

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued April 22, 1997 Decided June 6, 1997

No. 96-1107

STATE OF NEW MEXICO, THOMAS S. UDALL, ATTORNEY GENERAL,
PETITIONER

v.

ENVIRONMENTAL PROTECTION AGENCY AND
CAROL M. BROWNER, ADMINISTRATOR, U.S. ENVIRONMENTAL
PROTECTION AGENCY,
RESPONDENTS

Consolidated with
Nos. 96-1108, 96-1109

On Petitions for Review of an Order of the
Environmental Protection Agency

Lindsay A. Lovejoy, Jr., Assistant Attorney General, State
of New Mexico, argued the cause for petitioner. With her on
the briefs were *Thomas S. Udall*, Attorney General, New

Mexico, *Manuel Tijerina, Jr.*, Deputy Attorney General, New Mexico, and *Hal R. Ray, Jr.* and *Nancy Elizabeth Olinger*, Assistant Attorneys General, State of Texas, and *Margot J. Steadman*.

Alice L. Mattice and *Scott A. Schachter*, Attorneys, U.S. Department of Justice, argued the cause for respondents. With them on the briefs were *Lois J. Schiffer*, Assistant Attorney General, and *Vickie L. Patton*, Attorney, Environmental Protection Agency.

Before: EDWARDS, *Chief Judge*, WILLIAMS and RANDOLPH, *Circuit Judges*.

Opinion for the Court filed by *Circuit Judge* WILLIAMS.

WILLIAMS, *Circuit Judge*: In 1979 Congress authorized the Department of Energy to construct a demonstration project for the disposal of radioactive waste from national defense activities. The Department has since been at work on the facility, known as the Waste Isolation Pilot Plant or "WIPP." But it cannot put the plant into operation until the Environmental Protection Agency has certified the plant as complying with EPA's disposal regulations for radioactive wastes, 40 CFR Part 191 B, §§ 191.11-17 ("disposal regulations"); see WIPP Land Withdrawal Act of 1992, Pub. L. No. 102-579, §§ 7(b)(1), 8(d)(1), 106 Stat. 4777, *amended by* WIPP Land Withdrawal Amendment Act of 1996, Pub. L. No. 104-201, 110 Stat. 2422 (with amendments, the "WIPP Act"). The key disposal regulation, the "containment requirement," reflects a recognition of the stochastic nature of the inquiry, and is framed in terms of probabilities. It requires that the disposal system be designed with a reasonable expectation that over a 10,000-year period it will have less than one chance in 10 of exceeding certain release limits, and less than one chance in 1000 of exceeding ten times those limits. 40 CFR § 191.13. The regulations also require disposal system operators to take certain measures intended to assure fulfillment of this expectation. See generally *id.* Part 191.

At issue here is an intermediate step in the process—"criteria" issued by EPA, as required by Congress, for carrying out the certification of WIPP's compliance with the dis-

positional regulations. Criteria for the Certification and Recertification of the Waste Isolation Pilot Plant's Compliance with the 40 CFR Part 191 Disposal Regulations, 61 Fed. Reg. 5224 (February 9, 1996) (codified at 40 CFR Part 194) ("Final Rule"); see WIPP Act § 8(c)(2) (requiring promulgation of "criteria").

Petitioners argue that the resulting guidelines are not specific enough to qualify as "criteria" under the congressional mandate. They also attack several of the criteria as arbitrary and capricious and say that EPA's rulemaking procedures were defective.

* * *

Specificity of criteria

Petitioners define "criterion" as a "standard, rule or test by which something can be judged," quoting Webster's New World Dictionary of the American Language (2d coll. ed. 1982), a definition EPA does not dispute. This doesn't get us very far. "Criteria," as well as the dictionary's proffered equivalents, are ambiguous as to the level of specificity at which they may be promulgated, and the statute says nothing to suggest that the criteria must be detailed or quantitative. Under the standard analysis of *Chevron U.S.A., Inc. v. NRDC*, 467 U.S. 837 (1984), therefore, we defer to EPA's judgment on this question if it is reasonable. *Metropolitan Wash. Airports Auth. Prof'l Fire Fighters Ass'n v. United States*, 959 F.2d 297, 300 (D.C. Cir. 1992) (judicial deference at its highest in reviewing such policy choices as the level of generality for norms implementing legislative mandate); *NRDC v. EPA*, 907 F.2d 1146, 1165 n.16 (D.C. Cir. 1990) ("level of generality ... [of] regulations would turn on congressional intent ... with the agency's view entitled to great deference"); cf. *Boyce Motor Lines v. United States*, 342 U.S. 337 (1952) (rejecting due process attack on a mandated regulation scarcely more specific than the statute it implemented).

Of course it seems inescapable that as a general matter Congress intended that the criteria would add specificity to the disposal regulations. If they contributed no extra specificity or clarity on any aspect of the disposal regulations, it would be hard to believe EPA had done the intended job. But a cursory look at the two (the disposal regulations and the criteria) dispels such a concern.

In the rulemaking EPA explained why it resisted various demands for more specificity. It said that it tried to "avoid prescribing specific design choices or technical decisions so that EPA does not have the unintended effect of making the facility less safe," hoping thus to "allow the scientists and technical experts administering the WIPP," presumably those most knowledgeable about the facility, freedom to make reasonable judgments. Response to Comments ("RTC") at ix. In light of the complexity and uncertainty of planning for contingencies over the next 10,000 years, this seems quite reasonable. There has, in any event, been no general abdication to the discretion of DOE experts. Because this general discussion in the Response to Comments does not in itself establish the reasonableness of EPA's chosen level of specificity in particular provisions, we now turn to the ones where petitioners' attacks are strongest.

1. Passive institutional controls

EPA's final rule permits DOE's WIPP application, when calculating release probabilities, to take credit for passive institutional controls ("PICs"), which include devices such as permanent markers, designed to avoid inadvertent human interference. The disposal regulations require "the most permanent markers, records, and other passive institutional controls practicable to indicate the dangers of the wastes and their location." 40 CFR § 191.14(c). The criteria provide that credit can be given for PICs for no more than 700 years and that DOE can in no case assume that PICS will "eliminate the likelihood of human intrusion entirely." *Id.* § 194.43(c). In addition, the final rule requires that DOE show that the PICs will "endure and be understood by potential intruders for the [relevant] time period." *Id.*

Petitioners argue that "endure and be understood" is standardless. To be sure, EPA does not elaborate on the phrase, nor does it set forth a method by which DOE must demonstrate the effectiveness of PICs. Nonetheless, it drastically confines the range of credit from what the disposal regulations might have been thought to have allowed, and it sets a standard that must be met. Compared to many standards at work in the law—e.g., "reasonable man," "arbitrary and capricious"—the "endure and be understood" criterion is rather lucid.

Everything else being equal, the better a petitioner can demonstrate the feasibility of greater specificity the more convincing its attack on agency vagueness. For instance, where the agency itself has adopted highly specific *internal guidelines* governing the same subject, see *MST Express v. Department of Transportation*, 108 F.3d 401 (D.C. Cir. 1997), it cannot very plausibly deny feasibility. Here, petitioners take just the opposite tack. They say that it is utterly impossible to predict the effectiveness of PICs, and that EPA errs by even permitting DOE to try for a credit. Thus their argument *supports* rather than undermines EPA's decision to not specify a precise measure of effectiveness. Given methodological uncertainty in this area, it appears sensible to place the burden on DOE to figure out how to justify any PIC credits, rather than to foreclose the possibility entirely. Petitioners will have a chance to replay their impossibility argument in the certification rulemaking.

2. Engineered barriers

Petitioners also say that EPA provides no standards for how it will judge "engineered barriers" other than those set forth in the disposal regulations, which say that a barrier is a "material or structure that prevents or substantially delays movement of water or radionuclides toward the accessible environment." 40 CFR § 191.12. We needn't decide whether simply restating the regulation would be enough, because EPA did more. It set forth a detailed list of barriers that DOE must evaluate, and listed nine characteristics with respect to which any barrier must be assessed. *Id.* § 194.44(b),

194.44(c)(1). In response to demands both for enumeration of specific barriers and for performance criteria for barriers, EPA said that the complexity of the WIPP system made it impossible to evaluate a barrier's helpfulness in advance and that consideration of the nine enumerated factors would enable it to give a balanced evaluation of a barrier's usefulness, taking into account all the side effects. RTC 16-4 to 16-8. We have no basis for disputing this judgment.

Petitioners attack a number of other parts of the rule as standardless, but we find EPA's approach reasonable under our deferential review of the level of generality at which regulations can be promulgated.

Alleged nullification of the "resource" disposal regulation

One of the disposal regulations, 40 CFR § 191.14(e), demands avoidance of places where there has been mining of resources or where such mining is expected. But, recognizing that the advantageous geologic characteristics of resource-rich areas may make such a site preferable to alternatives, it says that they may be used if "the favorable characteristics of such places compensate for their greater likelihood of being disturbed in the future." *Id.* The corresponding criterion calls for a comparison of the favorable characteristics and the likelihood of disturbance, but concludes by saying that if the performance assessments of a disposal system predict that it will meet the containment requirements specified in § 191.13(e)—the ones setting maximum projected emissions—then the EPA will assume that both this specific criterion, as well as § 191.14(e) itself, have been fulfilled. 40 CFR § 194.45. Petitioners say this is a provision of criteria not for application of § 191.14(e) but for its evisceration.

The criterion clearly puts a spin on this "resource" consideration. The disposal regulation seems to demand some sort of comparison between the overall advantages of a resource-rich site and one particular problem (the greater likelihood of future disturbance), while the criterion looks at the total balance of advantages and disadvantages and focuses on

whether predicted emission levels comply with the containment requirements.

We asked at oral argument just how a site could pass the criterion yet flunk the "resource" test of the disposal regulations, and counsel for petitioners could offer no example. His difficulty lies in the fact that the criterion is in a sense a tightening of the disposal regulation. A system could pass § 191.14(e) if all its pluses outweighed a single negative, while it can pass § 194.45 only if its pluses outweigh *all* its drawbacks enough to carry it over the ultimate performance standard. To be sure, the criterion appears to dilute the resource issue as a single *independent* screen, but it accomplishes the purposes of the disposal regulation by directing attention to the problem, yet assuring that the ultimate safety and health concerns are satisfied. We are not persuaded that EPA has gutted the disposal regulation in question.

Petitioners suggest that EPA should have required comparisons with other non-resource sites. EPA argues, correctly, that the language of § 191.14(e) does not explicitly require a direct comparison with other sites. It chose not to consider other sites during the WIPP certification because Congress had ratified the selection of the WIPP site. We defer to EPA's choice as a reasonable interpretation of its own regulations. *Udall v. Tallman*, 380 U.S. 1, 16 (1965).

OMB and DOE communications

Petitioners argue that post-comment discussions with OMB and DOE induced EPA to make changes between the draft and final rules. Our decisions, beginning with *Sierra Club v. Costle*, 657 F.2d 298, 398-410 (D.C. Cir. 1981), make clear that communications with persons outside the agency are permissible under the Administrative Procedure Act so long as EPA can justify its rules entirely by reference to the record before it. See, e.g., *Int'l Union, UAW v. OSHA*, 938 F.2d 1310, 1324 (D.C. Cir. 1991) (late-filed comments problematic only where vital to agency's support of rule); cf. *San Luis Obispo Mothers for Peace v. NRC*, 751 F.2d 1287, 1325-26 (D.C. Cir. 1984) (review of administrative action on the

basis of the agency's *stated* rationale and findings), *aff'd in relevant part en banc*, 789 F.2d 26, 44-45 (D.C. Cir. 1986). Petitioners suggest that the WIPP Act places restrictions on DOE beyond those imposed by the APA, but they point only to legislative history, not to any statutory language.

Petitioners also seek to supplement the record with an EPA document titled "Action Memorandum," dated January 25, 1996. We deny their motion. The redacted portions of the memorandum qualify for the deliberative process privilege, *National Courier Ass'n v. Board of Governors of the Federal Reserve System*, 516 F.2d 1229, 1241-42 (D.C. Cir. 1975), and petitioners have provided no evidence of the sort of bad faith or improper behavior needed to warrant supplementation of the record with deliberative documents, *San Luis Obispo*, 751 F.2d at 1326-29.

The main sources of petitioners' concern are several EPA memoranda recording meetings with DOE and OMB about the effectiveness of PICs, which occurred after the close of the period for public comments. EPA placed the memos in the open public docket. If these showed that DOE had supplied EPA with additional data, on which EPA relied in the final rule and on which others had no chance to comment, we would have cause for concern.

According to the memoranda DOE argued that PICs would be effective over long periods of time, while EPA explained its belief that they could be effective for up to several hundred years. While there was no opportunity to respond to the contents of these memoranda, the effectiveness of PICs had been fully aired during the comment period. RTC 15-1 to 15-4. Some argued that any civilization 10,000 years from now would be smart enough to understand such markers, while others said the markers would be ineffective within 500 years. The DOE-EPA conversations added no new data, and EPA's decision on PICs is plainly sustainable on the contested record. Petitioners' other claims about side communications, relating to the quality assurance, peer review and pre-closure monitoring provisions, are equally meritless. The final rule rests amply on the notice of proposed rulemaking

plus the comments openly received within the comment period.

Relationship between proposed and final rules

Petitioners suggest that some of EPA's criteria were not proposed with enough clarity to enable the public to comment. Their lead example is the mining criterion, 40 CFR § 194.32(b). Although the disposal regulations call for "consideration of inadvertent human intrusion" as an important part of meeting the environmental standards for disposal, 40 CFR Part 191, app. C, EPA initially proposed excluding consideration of "mining events," explaining that they were not part of EPA's analyses supporting the promulgation of the disposal regulations. See Criteria for the Certification and Determination of the Waste Isolation Pilot Plant's Compliance with Environmental Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Waste, 60 Fed. Reg. 5766, 5774/2 (1995) ("Proposed Rule"). But the final rule *does* require consideration of mining in the certification process. 40 CFR § 194.32(b); see also Final Rule, 61 Fed. Reg. at 5229-30.

Petitioners' complaint here is not that EPA should have stuck to the no-mining-criterion judgment that it had made in the preamble to the Proposed Rule. Quite the opposite; they argue that the final rule should consider mining but that, because of the proposal, they were denied an adequate opportunity to show that EPA excessively focused on hydraulic conductivity in its mining analysis, at the expense of other possible effects.

But the final rule in fact does not confine the certification in the way petitioners assume. The rule states that the analysis of mining effects "may be limited to changes in the hydraulic conductivity of the hydrogeologic units of the disposal system...." 40 CFR § 194.32(b). Petitioners argue that this language gives DOE the election to consider only conductivity changes and to ignore other possible effects. The rule itself does not say so. The preamble hints at this

possibility, saying that DOE "may elect to use another parameter, provided that DOE can demonstrate" that its use is more appropriate, see Final Rule, 61 Fed. Reg. at 5229/2, but also frames the future decision in broader terms, "recogniz[ing] that some parameter other than hydraulic conductivity might be demonstrated to incorporate, equally or perhaps better, the potential effects of mining in performance assessments," *id.* In its brief here EPA says that "the only 'final' decision EPA has made in the criteria is to require [DOE] to consider mining," Resp. Br. at 47, and that it "did not foreclose either DOE or the public from showing that an alternative to hydraulic conductivity is more appropriate," *id.* This is a plausible reading of EPA's intent. Thus the petitioners had an opportunity to comment on the only issue conclusively resolved by the rule (that mining would be considered). Accordingly, the rule satisfies our requirement that a final rule be a "logical outgrowth" of the agency's proposal, in order to protect parties' opportunity to comment. See, e.g., *Shell Oil Co. v. EPA*, 950 F.2d 741, 750-51 (D.C. Cir. 1991).

Petitioners' arguments about the criteria relating to well injection, a technique for enhancing oil and gas recovery, fail for similar reasons. EPA proposed to exclude consideration of the impacts of well-injection techniques, but petitioners and others convinced it to include them. Petitioners now argue that the treatment of well-injection techniques is not strict enough, and is inconsistent with its treatment of drilling. In the final rule EPA assumed that drilling would continue, but that well injection would cease as resources are depleted. It decided to use drilling as a surrogate for future extraction activities. In light of the uncertainty as to the type and extent of resource extraction in the future, these decisions appear to represent a reasonable compromise. And, as the proposal clearly put the estimation of future human activity in issue, petitioners were not denied opportunity to comment.

We have addressed petitioners' strongest arguments, and find no merit in the others. The petitions for review are therefore

Denied.