informal commitment to use a more protective water standard—to approve certain Clean Water Act regulations). Because the EPA relied on an informal Cabinet commitment to approve Kentucky’s Tier II exemption for coal-mining discharges, we find that the agency’s approval was “not in accordance with law.” 5 U.S.C. § 706(2). Accordingly, we hold that this exemption too requires remand to the EPA for reconsideration.

II.

For the these reasons, we **REVERSE** the district court’s grant of summary judgment to the EPA on Plaintiffs’ challenge to the approval of Kentucky’s six Tier-II-review exemptions and **REMAND** this matter for further proceedings consistent with this opinion.