SHELL OIL COMPANY

v.

ENVIRONMENTAL PROTECTION AGENCY.

(Cite as: 950 F.2d 741)

United States Court of Appeals, District of Columbia Circuit.

Argued Dec. 17, 1990.

Decided Dec. 6, 1991.

As Amended on Denial of Rehearing

and Rehearing En Banc Feb. 12, 1992.

Before BUCKLEY, WILLIAMS and THOMAS, [FN*] Circuit Judges.

FN* Former Circuit Judge THOMAS, now an Associate Justice of the Supreme Court of the United States, was a member of the panel when the case was argued but did not participate in this opinion.

Opinion PER CURIAM.

PER CURIAM:

In these consolidated cases, petitioners challenge both the substance of several rules promulgated by the Environmental Protection Agency pursuant to the Resource Conservation and Recovery Act of 1976 and its compliance with the Administrative Procedure Act's rulemaking requirements.

Consolidated petitioners [FN1] challenge two rules that categorize substances as hazardous *745 wastes until a contrary showing has been made: the "mixture" rule, which classifies as a hazardous waste any mixture of a "listed" hazardous waste with any other solid waste, and the "derived-from" rule, which so classifies any residue derived from the treatment of hazardous waste. They argue that the EPA failed to provide adequate notice and opportunity for comment when it promulgated the mixture and derived-from rules, and that the rules exceed the EPA's statutory authority.

FN1. Consolidated petitioners' brief was filed on behalf of petitioners American Iron and Steel Institute; American Mining Congress; American Petroleum Institute, et al.; Chemical Manufacturers Association; Cyprus Foote Mineral Company; Dawn Mining Company; Edison Electric Institute, et al.; Ford Motor Company; Idarado Mining Company; Kennecott Corporation; Magma Copper Company; Newmont Gold Company; and Shell Oil Company, and on behalf of intervenors Cincinnati Gas & Electric Company, et al.

We agree with petitioners that the EPA failed to give sufficient notice and opportunity for comment in promulgating the "mixture" and "derived-from" rules .... We therefore remand the rules to the Administrator.

I. BACKGROUND

The EPA promulgated the disputed rules in order to implement the Resource Conservation and Recovery Act ("RCRA"), Pub.L. No. 94-580, 90 Stat. 2795 (1976) (codified as amended at 42 U.S.C. ss 6901-87 (1988)). [FN2] RCRA created a "cradle-to-grave" system for tracking wastes from their generation to disposal. The statute consists of two main parts: one governs the management of non-hazardous solid waste; the other, hazardous waste. See American Mining Congress v. EPA, 824 F.2d 1177, 1179 (D.C.Cir.1987) ("AMC I").

FN2. Because the EPA promulgated the challenged regulations before amendments to RCRA in 1980, 1982, and 1984, references are to the 1976 version of the United States Code.

As enacted, Subtitle C of RCRA required the EPA to establish a comprehensive national system for safely treating, storing, and disposing of hazardous wastes. It defined "hazardous waste," in part, as a "solid waste" which may "pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed." 42 U.S.C. s 6903(5) (1976). It gave the EPA until April 21, 1978 to develop and promulgate criteria for identifying characteristics of hazardous waste and to list particular wastes as hazardous. See id. s 6921(a), (b). It further required the EPA to promulgate regulations "as may be necessary to protect human health and the environment" respecting the practices of generators, transporters, and those who own or operate hazardous waste treatment, storage, or disposal facilities. Id. ss 6922- *746 6924. RCRA prohibited treatment, storage, or disposal of hazardous waste without a permit and required the EPA to promulgate standards governing permits for facilities performing such functions. Id. s 6925.

On February 17, 1977, the EPA published a Notice of Intent to Develop Rulemaking, 42 Fed.Reg. 9,803 (1977); and on May 2, 1977, it published an Advance Notice of Proposed Rulemaking, 42 Fed.Reg. 22,332 (1977), which set forth detailed questions on each of the subsections of Subtitle C. In addition, it circulated for comment several drafts of regulations, met with experts and representatives of interested groups, and held public hearings. This process culminated in the publication, on December 18, 1978, of proposed regulations covering most of the statutorily required standards. See 43 Fed.Reg. 58,946-59,022 (1978).

This proposal elicited voluminous comment, and the EPA held five large public hearings. The EPA failed to issue final regulations by the April 1978 statutory deadline; several parties sued the Agency to compel it to do so. Although the district court initially ordered the EPA to promulgate the regulations by December 31, 1979, the complexity of the task led the court to modify the order to require, instead, that the EPA use its best efforts to issue them by April 1980.

The EPA published its "[r]evisions to final rule and interim final rule" on May 19, 1980. 45 Fed.Reg. 33,066 (1980). It noted that time pressures had had an effect on the new regulations: Because of limited information, the Agency was unable to avoid underregulation and overregulation. It complained that the demands of developing a national, comprehensive system of hazardous- waste management made precise tailoring to individual cases impossible. See id. 33,088.

More than fifty petitions were brought to challenge these final rules. In 1982, we deferred briefing on these challenges to allow the parties to pursue settlement discussions and ordered the EPA to file monthly status reports. We did not stay the rules, however, which have remained in effect. Most of the issues have been resolved by settlement, by subsequent statutory or regulatory revision, or by the failure of petitioners to pursue them. The issues presented here are those that the EPA identified in January 1987 as unlikely to be settled, and that were subject to the briefing schedule established by this court on June 12, 1989.

Consolidated petitioners assert that the regulations proposed on December 18, 1978 did not foreshadow the inclusion of the mixture and derived- from rules in the final rule's definition of "hazardous waste." See 45 Fed.Reg. 33,119-20 (40 C.F.R. s 261.3). Thus, they assert, they were deprived of adequate notice and opportunity for comment. They also claim that the EPA exceeded its statutory authority by including the two rules in the final definition of hazardous waste. ... We consider each of these challenges in turn.

II. DISCUSSION

A. Principles Governing Judicial Review

[1] The Administrative Procedure Act ("APA") governs judicial review of final regulations promulgated under RCRA. 42 U.S.C. s 6976 (1976) (citing 5 U.S.C. ss 701-706). In issuing regulations, the EPA must observe the notice-and-comment procedures of the APA, 5 U.S.C. s 553(b) (1988), and the public-participation directive *747 of RCRA, 42 U.S.C. s 6974(b) (1976). The relationship between the proposed regulation and the final rule determines the adequacy of notice. A difference between the two will not invalidate the notice so long as the final rule is a "logical outgrowth" of the one proposed. If the deviation from the proposal is too sharp, the affected parties will not have had adequate notice and opportunity for comment. See American Fed'n of Labor v. Donovan, 757 F.2d 330, 338-39 (D.C.Cir.1985).

[2] RCRA defines the scope of the EPA's regulatory discretion: In formulating rules, the clearly expressed intent of Congress binds agencies as it binds courts. Where congressional intent is ambiguous, however, an agency's interpretation of a statute entrusted to its administration is entitled to deference, so long as it is reasonable. Chevron U.S.A. Inc. v. NRDC, 467 U.S. 837, 842-43, 104 S.Ct. 2778, 2781-82, 81 L.Ed.2d 694 (1984).

B. The Mixture and Derived-From Rules

[3] The mixture and derived-from rules are to be found in the definition of "hazardous waste" that appears in the final rules. That definition includes as hazardous all wastes resulting from mixing hazardous and other wastes and from treating, storing, or disposing of hazardous wastes, until such time as the wastes are proven nonhazardous. Petitioners protest that these provisions had no counterpart in, and were not a logical outgrowth of, the proposed regulations; thus, the promulgation of the rules violated the notice-and- comment requirements of RCRA and the APA. We agree.

1. Statutory Background

To become subject to RCRA's comprehensive regulatory system, a material must be a hazardous waste, which RCRA defines, in part, as: a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may--

* * * * * *

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. 42 U.S.C. s 6903(5) (1976). To determine what materials fall within that definition, the EPA must promulgate criteria for the identification and listing of hazardous wastes. The statute provides the EPA with specific instructions for identifying and listing hazardous waste: (a) Criteria for identification or listing Not later than eighteen months after October 21, 1976, the Administrator shall, after notice and opportunity for public hearing, and after consultation with appropriate Federal and State agencies, develop and promulgate criteria for identifying the characteristics of hazardous waste, and for listing hazardous waste, which should be subject to the provisions of this subchapter, taking into account toxicity, persistence, and degradability in nature, potential for accumulation in tissue, and other related factors such as flammability, corrosiveness, and other hazardous characteristics. Such criteria shall be revised from time to time as may be appropriate. (b) Identification and listing Not later than eighteen months after October 21, 1976, and after notice and opportunity for public hearing, the Administrator shall promulgate regulations identifying the characteristics of hazardous waste, and listing particular hazardous wastes (within the meaning of section 6903(5) of this title), which shall be subject to the provisions of this subchapter. Such regulations shall be based on the criteria promulgated under subsection (a) of this section and shall be revised from time to time thereafter as may be appropriate. Id. s 6921(a), (b).

2. The Proposed Regulations

In its proposed regulations, the EPA adopted the following definition of "hazardous waste": "Hazardous waste" has the meaning given in [RCRA, 42 U.S.C. s 6903(5)] as *748 further defined and identified in this Subpart. 43 Fed.Reg. 58,955 (proposed 40 C.F.R. s 250.11(b)(3)) (emphasis added). The regulations then set forth the following scheme for identifying and listing hazardous wastes: (a) Criteria for identifying the characteristics of hazardous waste. A characteristic of hazardous waste will be established under s 250.13 where, based on information from damage incidents or scientific and technical information, the Administrator determines that: (1) The characteristic can be defined in terms of specific physical, chemical, toxic, infectious, or other properties of a solid waste that will cause the waste to be a hazardous waste pursuant to the definition in [42 U.S.C. s 6903(5)], and (2) The properties defining the characteristic are measurable by standardized and available testing protocols applicable to waste. (b) Criteria for listing hazardous waste. A solid waste, or source or class of solid waste, will be listed as a hazardous waste in s 250.14 if the Administrator determines that the solid waste: (1) Possesses any of the characteristics defined in s 250.13, and/or (2) Meets the definition of hazardous waste found in [42 U.S.C. s 6903(4)]. 43 Fed.Reg. 58,955 (proposed 40 C.F.R. s 250.12(a), (b)).

Although the EPA initially identified nine possible characteristics as potentially hazardous, it decided to rely on only four of them--ignitability, corrosivity, reactivity, and toxicity--in its proposed section 250.13, because only these could be tested reliably and inexpensively. Id. 58,950, 58,955-57. Because solid wastes that present a hazard but do not display one of these four characteristics remained subject to RCRA, the EPA proposed to list such wastes specifically, id. 58,957-58 (proposed 40 C.F.R. s 250.14), and to treat any waste once listed as hazardous until a person managing the waste filed a delisting petition and demonstrated to the EPA that the waste did not pose a hazard. Id. 58,959-60 (proposed 40 C.F.R. s 250.15).

3. The Final Rules

The final rules defined a hazardous waste more broadly than did the proposed regulations. Under the final rules, a hazardous waste is a solid waste that is not specifically excluded from regulation and meets any one of the following criteria: (i) It is listed in Subpart D and has not been excluded from the lists in Subpart D under ss 260.20 and 260.22 of this Chapter. (ii) It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D and has not been excluded from this paragraph under ss 260.20 and 260.22 of this Chapter. (iii) It exhibits any of the characteristics of hazardous waste identified in Subpart C. 45 Fed.Reg. 33,119 (40 C.F.R. s 261.3(a)(2)). [FN3] In addition, a solid waste generated from the treatment, storage, or disposal of a hazardous waste is considered a hazardous waste. Id. 33,120 (40 C.F.R. s 261.3(c)(2)).

FN3. The characteristics of hazard are discussed at 45 Fed.Reg. 33,121- 22 (40 C.F.R. Part 261 Subpart C). Wastes that are hazardous because they possess the characteristics of hazard will be referred to as "Subpart C" wastes. Listed hazardous wastes are discussed at 45 Fed.Reg. 33,122-33 (40 C.F.R. Part 261 Subpart D) and will be referred to as "Subpart D" wastes.

In establishing criteria for identifying and listing hazardous wastes in its final rules, the EPA relied heavily on the dangers that such wastes pose. See 45 Fed.Reg. 33,121 (40 C.F.R. ss 261.10-.11). Thus the EPA compiled a list of toxic constituents as a starting point and required that a waste be listed as hazardous if it (1) exhibits one of the four characteristics of hazardous waste identified in Subpart C of the regulations ("hazardous characteristics"), (2) meets certain toxicity criteria, or (3) contains any of the toxic constituents listed in Appendix VIII unless, after considering any of the following factors, the *749 Administrator concludes that the waste is not capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed. Id. 33,121 (40 C.F.R. s 261.11(a)(1)-(3)). The final rules, moreover, provide for delisting by formal notice and comment rulemaking rather than by the more informal procedure using defined thresholds that was initially proposed by the EPA. Id. 33,076-77 (40 C.F.R. ss 260.20, 260.22); 43 Fed.Reg. 58,959-60 (proposed 40 C.F.R. s 250.15).

A number of interested parties had challenged the listing of classes of wastes in the proposed regulations as an unwarranted expansion of the statutory phrase "particular wastes," which, they asserted, required the listing of specific wastes only. See 45 Fed.Reg. 33,114. The EPA nevertheless retained the proposed scheme in its final rules, stating that its use of classes was justified by the

complexity of the factors bearing on hazard and the impossibility of defining a numerical threshold level for hazardous characteristics. See id. 33,105.

4. The Mixture Rule

The mixture rule requires that a waste be treated as hazardous if [i]t is a mixture of solid waste and one or more hazardous wastes listed in Subpart D and has not been excluded from this paragraph under ss 260.20 and 260.22 of this Chapter. 45 Fed.Reg. 33,119 (40 C.F.R. s 261.3(a)(2)(ii)). Once classified as hazardous, then, a mixture must be so treated until delisted. [FN4]

FN4. The EPA notes that subsequent regulatory action limits petitioners' challenge of the mixture rule to listed wastes, because a mixture that does not exhibit any of the four testable characteristics is no longer classified as hazardous. See Brief for Respondent at 37 n. 28 (citing 40 C.F.R. s 261.3(a)(2)(iii) (1988)).

The EPA acknowledged at the outset that the mixture rule was "a new provision," and that it had no "direct counterpart in the proposed regulations." 45 Fed.Reg. 33,095. Nevertheless, it added the rule for purposes of clarification and in response to questions raised during the comment period concerning waste mixtures and when hazardous wastes become subject to and cease to be subject to the Subtitle C hazardous waste management system. Id.

Although admitting that it had failed to say so in the proposed regulations, the EPA stated that it had "intended" to treat waste mixtures containing Subpart D wastes as hazardous. It then presented the mixture rule as necessary to close "a major loophole in the Subtitle C management system." Id. 33,09 5. Otherwise, generators of hazardous waste "could evade [those] requirements simply by commingling [Subpart D] wastes with nonhazardous solid waste" to create a waste that did not demonstrate any of the four testable characteristics but that posed a hazard for another reason. Id. The Agency explained that although the mixture rule might include waste with concentrations of Subpart D wastes too low to pose a hazard, the delisting process and the possibility of segregating waste to avoid the problem mitigated the burden of the rule. Finally, the EPA invoked the practical difficulties of its task to justify the rule's adoption: Because the potential combinations of listed wastes and other wastes are infinite, we have been unable to devise any workable, broadly applicable formula which would distinguish between those waste mixtures which are and are not hazardous. Id.

While the EPA admits that the mixture rule lacks a clear antecedent in the proposed regulations, it nonetheless argues that the rule merely clarifies the intent behind the proposal that listed wastes remain hazardous until delisted: As industry could not have reasonably assumed that a generator could bring a listed waste outside the generic listing description simply *750 by mixing it with a nonhazardous waste, the rule cannot be seen as a "bolt from the blue." Cf. WJG Telephone Co., Inc. v. FCC, 675 F.2d 386, 388-90 (D.C.Cir.1982).

5. The Derived-From Rule

The derived-from rule provides that [a]ny solid waste generated from the treatment, storage or

disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust or leachate (but not including precipitation run-off), is a hazardous waste. 45 Fed.Reg. 33,120 (40 C.F.R. s 261.3(c)(2)). Subpart D wastes continue to be regulated as hazardous until delisted; a solid waste derived from Subpart C wastes may emerge from regulation if it does not itself display a hazardous characteristic. See id. 33,120 (40 C.F.R. s 261.3(d)).

The EPA's justifications for the derived-from rule resemble those for the mixture rule. Arguing that the products of treatment, storage, or disposal of listed hazardous wastes usually continue to pose hazards, the EPA defends the rule as "the best regulatory approach we can devise," given the fact that "[w]e are not now in a position to prescribe waste-specific treatment standards which would identify those processes which do and do not render wastes or treatment residues nonhazardous." 45 Fed.Reg. 33,096. The EPA acknowledged, however, that the rule was a new provision, "added both in response to comment and as a logical outgrowth of [s 261.3(b)]." Id.

6. Adequacy of Notice

Although the EPA acknowledges that neither of the two rules was to be found among the proposed regulations, it nevertheless argues that they were foreseeable--and, therefore, the notice adequate--because certain of the comments received in response to the rulemaking appeared to anticipate both the mixture and the derived-from rules. We are unimpressed by the scanty evidence marshaled in support of this position.

The only comment actually cited by the EPA was made by the Manufacturing Chemists Association, which stated that under the proposed regulations, "a listed waste is a hazardous waste regardless of quantity or concentration," and that "[i]t is not reasonable to classify all waste streams which contain any concentration of one of the specific wastes as hazardous." EPA, Comments of Manufacturing Chemists Ass'n, D-1384 at 74, reprinted in Joint Appendix ("J.A.") at 114 (emphasis in the original). This comment, we note, addresses the initial classification of a waste as hazardous rather than the problem of how to deal with residues resulting from the treatment of wastes, or with their subsequent mixture with other, nonhazardous materials.

The EPA also draws attention to a response it made before the close of the comment period to a question posed by the American Mining Congress in which the Agency indicated that the delisting procedure would permit generators to remove wastes from the RCRA system. This, apparently, is supposed to have alerted interested parties that delisting would be the only means of exit from regulation. But examination of the precise words that the EPA used reveals a different message. The EPA stated that "[de]listing provides a means on a case by case basis for [the generator of a given waste] to demonstrate that that waste does not belong in the system at all." EPA, Transcript of Public Hearing (Mar. 7-9, 1979), D-2703 at 29, reprinted in J.A. at 163. This response concerned the exclusion from regulation of wastes included by initial regulatory error, not the deregulation of wastes that have ceased to be hazardous.

The EPA's remaining evidence of implied notice is equally unimpressive. It consists of generalized references to comments urging that wastes be evaluated only according to the four easily testable characteristics, EPA, 1980 Background Document, D-2377 at 51, reprinted in J.A. at 575, and

requests that the regulations specifically address the disposition of incinerator ash. Id., D-2372 at 46, reprinted in J.A. at 549.

An agency, of course, may promulgate final rules that differ from the proposed regulations. To avoid "the absurdity *751 that ... the agency can learn from the comments on its proposals only at the peril of starting a new procedural round of commentary," International Harvester Co. v. Ruckelshaus, 478 F.2d 615, 632 n. 51 (D.C.Cir.1973), we have held that final rules need only be a "logical outgrowth" of the proposed regulations. Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 546-47 (D.C.Cir.1983) (canvassing precedent). But an unexpressed intention cannot convert a final rule into a "logical outgrowth" that the public should have anticipated. Interested parties cannot be expected to divine the EPA's unspoken thoughts. See Small Refiner, 705 F.2d at 548-49. The reasons given by the EPA in support of its contention that interested parties should have anticipated the new rules are simply too insubstantial to justify a finding of implicit notice.

While it is true that such parties might have anticipated the potential for avoiding regulation by simply mixing hazardous and nonhazardous wastes, it was the business of the EPA, and not the public, to foresee that possibility and to address it in its proposed regulations. Moreover, while a comment may evidence a recognition of a problem, it can tell us nothing of how, or even whether, the agency will choose to address it. The comments the EPA cites strike us as sparse and ambiguous at best. Some address similar concerns, but none squarely anticipates the rules.

Even if the mixture and derived-from rules had been widely anticipated, comments by members of the public would not in themselves constitute adequate notice. Under the standards of the APA, "notice necessarily must come--if at all--from the Agency." Small Refiner, 705 F.2d at 549; see also American Fed'n of Labor v. Donovan, 757 F.2d at 340 (holding that the court cannot "properly attribute notice to [interested parties] on the basis of an assumption that they would have monitored the submission of comments."). Although we have held that comments raising a foreseeable possibility of agency action can be a factor in providing notice, NRDC v. Thomas, 838 F.2d 1224, 1243 (D.C.Cir.), cert. denied sub nom. Alabama Power Co. v. Thomas, 488 U.S. 888, 109 S.Ct. 219, 102 L.Ed.2d 210 (1988), this is not such a case. While, in Thomas, the New York State Attorney General's Office suggested a regulatory approach similar to that finally adopted by the EPA, the Agency itself gave warning of its approach two weeks before final promulgation, and the industry petitioners had "at least a limited opportunity to focus a direct attack." Id. In fact, they "managed to file objections 7-10 days before the final regulations were signed." Id. We nevertheless acknowledged that the case "stretche[d] the concept of 'logical outgrowth' to its limits." Id. In contrast, here, the ambiguous comments and weak signals from the agency gave petitioners no such opportunity to anticipate and criticize the rules or to offer alternatives. Under these circumstances, the mixture and derived-from rules exceed the limits of a "logical outgrowth."

The EPA's argument also fails to take into account a marked shift in emphasis between the proposed regulations and the final rules. Under the EPA's initial regulatory strategy, the EPA planned to identify and quantitatively define all of the characteristics of hazardous waste.... Generators would be required to assess their wastes in accordance with these characteristics and EPA would list hazardous wastes where it had data indicating the wastes exhibited one of the identified characteristics. 45 Fed.Reg. 33,106. As a consequence, listing was to "play [the] largely

supplementary function" of increasing the "certainty" of the process. Id. Listing was also to have relieved generators of listed wastes of the burden of testing for characteristics "unless they wish to demonstrate that they are not subject" to Subtitle C regulation. 43 Fed.Reg. 58,951. Thus, the proposed regulations imposed, as a generator's principal responsibility, the duty to test wastes for hazardous characteristics and suggested that if the required tests failed to reveal a hazard, the waste would not need to be managed as hazardous.

*752 The final rules, however, place a heavy emphasis on listing. As a consequence, the final criteria for listing are "considerably expanded and more specific" than those proposed. 45 Fed.Reg. 33,106. The EPA justified this "change in emphasis in [its] regulatory strategy," id. 33,107, on the basis that it was "not fully confident that it can suitably define and construct testing protocols for [several] characteristics." Id.

Whatever the basis for this shift in strategy, it erodes the foundation of the EPA's argument that the mixture rule was implicit in the proposed regulations. A system that would rely primarily on lists of wastes and waste-producing processes might imply inclusion of a waste until it is formally removed from the list. The proposed regulations, however, did not suggest such a system. Rather, their emphasis on characteristics suggested that if a waste did not exhibit the nine characteristics originally proposed, it need not be regulated as hazardous. We conclude, therefore, that the mixture rule was neither implicit in nor a "logical outgrowth" of the proposed regulations.

Similarly, while the derived-from rule may well have been the best regulatory approach the EPA could devise, 45 Fed.Reg. 33,096, it was not a logical outgrowth of the proposed regulations. The derived-from rule is not implicit in a system based upon testing wastes for specified hazardous characteristics-- the system presented in the proposed regulations. To the contrary, the derived-from rule becomes counterintuitive as applied to processes designed to render wastes nonhazardous. Rather than presuming that these processes will achieve their goals, the derived-from rule assumes their failure.

Our opinion in Chemical Waste Management, Inc. v. EPA, 869 F.2d 1526 (D.C.Cir.1989), does not suggest a contrary result. There, we characterized the regulation providing for the retroactive application of the derived-from rule as "an entirely reasonable (if not inevitable) construction of the regulation," and found that the EPA provided adequate notice and opportunity for comment on that regulation. Id. 1534-35. That holding, however, had no bearing on the validity of the derived-from rule itself, as that question was not before the court. See id. 1530 n. 4.

The EPA maintains, finally, that it had considered and rejected the points raised by petitioners, and argues that they cannot show prejudice from its failure to provide notice and opportunity to comment. While petitioners must show that they would have submitted new arguments to invalidate rules in the case of certain procedural defaults, such as an agency's failure to provide access to supplemental studies, see Air Transport Ass'n of America v. CAB, 732 F.2d 219, 224 n. 11 (D.C.Cir.1984), petitioners need not do so here, where the agency has entirely failed to comply with notice-and-comment requirements, and the agency has offered no persuasive evidence that possible objections to its final rules have been given sufficient consideration. See McLouth Steel Prods. Corp. v. Thomas, 838 F.2d 1317, 1324 (D.C.Cir.1988) ("we cannot say with certainty whether petitioner's

comments would have had some effect if they had been considered when the issue was open").

Because the EPA has not provided adequate notice and opportunity for comment, we conclude that the mixture and derived-from rules must be set aside and remanded to the EPA. In light of the dangers that may be posed by a discontinuity in the regulation of hazardous wastes, however, the agency may wish to consider reenacting the rules, in whole or part, on an interim basis under the "good cause" exemption of 5 U.S.C. s 553(b)(3)(B) pending full notice and opportunity for comment. See, e.g., Mid-Tex Elec. Co-op., Inc. v. FERC, 822 F.2d 1123, 1131-34 (D.C.Cir.1987).

As we vacate them on procedural grounds, we do not reach petitioners' argument that the mixture and derived-from rules unlawfully expand the EPA's jurisdiction under Subtitle C of RCRA.

* * *

III. CONCLUSION

Because the EPA failed to provide adequate notice and opportunity for comment with regard to the mixture and derived-from rules and with regard to the leachate monitoring requirement, we vacate these rules and remand them to the Agency. ...

The petitions for review are therefore granted in part and denied in part.

So ordered.