No. 21-1187

United States Court of Appeals
For The District of Columbia Circuit

Public Employees for Environmental Responsibility,

Petitioner,

v.

Environmental Protection Agency,

Respondent.

Petition for Review of a Final Order of the Environmental Protection Agency

OPENING BRIEF OF PETITIONER

Paula Dinerstein
D.C. Bar No. 333971
Kevin Bell
Public Employees for Environmental Responsibility
962 Wayne Ave., Suite 610
Silver Spring, MD 20910
202-265-7337
pdinerstein@peer.org
kbell@peer.org

Attorneys for Petitioner

December 20, 2021

CERTIFICATE AS TO PARTIES, RULINGS AND RELATED CASES

A. Parties and Amici. The parties to this matter are Public Employees for Environmental Responsibility (PEER) and the United States Environmental Protection Agency (EPA). There are currently no intervenors or amici. There were no proceedings in the District Court and thus no parties appeared there.

B. Rulings Under Review. The ruling under review is the EPA's denial of Petitioner's rulemaking petition published in the Federal Register, 86 Fed. Reg. 21622 (June 15, 2021).

C. Related Cases. There are no related cases.

Respectfully submitted,

____/s/ Paula Dinerstein_____

Paula Dinerstein

CORPORATE DISCLOSURE STATEMENT

As required by Circuit Rule 26.1 Petitioner, Public Employees for Environmental Responsibility (PEER), files this Disclosure Statement. PEER is a non-profit, tax-exempt corporation incorporated in the District of Columbia. Its purposes include educating employees of resource management and environmental protection agencies nationwide, and the public, about environmental ethics and to assist those who speak out on behalf of environmental ethics. PEER has no parent companies and no publicly owned company has a 10% or greater ownership interest in PEER.

_____/s/_____
Paula Dinerstein
Attorney for PEER

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases

Statutes

Regulations

GLOSSARY

APA	Administrative Procedure Act
CKD	Cement Kiln Dust
EPA	United States Environmental Protection Agency
GHS	United Nations Globally Harmonized System of Classification and Labeling of Chemicals
ILO	International Labor Organization
PEER	Public Employees for Environmental Responsibility
pH	A quantitative measure of the acidity or basicity of a material.
RCRA	Resource Conservation and Recovery Act
WTC	World Trade Center

JURISDICTIONAL STATEMENT

This appeal challenges the denial of a petition filed by Petitioner Public Employees for Environmental Responsibility (PEER) and Dr. Cate Jenkins pursuant to the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6974(a), and its implementing regulation at 40 C.F.R. § 260.20. The petition sought to amend the regulation at 40 C.F.R. § 261.22, which defines the RCRA hazardous waste characteristic of corrosivity. That regulation was promulgated under the authority of 42 U.S.C. § 6903(5) (definition of hazardous waste) and 42 U.S.C. § 6921 (directing promulgation of regulations, *inter alia* for identifying the characteristics of hazardous waste). In accordance with the regulation at 40 C.F.R. § 260.20(c) and (e), Respondent, United States Environmental Protection Agency (EPA), first tentatively denied the petition on April 11, 2016, and then issued its Final Denial on June 15, 2021. 86 Fed. Reg. 31622 (June 15, 2021).

This appeal was filed on September 10, 2021, in accordance with 42 U.S.C. § 6976, which provides for judicial review of "the Administrator's denial of any petition for the promulgation, amendment, or repeal of any regulation under this Act." Judicial review is to take place in the United States Court of Appeals for the District of Columbia Circuit, within 90 days of the denial of the petition. 42 U.S.C. § 6976(a)(1). Thus this appeal is from a final order disposing of all of Petitioner's claims and was timely filed within the 90-day period set by the statute.

STATEMENT OF ISSUES

1. Does PEER have standing to bring this case, when the case is germane to its organizational purposes and its members are injured by the failure of EPA to amend the regulation as requested in the petition?
2. Was it arbitrary and capricious and not in accordance with law for EPA to rest denial of the petition in large part on its desire to exclude lime-treated wastewater sludges from hazardous designation, when RCRA's definition of hazardous waste does not include consideration of what EPA terms "waste management scenarios," but only of the potential of the waste to pose a hazard to human health or the environment, either intrinsically or when mismanaged?
3. Is EPA's consideration of avoidance of hazardous regulation of lime-treated wastewater sludges also impermissible because it is a consideration of the costs of regulation?
4. Did EPA fail to consider an important aspect of the problem in ignoring the evidence of possible exemptions and exclusions that could cover lime-treated wastewater sludges?
5. Was EPA's determination that wastes with a pH between 11.5 and 12.5 did not merit hazardous designation contrary to the evidence before the agency?

6. Did EPA err in denying the petition's request to regulate non-aqueous corrosive materials?

STATEMENT OF THE CASE

RCRA regulates all "solid wastes," defined as "any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility *and other discarded material*." 42 U.S.C. § 6903(27) (emphasis added). However, the subset of solid wastes that are classified as hazardous under RCRA are regulated far more stringently. Only hazardous wastes are regulated under RCRA Subtitle C, 42 U.S.C. §§ 6921-6939b, which sets out a "comprehensive regulatory system governing the treatment, storage, and disposal of hazardous wastes" from "cradle to grave." *Chem. Waste Mgmt., Inc. v. EPA*, 976 F.2d 2, 7, 8 (D.C. Cir. 1992).

RCRA provides two ways in which wastes are deemed hazardous. First, a waste can be deemed hazardous because it possesses one of the four hazardous characteristics identified by EPA in 40 C.F.R. §§ 261.22 to 261.24, including the corrosivity characteristic at 40 C.F.R. § 261.22. *See* 40 C.F.R. § 261.3(a)(2)(i) (defining hazardous wastes to include those identified in the hazardous waste characteristics). Second, wastes can be listed individually in EPA rulemakings. *See Chemical Waste Management*, 976 F.2d at 7-8.

The hazardous characteristics identify physical, chemical or other properties of wastes that render them hazardous. EPA has identified four hazardous waste characteristics – ignitability, corrosivity, reactivity, and toxicity – that govern numerous individual wastes that demonstrate those characteristics and are therefore subject to stringent hazardous waste regulations.

On September 8, 2011 PEER and Dr. Cate Jenkins filed a petition seeking amendments to the regulation at 40 C.F.R. § 261.22 to expand RCRA's hazardous waste corrosivity characteristic to include corrosive alkaline wastes with a pH between 11.5 and 12.5, and to include non-aqueous wastes. Doc. 352, Appx. ___.[1] The petition contained extensive argument and evidence in support of the amendments sought.

After EPA failed to address the petition for three years, on September 9, 2014, the petitioners filed a petition for writ of mandamus for unreasonable delay in the D.C. Circuit, No. 14-1173. After EPA committed to completing a tentative ruling on the petition by March 31, 2016, the parties sought a stay of the mandamus proceeding. EPA issued a tentative denial of the petition on March 30, 2016, published in the Federal Register on April 11, 2016. Doc. 435, Appx. ___. On December 7, 2016, Petitioners filed extensive comments on the tentative denial

[1] Citations to "Doc. #" are to documents in the administrative record. They are followed by "Appx. ___" to denote the cites to the Appendix that will be filed in for the final version of the brief.

and in support of granting the petition. Doc. 452, Appx. ___. On June 15, 2021, EPA published in the Federal Register its Final Denial of the petition. Doc. 458, Appx. ___. On July 26, 2021, this Court dismissed the mandamus petition, which had been held in abeyance pending EPA's final action on the petition. This petition for review challenging the Final Denial was filed on September 10, 2021.

SUMMARY OF ARGUMENT

PEER has standing because this appeal because is in furtherance of its organizational purposes to serve public employees who seek environmental compliance by their agencies and to educate the public about environmental ethics. PEER and Dr. Cate Jenkins, a retired EPA scientist in the RCRA program, filed the petition that is that subject of this appeal. PEER has members who would have standing to sue as individuals, including two who filed declarations regarding their injuries as employees or neighbors of non-hazardous waste landfills that accept corrosive waste that they could not accept, and that would be required to be treated as hazardous, under the requested regulatory amendments.

EPA's Final Denial of the petition was arbitrary and capricious and not in accordance with law for several reasons, and thus should be held unlawful and set aside by this Court.

First, a major basis for the denial of the petition was that EPA's claim that it was appropriate to set and maintain the corrosivity characteristic to not include

materials with a pH between 11.5 and 12.5, in order to avoid hazardous regulation of lime-treated wastewater treatment sludges, and to allow either their re-use or recycling as a soil amendment or their placement in non-hazardous landfills. This is an impermissible factor under the RCRA statute, which defines hazardous wastes solely on the basis of their potential to pose hazards to human health or the environment, either intrinsically or when mismanaged. The regulations likewise do not permit this consideration in identifying hazardous characteristics.

Second, EPA's reliance on its desire to avoid hazardous designation of lime-treated wastewater sludges is based on another impermissible factor, because RCRA does not permit economic or cost considerations in promulgating regulations. The RCRA regulations are to be based on health and environmental considerations alone. The primary aim and result of avoiding hazardous regulation of these sludges is to save money for wastewater treatment plants and others who generate or manage waste with a pH between 11.5 and 12.5.

Third, EPA failed to address an important aspect of the problem by ignoring petitioners' evidence and arguments about potential exemptions or exclusions that could avoid hazard treatment of lime-treated wastewater sludges without the need to change the entire corrosivity characteristic to accommodate them.

Fourth, EPA's determination that wastes with a pH of 11.5 to 12.5 do not merit hazardous designation is contrary to the evidence before the agency. The

primary source relied on in promulgating the corrosivity characteristic, the ILO Encyclopedia, actually found irreversible corrosive injury to human tissue at a pH of 11.5, exactly the standard that petitioners sought. EPA first claimed that the ILO Encyclopedia standard was based on sensitive eye tissue, and not skin tissue, which justified setting a higher pH for the regulatory limit. However, this is directly contrary to what the source says. In the Final Denial, EPA appeared to drop the eye tissue rationale, but claim that it was not required to rely on the ILO Encyclopedia and could rely on the "management consideration" of avoiding regulation of lime-treated sewage sludges. However, this left EPA with *no source or rationale* for selecting a pH of 12.5, other than the impermissible one of exempting the sludges.

In addition, pH 11.5 is the international standard in agreements the U.S. has supported. EPA provides no legitimate basis for departing from the international consensus, other than again resorting to is claim that it is relying on management considerations other than the intrinsic hazard of the materials. However, EPA provides no evidence that wastes with a pH of 11.5 to 12.5 are not hazardous because of the way they are managed in the United States, but again only relies on its desire to exclude the wastewater sludges from hazardous regulation.

Fifth, while "damage incidents" showing harm from the wastes the petition seeks to regulate are not necessary to support granting the petition, because the

RCRA standards for setting characteristics do not require them, petitioners in fact supplied evidence of harm from these materials. EPA's reasons for discounting that evidence are not valid.

Finally, EPA in rejecting the petition's request to regulate non-aqueous corrosive waste as hazardous, EPA fails to consider an important aspect of the problem by ignoring petitioners' evidence other than about the World Trade Center (WTC) disaster and the corrosive dusts released there. With regard to the WTC, EPA gave inappropriate reasons for discounting the evidence of harm from the non-aqueous dust, including that the WTC dust contained other toxic components besides corrosive ones, that the injuries were not of the same nature as those cited by EPA when it set the corrosivity characteristic in 1980, and that the injuries did not occur to waste management workers in the course of waste management. None of these rationales is consistent with the RCRA statutory scheme whose regulation of hazardous wastes does not require that they be the sole cause of injury, requires hazardous designation of any wastes that pose a hazard to human health or the environment, and does not limit its coverage to waste management employees or the process of waste management.

In sum, EPA had no valid reasons to deny either the petition's request to change the pH standard to 11.5, or to expand coverage to non-aqueous wastes. Its failure to do so is arbitrary, capricious, and not in accordance with law.

STANDING

PEER bears the burden of proving the three requirements of constitutional standing: (1) an actual or imminent concrete and particularized injury; (2) a causal connection between the injury and conduct alleged; and (3) a likelihood that a favorable decision would redress the injury. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992). PEER claims representational standing on behalf of its members. Accordingly, it must demonstrate that "[1] its members would otherwise have standing to sue in their own right, [2] the interests it seeks to protect are germane to the organization's purpose, and [3] neither the claim asserted nor the relief requested requires the participation of individual members." *NRDC v. EPA*, 755 F.3d 1010, 1016 (2014) (quoting *Defenders of Wildlife v. Perciasepe*, 714 F.3d 1317, 1323 (D.C. Cir. 2013). It is "well-established . . . that standing will lie where a plaintiff demonstrates that the challenged agency action authorizes the conduct that allegedly caused the plaintiff's injuries, if that conduct would allegedly be illegal otherwise." *Am. Trucking Ass'n v. Fed. Motor Carrier Safety Admin.*, 724 F.3d 243, 248 (D.C. Cir. 2013) (internal quotation omitted). The injury inquiry focuses on the injury to the claimant, not the injury to the environment. See *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 181 (2000).

The interests that PEER seeks to protect through this litigation are germane to its organizational purposes. PEER seeks to protect the environment, public health, and the health of its members from environmental hazards including from improper disposal of dangerous wastes caused by the denial of PEER's petition to expand the scope of the corrosivity characteristic for hazardous wastes. PEER also seeks to advance the environmental concern brought to it by public employee whistleblower Dr. Cate Jenkins, that EPA was not properly regulating corrosive wastes. *See* Dec'l of Paula Dinerstein.

Neither the claims in this action nor the relief requested requires the participation of individual members of PEER. The claims are not specific to any individual members and the relief sought would address the members' injuries without the necessity of any individualized relief. *See Hunt v. Wash. State Apple Advert. Comm'n*, 432 U.S. 333, 343 (1977) ("If . . . the association seeks a declaration, injunction, or some other form of prospective relief, it can reasonably be supposed that the remedy, if granted, will inure to the benefit of those members of the association actually injured") (internal citation omitted).

Additionally, the Declarations of Stephen M. Jackson and Johnathan Pollack demonstrate that these individual members of PEER meet the requirements of standing. Each has suffered injury from health and environmental hazards from corrosive materials deposited in landfills where they live and/or work. Success in

this litigation would cause materials currently causing harm to them and the environment to be regulated by the EPA corrosivity characteristic as hazardous waste. This would mean that these materials would not be deposited or handled in the non-hazardous landfills where they work or live, and their own health and the environment where they live would no longer be adversely affected by those wastes. The wastes would be taken to landfills qualified to handle hazardous waste and would then receive the further protections of treatment as hazardous waste. These PEER members have suffered and will continue to suffer injury because of EPA's failure to regulate waste with a pH between 11.5 and 12.5 as hazardous.

Stephen M. Jackson is a member of PEER and an employee of the Butte County Public Works in Oroville, California, formerly and likely in the future stationed at the Neal Road Recycling and Waste Facility. Dec'l of Stephen M. Jackson ¶ 3. That facility is a solid waste disposal facility that has a permit to operate under RCRA through the California Environmental Protection Agency (CalEPA). *Id.*, ¶ 5. It has a permit for a non-hazardous waste landfill, and therefore is not allowed to accept hazardous waste. *Id.* While Jackson was employed there in 2019, a large quantity of concrete waste was deposited at the landfill, where it was broken up by landfill employees with bulldozers and then rock crushers, exposing him and his co-workers to corrosive concrete dust which they breathed. *Id.* at ¶¶ 9-13. He is concerned that as long as the landfill accepts such wastes because they

are not designated as hazardous, he could continue to be subject to such injuries in the future, as well as injuries to the environment where he lives. *Id.* ¶¶ 18, 24, 25.

He is also concerned that rain events may have and could in the future wash highly alkaline concrete dust into a conservation easement adjoining the landfill and downstream into the local watershed, where the corrosive material could cause environmental harm. *Id.* ¶ 14. He is also concerned about the presence of alkaline wastes at the landfill because he lives on and operates a small ranch a few miles downstream from the landfill and draws water from a well into the Tuscan aquifer, which lies below both the landfill and his ranch. *Id.* at ¶ ¶ 15-16.

Finally, Mr. Jackson is concerned that when he returns to working at the landfill, he will be exposed to corrosive alkaline wastes that could injure him or harm his health because of the failure of EPA to regulate materials in the 11.5 to 12.5 pH range as hazardous, including solids like concrete and concrete dust. *Id.*, at ¶ 24.

PEER's second declarant, Johnathan Pollack, has been a PEER member and supporter since 2020 when PEER began working with his community to address environmental and public health concerns relating to the Dunn Landfill, a Construction and Demolition landfill located in the towns of East Greenbush and Rensselaer, NY. Dec'l of Johnathan Pollack ¶¶ 3-4. Mr. Pollack lives near the landfill and is affected every day by runoff into Quackenderry Creek, a surface

water which runs alongside the landfill, wind erosion of materials deposited at the landfill, concrete dust blown from the landfill into the surrounding community, spills of waste being transported to the landfill on local roads, and impacts to local wildlife. *Id.* ¶ 6. Mr. Pollack has had to alter his behavior by spending less time outdoors and planning his activities to avoid possible discharges or leakage of corrosive alkaline materials which could damage the environment near his home, including possible human exposure to corrosive materials and damage to aquatic life that could injure him because of the failure of EPA to regulate materials in the 11.5 to 12.5 pH range as hazardous.

Thus, PEER has met all the requirements for organizational standing, having shown that its members would have standing to sue in their own right, that the interests it seeks to protect are germane to its organizational purposes, and that neither the claim asserted nor the relief requested requires the participation of PEER's individual members.

ARGUMENT

I. STANDARD OF REVIEW

RCRA provides that judicial review of petition denials like this one "shall be in accordance with sections 701 through 706 of title 5 of the United States Code," (the Administrative Procedure Act (APA)). 42 U.S.C. § 6976(a). Thus the APA's familiar standard of review of "arbitrary, capricious, an abuse of discretion, or

otherwise not in accordance with law" applies. 5 U.S.C. § 706 (2)(A). *See* *Hazardous Waste Treatment Council v. EPA*, 861 F.2d 270, 274 (D.C. Cir. 1988) (quoting 5 U.S.C. § 706(2)(A)).

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

Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Auto. Ins. Co., 463 US 29, 43 (1983).

In determining whether an agency's interpretation of its governing statute is not in accordance with law, courts follow a two-step process.

> First, we ask whether the intent of Congress is clear. *Chevron U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 842 (1984). If so, "that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress." *Id.* at 842-43. We determine the plain meaning of a statute by examining, at least in the first instance, the "particular statutory language at issue, as well as the language and design of the statute as a whole." *K Mart Corp. v. Cartier, Inc.*, 486 U.S. 281, 281 (1988). Second, if Congress has not "spoken to the precise question at issue," *Chevron*, 467 U.S. at 842, we ask whether the agency's construction of the statute is "permissible," *id.* at 843, i.e., "rational and consistent with the statute." *NLRB v. United Food & Commercial Workers Union, Local 23*, 484 U.S. 112, 123 (1987).

Hazardous Waste Treatment Council, 861 F.2d at 274.

This standard of review applies to all of the issues briefed below.

II. THE FINAL DECISION IS CONTRARY TO LAW AND ARBITRARY AND CAPRICIOUS BECAUSE EPA RELIED ON AN IMPERMISSIBLE FACTOR IN DENYING THE PETITION

This Court long ago established that EPA may not go outside of the "technical characteristics of hazardous wastes" identified in the statute in its listing decisions. *Hazardous Waste Treatment Council* reversed EPA's decision not to list used oil as hazardous, which was based on the agency's finding that listing would attach a stigma to recycled oil. 861 F.2d at 275. The Court found that stigma was a "factor not permitted by the statute." *Id.* at 277. Relying on factors outside of RCRA's technical listing criteria is such a clear violation of the statute that the Court was able to make its decision at step one of the *Chevron* analysis. *Id.* at 276 ("As the statute clearly defines the Agency's obligation, 'that is the end of the matter.' *Chevron*, 467 U.S. at 842.") *See also Nat. Res. Def. Council v. EPA*, 25 F.3d 1063, 1069 (D.C. Cir. 1994) ("EPA is required by statute to base its … listing decisions exclusively on its technical listing criteria promulgated under RCRA section 6921").

Yet, EPA has relied on just such an impermissible factor here, namely its desire to allow the re-use of lime-treated municipal wastewater sludges as soil amendments, and their disposal in non-hazardous landfills. This is not a criteria permitted by the statute or regulations, and EPA's reliance on it renders its decision and arbitrary and capricious because it has "has relied on factors which

Congress has not intended it to consider." *Motor Vehicle Manufacturers*, 463 US at 43. It is also contrary to law because it violates the statutory direction to EPA regarding the establishment of hazardous characteristics.

Specifically, in 1980 EPA set the corrosivity characteristic to include alkaline wastes with a pH 12.5 or higher, and recently denied the petition to lower the standard to pH 11.5, so that lime-treated municipal sewage sludges could avoid hazardous designation. EPA's Background Document for the 1980 regulation noted that many lime-treated wastes and sludges have a pH between 12.0 and 12.5. Doc. 346 at 14, App'x ___. EPA stated that it set the regulatory value at pH 12.5 because it agreed with commenters that lime-stabilized sludges and wastes should not be designated as hazardous. *Id.* EPA denied the petition's request to lower the standard to pH 11.5 for the same reason. Doc. 458, at 31625, App'x ___.[2]

---

[2] EPA noted in the Final Denial that the petitioners could no longer challenge its 1980 decision to set the corrosivity characteristic with a regulatory limit of pH 12.5, because RCRA requires challenges to regulations within 90 days. Doc. 458, at 31625. However, the statutory provision cited by EPA, 42 U.S.C. § 6976(a)(1), provides for the filing of appeals within 90 days for both challenges to regulations and to the denial of petitions to promulgate, amend or repeal rules. There can be no dispute that this challenge to the denial of PEER's petition to amend the regulation was timely filed. EPA nevertheless suggests that because the time to challenge the original regulation had long passed when the petition was filed, it only needed to consider new information supporting a change to the regulation, and not the asserted flaws in the original regulation. Doc. 458, at 31,625, App'x __. EPA cites no authority for that claim, and this Court has rejected it, ruling that in a challenge to later action on a regulation, it must assess "the justification offered and the

The Final Denial defended and reaffirmed the basis of the 1980 promulgation of the corrosivity characteristic, finding that because treatment of wastewater with corrosive materials in some ways reduces their hazards by inactivating pathogens, considering that practice was "an appropriate balancing of different waste management risks by the agency." Doc. 458 at 31625, App'x ___. However, the statutory technical criteria do not include any such balancing, but, as detailed below, focus solely on the potential hazards of the waste itself. Moreover, even if it were permitted by the statute, EPA did not actually "balance" anything, as it did not determine whether lime-treated sludges in fact posed hazards when managed by disposal in a non-hazardous landfill or used as a soil amendment, or if they posed hazards from direct contact with children or other members of the public, or if they were disposed of in some other unsafe manner not involving a landfill or soil amendment. Thus, EPA could not balance those risks against the benefits of treating wastewater with corrosive alkaline materials. Nor did it analyze the hazards of other types of alkaline materials, either intrinsically or when mismanaged, as part of its "balancing."

---

factors relied upon by EPA" in making the decision on the new challenge. *Envtl. Def. Fund v. EPA*, 852 F.2d 1316, 1324 (D.C. Cir. 1988). Questions about the original decision's consistency with congressional intent are not time-barred where the Agency has in effect re-adopted the earlier decision in the new decision. *Id.* at 1325.

EPA may have been able to achieve its goal in accordance with the law by taking regulatory action to specifically exempt lime-treated sewage sludges from the definitions of solid or hazardous wastes or by another industry-specific exemption under RCRA. However, it could not take its broad-brush approach to set the regulatory characteristic for all alkaline materials in order to avoid coverage of those particular wastes. Nor could it then decline to revise the characteristic in response to the petition, so those wastes would continue to escape a hazardous designation. EPA's approach excludes from the corrosivity characteristic all alkaline wastes with a pH from 11.5 to 12.5, including those without the claimed beneficial uses EPA sought to protect, despite the lack of any justification meeting the RCRA statutory standards.

To justify its approach, EPA relies on a portion of RCRA's definition of the term "hazardous waste," 42 U.S.C. § 6903(5)(B), to claim that it can consider such "waste management factors" in setting and retaining the corrosivity characteristic. *See* Doc. 458 at 31627, App'x ___. However, the statute does not provide for consideration of potential beneficial reclamation, recycling or reuse of wastes in determining whether they meet the definition of hazardous waste. Rather, it defines hazardous wastes only in terms of their own potential hazards to human health or the environment, either intrinsically (subpart A) or when mismanaged (subpart B).

The provision states:

> **(5)** The term "hazardous waste" means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—
>
> **(A)** cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; *or*
>
> **(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. § 6903(5)(B) (emphasis supplied). If the waste meets *either* of these provisions, due to its "quantity, concentration, or physical, chemical or infectious characteristics," it must be classified as hazardous, regardless of potential beneficial reuse or recycling, which play no part in the statutory definition.[3]

A plain reading of the statute reveals that part (B), which is relied upon by EPA, *expands* the universe of materials that must be designated as hazardous from those covered in part (A), which applies only to wastes that intrinsically pose an increased risk of human mortality or serious illness. As EPA itself stated when it promulgated the corrosivity regulation, part (A) concerns the health effects of wastes "regardless of how they are managed." 1980 regulation, 45 Fed. Reg.

[3] As discussed above and below, EPA can and has created exclusions from RCRA coverage for materials that are re-used or recycled, and for many other particular wastes and circumstances. However, it may not define an entire characteristic based on its desire to exclude an individual waste that would otherwise come within it.

33,085, 33106 (May 19, 1980).[4] EPA went on to assert that most hazardous wastes do not meet the part (A) standard, but are covered under part (B), which applies to wastes that may not be hazardous generally, but only "*when improperly managed*." *Id.* (emphasis in original). *See also American Chemistry Council v. EPA*, 337 F.3d 1060, 1064 (D.C. Cir. 2003) (RCRA definition of hazardous waste "includes those wastes in which the 'potential hazard' becomes an actual hazard only if the waste is 'improperly treated, stored, transported, or disposed of, or otherwise managed.' 42 U.S.C. § 6903(5)(B))."[5]

EPA now abandons the commonsense reading of the statute that it previously advocated, and claims that part (B) allows it to *contract* the universe of materials designated hazardous by considering "management scenarios" in order to exclude wastes from hazardous designation. However, the plain language of Part (B) is not directed at such "management scenarios," but rather at hazards that can be posed by the wastes themselves when improperly managed.

---

[4] The Federal Register notice for the 1980 final rule was not included in the Administrative Record by the agency, so citation in this brief will be to the Federal Register directly. The exclusion of this document from the administrative record appears to be an inadvertent error.

[5] Part B also provides a less demanding standard than Part A by not requiring that the waste may cause or significantly contribute to an increase in mortality or serious illness, but instead that it poses a potential hazard to human health generally, not just mortality or serious illness. It also adds harm to the environment, which is not covered in part (A). 42 U.S.C. § 6903(5)(B).

EPA conflates and confuses the concept of "plausible mismanagement," which, in order to bring more wastes into the system, RCRA directs be considered in designating hazardous wastes,[6] with "waste management conditions and practices," Doc. 458 at 31627, App'x ___, a concept created by EPA to justify excluding wastes from the system for reasons unrelated to their actual hazards. For example, EPA claimed in the Final Denial that its consideration of the use of lime for the stabilization of municipal sludge in setting the corrosivity characteristic was authorized by RCRA's direction to regulate wastes "posing risks when plausibly mismanaged." Doc. 458, at 31627, App'x ___. Obviously, the re-use of wastewater sludges as a soil amendment has nothing to do with "plausible mismanagement" that could cause hazards.

Also, part (B)'s direction to designate as hazardous wastes that pose risks *when* mismanaged means that EPA may not fail to designate a waste simply because it is not *always* mismanaged, or because it is sometimes properly managed and as a result does not pose hazards in those instances. That is exactly what EPA has done here by setting the corrosivity characteristic so as not to cover certain corrosive wastes that it believes are in some instances well-managed and do not

[6] The RCRA term is actually "when improperly …. managed," 42 U.S.C. § 6903(5)(B), while EPA has used the language "plausibly mismanaged."

pose hazards, even though other wastes with the same level of corrosivity may be mismanaged.[7]

RCRA's general direction for setting the criteria for both identifying characteristics and listing individual wastes also does not include anything in the nature of "management scenarios," or anything that does not pertain to the hazards of the waste itself. 42 U.S.C. § 6921 provides:

> **Criteria for identification or listing.** Not later than eighteen months after the date of the enactment of this Act [enacted Oct. 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 subtitle [42 USCS §§ 6921 et seq.], 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.

EPA's regulations "identifying the characteristics of hazardous wastes and listing particular hazard wastes" are to "be based on the criteria promulgated under subsection (a)". 42 U.S.C. § 6921(b). EPA then did promulgate the regulations setting out the criteria for the hazardous characteristics at 40 C.F.R. § 261.10, and for listing particular hazardous wastes at 40 C.F.R. § 261.11.

[7] In addition, as discussed above, EPA has not provided any evidence, and the record does not support a claim, that lime-treated municipal wastes do not pose hazards to human health or the environment.

These regulations likewise do not support EPA's claim that it may consider other "aspects of waste management" in setting hazardous characteristics. The Final Denial relies on 40 C.F.R. § 261.11(a)(3), Doc. 458, at 31636, n. 41, App'x ___, but that regulation governs the listing of individual hazardous wastes, not the hazardous wastes characteristics. The regulation addressing the characteristics, 40 CFR § 261.10, tracks the statutory provision at 42 U.S.C. § 6903(5) quoted above, and provides that wastes that exhibit the characteristic must either cause or significantly contribute to human mortality or serious illness, 40 C.F.R. § 261.10(a)(1), or pose a substantial present or potential hazard to human health or the environment when mismanaged. 40 C.F.R. § 261.10(a)(2). The characteristic also must be measurable by an available standardized test method or reasonably detected by generators of solid waste through their knowledge of their waste. 40 C.F.R. § 261.10(a)(2)(i) and (ii). No other considerations are allowed.

In contrast, 40 C.F.R. § 261.11 applies to the "Criteria for listing hazardous wastes" individually and provides three criteria. The first is that the waste exhibits one of the established characteristics. 40 C.F.R. § 261.11(a)(1). Those characteristics, of course, are to be established in accordance with the criteria in 40 C.F.R. § 261.10. The second applies to "Acute Hazardous Waste," which has a high level of toxicity that is capable of causing or significantly contributing to death or serious illness. 40 C.F.R. § 261.11(a)(2). The third category, which EPA

inappropriately applies to the setting of hazardous characteristics, actually only applies to the listing of individual wastes that contain toxic constituents listed in appendix VIII to RCRA, and may pose a hazard to human health or the environment when mismanaged. 40 C.F.R. § 261.11(a)(3). Only for individual listings, and only for that particular category of wastes, is EPA directed to consider a series of factors that include both the nature of the waste and its management. 40 C.F.R. § 261.11(a)(3)(i)-(xi).[8] Those factors do not apply to listing individual wastes either based on hazardous characteristics, (a)(1), or based on their severe hazards as Acute Hazardous Waste, (a)(2), and do not apply to the identification of the characteristics under 40 C.F.R. § 261.10 at all.

Thus, there is nothing in the regulations governing the setting of hazardous characteristics that allows consideration of anything but the waste's potential hazards to human health and the environment and the ability to measure the characteristic by a standardized test method.

At the time EPA promulgated these regulations in 1980, it explained how the provisions for characteristics and for individual listings fit together and why. EPA explained that the criteria for identifying hazardous characteristics in § 261.10 relate to "physical, chemical or other properties which cause the waste to meet the

[8] None of the listed factors involve waste "management considerations" for treatment or re-use of wastes.

definition of hazardous waste in the Act." Characteristics were also required to be measurable by standardized available testing protocols. 45 Fed. Reg. 33,105. Because EPA determined it could not define and adopt testing protocols for all the characteristics that would render wastes hazardous, such as organic toxicity, carcinogenicity, mutagenicity, teratogenicity, bioaccumulation, phytotoxicity, radioactivity and infectiousness, it opted to list wastes with those properties individually under § 261.11. *Id.*, at 33,107.[9]

It is for those individual listings that do not fall within one of the four adopted hazardous characteristics that EPA employed a "flexible, multiple factor approach to listing rather than the formulaic approach embodied in the characteristics …". *Id.*, at 33,107. Clearly, characteristics and individual listings are based on different criteria, and only certain individual listings (for wastes with listed toxic constituents) consider factors other than the basic physical, chemical, and other properties of the waste itself.[10]

---

[9] EPA adopted characteristics only for ignitability, corrosivity, reactivity and toxicity. 40 C.F.R. §§ 261.21 – 261.24.

[10] This Court addressed the consequences of a waste exhibiting a hazardous characteristic as one of the criteria for individually listing a waste under § 261.11 in *Nat. Res. Def. Council v. EPA*, 25 F.3d 1063 (D.C. Cir. 1994). It held that EPA was not compelled to list a waste individually because it exhibited one of the characteristics, but could choose to evaluate the waste for individual listing under one of the two other criteria in § 261.11. However, even if EPA decided not to list the waste individually, *id.* at 1068-69, it would still be subject to regulation as a characteristic waste. *Id.* at 1070.

The legislative history of RCRA also supports the conclusion that in setting hazardous waste criteria, EPA was to consider only the hazards of the substance to human health and the environment, and not other management considerations. For example, the Report of the Senate Committee on Public Works states that the bill's definition of hazardous waste was expansive enough to include "any waste or combination of wastes which pose a substantial, present or potential hazard to health or living organisms." S. Rep. No. 94-988 at 26 (1976). It made no reference to other waste management considerations that would serve as limiting factors in the designation of hazardous wastes. Likewise the House Report directs that in identifying hazardous substances, the criteria should be based on "the danger to human health and the environment." H.R. Rep. No. 94-1491 at 25.

In sum, EPA's reliance on its desire to avoid regulation of lime-treated sewage sludge as hazardous waste is an impermissible factor that Congress did not intend the agency to consider, and is contrary to the statute and regulations.

III. EPA'S RELIANCE ON AVOIDING HAZARDOUS REGULATION OF LIME-TREATED SEWAGE SLUDGES IS ALSO NOT PERMISSIBLE UNDER RCRA BECAUSE IT IS A CONSIDERATION OF ECONOMIC COSTS

EPA describes its reliance on the aim of excluding lime-treated sludges from hazardous designation as a "waste management consideration," and disclaims any reliance on economic impacts for its denial of the petition. Doc. 458 at 31,533, App'x ___. EPA makes this makes this disclaimer because it is well aware that

RCRA does not allow consideration of costs in developing the RCRA regulations. *See* Doc. 458, at 31633 and n. 36, App'x ___, citing *Utility Solid Waste Activities Group v. EPA*, 901 F.3d 414 (D.C. Cir. 2018). That case found that where RCRA directs EPA to regulate based on factors that do not include cost, costs may not be considered. 901 F.3d at 448. The RCRA definition of hazardous waste, quoted and discussed above, rests on consideration of human health and environmental hazards and does not include any consideration of costs.

EPA's claim that it has made a "waste management consideration" and has not relied on the economic savings from avoiding hazardous designation is disingenuous. The primary result of allowing municipal sewage treatment plants to treat wastewater with corrosive materials for re-use as a soil amendment, or allowing it to be sent to non-hazardous landfills, is to save those sewage treatment plants money. Industries regularly seek to avoid hazardous treatment of their wastes because it is expensive, and as EPA acknowledges, various industries did so here, submitting estimates of the monetary impacts of the requested changes in the regulation on their businesses. Doc. 458, at 31,635, App'x __ (industries commented on the possible costs of managing additional wastes that would be regulated as hazardous if the petition were granted). Even if there were some non-economic waste management considerations (such as lime treatment reducing the

hazards of wastewater by inactivating bacteria), it is not credible that economic factors were not a major, and impermissible, factor in EPA's decision.

IV. EPA DID NOT ADDRESS THE ARGUMENT IN THE PETITION THAT IT COULD LEGALLY ACHIEVE THE EXCLUSION OF LIME-TREATED SEWAGE SLUDGES FROM HAZARDOUS REGULATION BY EITHER USING EXISTING OR CREATING NEW REGULATORY EXCEPTIONS OR EXCLUSIONS

The Final Denial did not address the argument made in the petition and the petitioners' response to the tentative denial that it is not necessary to set the corrosivity characteristic to exempt waste lime and reclaimed sludges from the definition of "hazardous waste," because those wastes are already excluded by the regulations, or could be. *See* Doc. 352, at 10, App'x __, discussing the fact that "waste lime" or cement kiln dust (CKD) would not be regulated as a solid waste or hazardous waste if it is recycled and beneficially reused; *see also* Doc. 452, at 48-50 and 79- 83 App'x __, referencing numerous exemptions and exclusions that could apply to corrosive wastes.

The Final Denial addresses this issue only with regard to RCRA deference to the Clean Water Act in addressing the use of biosolids as an agricultural fertilizer. Doc. 458, at 31,625-26, App'x __. It does not address the issue with regard to the many other possible existing exemptions cited by petitioners, and does not address the possibility of creating a regulatory exclusion or exemption of existing ones do not apply.

Thus, EPA has failed consider an important aspect of the problem, rendering its decision arbitrary and capricious.

V. THE DETERMINATION THAT ALKALINE WASTES WITH A pH FROM 11.5 TO 12.5 ARE NOT HAZARDOUS UNDER RCRA RUNS COUNTER TO THE EVIDENCE BEFORE EPA

EPA provided no reliable evidence, either when it set the corrosivity characteristic in 1980, or when it denied the petition in 2021, that corrosive wastes with a pH of from 11.5 to 12.5 do *not* pose a substantial present or potential health hazard, either intrinsically or when improperly managed. Thus, EPA had no legitimate basis to deny the petition. This is especially true, as shown below, because the main source relied on by EPA to set the characteristic actually found that materials with a pH above 11.5 cause irreversible human tissue damage, and because pH 11.5 was at the time the regulation was promulgated and is still the international standard. EPA's decision is arbitrary and capricious because it runs counter to the evidence before the agency.

A. The Only Scientific Evidence Relied on by EPA in Setting and Retaining the Corrosivity Characteristic Establishes Corrosive Injury to Human Health at pH 11.5.

There is no data supporting the selection of pH 12.5 as the hazardous threshold for alkaline corrosive wastes, other than the impermissible factor of avoiding hazardous regulation of one of those wastes—lime-treated wastewater sludges. In setting the corrosivity characteristic, EPA relied on the Encyclopedia of

Occupational Health and Safety of the International Labor Organization of the United Nations World Health Organization, Doc. 359, App'x __ (*hereinafter* "ILO Encyclopedia"),[11] which found corrosive injury to human tissues at pH levels of 11.5 and up. EPA did not cite any other evidence on the pH level that caused human injury, or any other evidence supporting the use of a higher pH level than 11.5 for the hazardous threshold. But it determined to set the standard at a higher pH than the ILO Encyclopedia level, based on the false claim that the ILO level pertained only to eye and not skin tissue.

EPA's original proposal for the corrosivity characteristic included a pH limit of 12.0. The 1978 Draft Background Document for the proposed regulation proposed that level despite the fact that the only evidence it referenced "suggested that pH extremes below 2.5 and above 11.5 are not tolerated by the body, and contact will often result in tissue damage." Doc. 344, at 102 (8),[12] App'x __. The only reason EPA gave for not setting the pH at 11.5 was its claim that the studies establishing the levels causing corrosive injury were conducted on corneal (eye)

---

[11] ENCYCLOPEDIA OF OCCUPATIONAL HEALTH AND SAFETY, VOLUME 1, GENEVA, INTERNATIONAL LABOR ORGANIZATION (1972) Doc. 359, App'x __.

[12] Document 344 contains the Draft Background Documents for all of the characteristics. The relevant section addressing corrosivity begins at page 95 of the PDF and is independently numbered. Pagination referencing Doc. 344 will go to the page number of the PDF in the Administrative Record with the internal pagination provided in parentheses.

tissue, which is more sensitive to injury than the skin. EPA concluded that therefore setting the characteristic at pH 12 should provide sufficient protection to exposed persons. *Id*. There is no specific citation within the Background document to support this claim, but the ILO Encyclopedia, pp. 220-221, Doc. 359, App'x __, is among the references in the document. Doc. 344, at 111 (17), App'x ___. [13] As shown below, that reference is the source of the finding that a pH of 11.5 or above causes corrosive injury, but it is not true that this finding was limited to eye injury.

After misrepresenting the source it relied on, EPA unscientifically suggested that because skin is less sensitive than eyes, it could increase the pH number by 0.5, which, because the pH scale is logarithmic, is approximately five times as alkaline. It provided no basis or evidence that this amount of increase in the pH level was warranted by the difference between eye and skin sensitivity, or that materials with a pH of 12.0 did *not* damage skin tissue. Nor did EPA ever justify why damage to eye tissue would not meet the statutory definition of a "present or potential hazard to human health." 42 U.S.C. § 6903(5)(B).

Then, when EPA actually set the characteristic in 1980, it compounded the error by setting the threshold for hazardous waste regulation even higher, another

[13] EPA downplayed what the ILO Encyclopedia actually said, using the language quoted above that "contact will often result in tissue damage," when the accurate quotation is, "Extremes above pH 11.5 or below 2.5 are not tolerated by the body and *will almost always result in irreversible tissue damage.*" Doc. 359, App'x __ (emphasis added).

approximately five-fold increase to pH 12.5. *See* Doc. 458, at 31,625, App'x __. It did so because it agreed with commenters that

> otherwise nonhazardous lime stabilized sludges and wastes should not be designated as hazardous. Accordingly, the Agency has adjusted the upper limit to pH 12.5 to exclude such wastes from the system.

Doc. 346, at 15 (11), App'x ___.

EPA thus turned the process of identifying hazardous characteristics on its head. Instead of using the statutory definition to identify a characteristic to govern all wastes that fit within it, EPA based the identification of the entire characteristic on its conclusion that an individual waste that would be governed by it should not be regulated as hazardous. It did so without any reference to the statutory definition, and without providing any evidence that lime stabilized sludges and wastes were "otherwise nonhazardous."[14]

Moreover, even though EPA had already justified a 0.5 increase in the pH standard based on the difference between skin and eye tissue, it used that difference again to claim that another 0.5 pH increase to accommodate lime-treated sewage sludges "should not compromise the protection of human health." *Id.* at

[14] It should be noted that without hazardous designation, sludges treated to be highly corrosive could be applied to land anywhere, including, for example, at a school playing field where children could have direct contact with them.

17(15), App'x ___.[15] There is no rhyme or reason as to why first a 0.5 pH increase and then a 1.0 increase could be based on the same justification, or why or based on what evidence those particular numbers were chosen.

Worse yet, the entire premise that materials with a pH of 11.5 and up are corrosive to eye tissue only is simply wrong. Apart from the fact that EPA presents no evidence regarding what pH level *would* purportedly damage skin, or how much more sensitive eyes are than skin, the authority EPA relies on for its claim about eye versus skin damage does not support EPA's conclusion.

When it promulgated the regulation containing the corrosivity characteristic in 1980, EPA stated that "Studies indicate that pH extremes above 11.5 and below 2.5 generally are not tolerated by human corneal (eye) tissue." Doc. 346, at 9(5), App'x __. The support for this statement is no. 3 in the references to the

---

[15] EPA repeated this claim when it promulgated the regulation, stating:

> to a significant extent, EPA based the proposed pH levels on studies demonstrating a correlation between pH and eye tissue damage. Since eye tissue is considered to be more sensitive than other human tissue, the proposed pH levels were unnecessarily conservative and had the unintended effect of inhibiting the use of such beneficial processes as the lime stabilization of wastes. The expanded pH range being adopted today rectifies this problem by excluding such things as lime stabilized wastes from the system. It also addresses the problem of tissue damage more realistically ….

45 Fed. Reg. 33109 (May 19, 1980).

Background Document, the ILO Encyclopedia, Doc. 346, at 46, App'x __. However, the ILO Encyclopedia does *not* limit its statement that materials with a pH above 11.5 are not tolerated by human tissue to eye damage. It actually says:

> The skin, eyes and digestive system are the most commonly affected parts of the body. The corrosives may be either acid or alkali, the main feature being the hydrogen or hydroxyl concentration. Extremes above pH 11.5 or below 2.5 are not tolerated by the body and will almost always result in irreversible tissue damage.

Doc. 359 (emphasis added). The ILO Encyclopedia never mentions a pH level of 12.5 in any context. EPA did not cite any other sources or studies to support its claim that alkaline levels up to pH 12.5 are safe for human tissues, either when setting the characteristic in 1980 or when denying the petition in 2021.

Petitioners highlighted in their petition this misrepresentation of the sole source relied upon by EPA to conclude that wastes with a pH of 12.5 would not cause irreversible human tissue damage (except to the eyes). Doc. 352, at 8 -10, App'x __. It was also highlighted in petitioners' response to the tentative denial. Doc. 452, at 28-32, App'x __. Yet, EPA entirely ignored this highly relevant factor in its Final Decision to deny the petition, never addressing whether the pH 11.5 figure in the ILO Encyclopedia in fact applied only to eye tissue, thus justifying a higher pH standard for the corrosivity characteristic in the regulation.

Thus, EPA entirely refused to consider an important aspect of the problem, namely what the ILO Encyclopedia -- the only source EPA cited for the level of

alkaline pH that harms human health -- actually provided. In fact, in refusing to address this issue, EPA appears in the Final Denial to rest primarily on the consideration of "other waste management factors," with consideration of the ILO Encyclopedia and other international standards factored in only in some unspecified way. *See* Doc. 458, at 31624-31625, 31626, 31627, 31636, App'x __. For example, EPA states that it "relied in part on the ILO guidance on corrosivity, and also considered other factors related to waste management in establishing the corrosivity regulation." *Id.*, p. 31,636, App'x __. There is no discussion of how the ILO Encyclopedia and the "other factors related to waste management" were reconciled or balanced, or how that process justified the final pH number of 12.5.[16]

Because EPA cited no other scientific evidence regarding the pH level that causes harm to human health, dropping the contention that the ILO Encyclopedia supported setting the characteristic at pH 12.5 because its 11.5 standard was directed at eye damage leaves EPA with *no scientific basis* for claiming that the pH 12.5 standard will protect human health. As detailed above, "other management considerations" play no part in the statutory definition of hazardous waste, and certainly cannot justify setting a hazardous characteristic by discounting the only

[16] In the Tentative Denial, EPA more explicitly refused to address the allegations that it misrepresented the pH levels in the ILO Encyclopedia, claiming that those allegations are "not relevant to considerations about whether a regulatory change" is warranted. Doc. 435, at 21299, n. 10, App'x __.

evidence of human health impacts by an amount justified only by the aim of excluding certain wastes from coverage.

The only other major evidence before EPA relevant to setting the corrosivity standard is the international standards set not only through the ILO Encyclopedia, but also the United Nations Basel Convention treaty,[17] and the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).[18] All of these international consensus standards set the corrosive level for alkaline wastes at pH 11.5.

Although EPA argues that adoption of the corrosivity standards in these international agreements is not legally required for U.S. agencies, this is not relevant to the question of EPA's justification for setting a standard significantly laxer than the international consensus. The United States took part in developing and implementing these standards. *See* Doc. 458, at 31626 App'x __ (discussing a U.S. State Department committee that seeks to facilitate adoption of GHS criteria in appropriate federal regulatory programs).

---

[17] United Nations Environment Programme (February 5, 1992) Basel Convention of Transboundary Movements of Hazardous Wastes and their Disposal, Annex IX, List B, Waste B2120, Doc. 205, at 82, App'x __ (cited in Doc. 352, at 24, n. 64, App'x __)

[18] United Nations Economic Commission, Globally Harmonized System of Classification and Labeling of Chemicals (GHS), Docs. 275-77, cited in Doc. 352 at 24 and n. 65, App'x __. *See also* Doc. 551, App'x ___, as a guide to the GHS.

EPA does not dispute that pH 11.5 is the international standard,[19] but only claims that this standard represents intrinsic hazards, while RCRA regulation can take into account the way wastes are managed under RCRA with "controls on or mitigation of exposure." Doc. 458, at 31,625, App'x __; *see also id.*, at 31,627, App'x __ ("the Agency's conclusion was that direct use of GHS criteria as a corrosivity regulation standard was not appropriate as the GHS criteria are intended to identify the inherent or intrinsic hazards of chemicals or chemical products (which are usually associated with direct exposure to chemicals), and do not consider how exposures in different settings, such as waste management scenarios of concern under RCRA, might reduce the actual hazard posed." This explanation for rejecting the international standard is unavailing, because RCRA does *not* direct the setting of hazardous waste characteristics based on whether exposure and hazard are or could be mitigated in the process of waste management. Instead, RCRA directs that a waste is determined to be hazardous based on its potential to pose a hazard to health or the environment, either intrinsically or when mismanaged. In addition, this argument is especially inapt because EPA has not posited *any* attenuating or mitigating factors that would

[19] The Final Denial does claim that the GHS does not rely only on pH, but also on other data to define its corrosivity standard. Doc. 458, at 31,626, n. 9, App'x __. *See also id.*, at 31,626, App'x __ regarding EPA's claim that the Basel convention does not rely directly on pH. However, EPA does not dispute that as far as pH, 11.5 is the standard used in these international agreements.

reduce the hazards of corrosive wastes, but has only defended its determination to set the corrosivity characteristic so as to exclude lime-treated sewage sludges that it considers a beneficial method of waste management.

B. Evidence of Damage Incidents is Unnecessary to Support the Petition; However the Petition Did Supply Such Evidence and the Final Denial Does Not Refute Its Claims of Harm from Materials with a pH between 11.5 and 12.5.

Petitioners did not need to prove harm from wastes with a pH between 11.5 and 12.5 in order for the petition to be granted, given that the sole source of scientific evidence relied on by EPA in setting the characteristic finds irreversible injury to human tissue for materials with a pH of 11.5 or higher. EPA supplied no evidence contrary to this conclusion, which alone mandates the granting of the petition. Nor did EPA provide any reasonable basis for not adopting the international standard of 11.5, as discussed above.

Equally important, the regulatory scheme does not provide for consideration of damage incidents in setting hazardous waste characteristics. EPA found when it set the characteristics that it need not rely on evidence of damage. *See* 45 Fed. Reg. 33,106, stating that EPA "omitted reference to damage incidents" in the regulatory language applicable to the criteria for identifying characteristics "out of a conviction that this reference is unnecessary." The resulting regulation identified two criteria for identifying hazardous characteristics – that the waste meet the statutory definition of a hazardous waste, and that the characteristic can be

measured by standardized and available testing protocols. *Id.*; 40 C.F.R. § 261.10. The factors to be considered do not include damage incidents.

In contrast, the criteria for individually listed hazardous wastes do allow for the consideration of damage incidents in the case of wastes with toxic constituents. 40 C.F.R. § 261.11(a)(3)(ix) provides, as one of many factors that may be considered, the "nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent."

Nevertheless, while not needed here, the petition did include extensive evidence of harm from corrosive pH 11.5 to 12.5 alkaline wastes. EPA does not specifically refute this evidence. *See* Doc 352 at 26-27 and n. 71, citing Doc. 696, App'x ___; n. 73, citing Doc. 694, App'x ___; n. 74, citing Doc. 349, App'x ___, and n. 75 (not included in Administrative Record by EPA) (citing studies showing damage to ciliary cells in the respiratory tract in World Trade Center (WTC) first responders and due to exposure to alkaline materials); *id.* at 27 and n. 78 (not included in Administrative Record by EPA) (study showing caustic ulcers in two adolescent football players from brief contact with calcium hydroxide (lime) used to mark a goal line); *id.* at 30-32 and n. 88, citing Doc. 188, App'x __, n. 89, citing Doc. 199, App'x ___, n. 90 (not included in Administrative Record by EPA), n. 91, citing Doc. 234, App'x, n. 92 (not included in Administrative Record by EPA), n.

93 (not included in Administrative Record by EPA), n. 94, citing Doc. 191, App'x ___, n. 96 (not included in Administrative Record by EPA), n. 97 citing Docs. 202 & 728 [duplicates], App'x ___; *see also* Doc. 197, App'x ___ (studies and reports showing injuries to WTC first responders from corrosive dust and fibers). The petition also provided evidence that the Material Safety Data Sheet from a major cement manufacturer warned that CKD, with a pH of 10-13, "causes severe burns" and is harmful by inhalation. Doc. 352, at 35 and n. 109, App'x __. *See also* Doc 435,at 124, App'x ___, quoting the Portland Cement Safety Data Sheet, Doc. 409, App'x ___, stating that inhalation "can cause serious, potentially irreversible lung/respiratory tract tissue damage due to chemical (caustic) burns, including third degree burns," and is "corrosive to eyes, respiratory system and skin."

EPA did not support its claims that the scientific evidence supplied with the petition was insufficient, nor did it review all relevant studies submitted to the record. The Tentative Denial requested additional studies on injury from WTC dust. Doc. 435, at 21302, n. 17, App'x ___. In response, Petitioners incorporated by reference the National Institute of Occupational Safety and Health, Doc. 690, App'x __, and New York City databases of all available studies on WTC exposures. Docs. 669, 683-86, 688 (NYC Health database lists), App'x ___. The record is clear that none of these additional studies in these databases were

evaluated by EPA, since not even one new study was incorporated into the docket for the final rulemaking.

Further, EPA rejected as irrelevant the studies submitted by the Petitioners on past incidents where humans exposed to lime or animals exposed to sodium hydroxide solutions having pH levels of 11.5-12.5 resulted in chemical burns. EPA declined to consider these studies because they purportedly were based on the intrinsic or inherent hazard of the materials rather than on risks posed in the course of waste management. Doc. 458, at 31629, App'x __. However, the inherent hazard of the material, including outside of the waste management context, is highly relevant to its potential to pose hazards when improperly managed. *See* 42 U.S.C. § 6903(5)(B). It is not possible to know what the potential hazards when mismanaged would be without knowing the inherent hazards of the material itself.

The main discussions in the Final Denial of whether materials with a pH between 11.5 and 12.5 pose a present or potential hazard to human health concern the petition's claims about harms from the corrosive dust at the WTC disaster. These discussions do not actually provide any evidence that in general, materials in this pH range do not pose hazards. The petition, of course, did not address only WTC dust, but was directed at all wastes with a pH between 11.5 and 12.5.

With regard to the WTC, EPA asserts that there is no proof that the corrosivity from the dust at the WTC was the cause of the injuries to first

responders and others, because the dust contained many other potentially harmful constituents. Doc. 458, at 31628-30, App'x __. However, the statutory definition does not require that a waste be the sole cause of an injury to health to be considered hazardous. Part (A) of the definition requires that the waste "may" "cause or significantly *contribute to*" an increase in mortality or serious illness, 42 U.S.C. § 6903(5)(A) (emphasis added), not that it be the sole cause. Part (B) applies to wastes that "may" "pose a substantial present or potential hazard to human health or the environment" when improperly managed. 42 U.S.C. § 6903(5)(B). It thus is concerned with whether the waste even potentially may pose a hazard, not whether it is the sole cause of injuries to human health. Most hazardous wastes are complex mixtures of various toxic constituents, and are not exempt from regulation merely because the health impact of each component cannot be evaluated separately.

EPA also makes the legally irrelevant contention that the injuries from the WTC disaster were not the type of injuries described in the 1980 Background Document, Final Denial, Doc. 458, at 31629, App'x __, and, "while serious, are not consistent with the gross tissue injuries the Agency sought to prevent in regulating some wastes as hazardous due to their corrosive properties." Doc. 458 at 31631, App'x __. In its "response to comments" document, EPA states that the only corrosive injuries it will consider are "'corrosive injury' to persons *as that*

term is described in the 1980 Background Document." Doc. 740, p. 44, App'x __ (emphasis added). It stated that even though "adverse health effects" had occurred as a result of exposure to high pH solids, they would not be considered by EPA in altering the corrosivity characteristic. *Id.*

However, "corrosive injury" is not a term defined in the 1980 Background Document. In fact, nowhere in that document does the phrase "corrosive injury" even appear. Doc. 346, App'x__. EPA's current effort to define it to exclude anything but gross damage to the skin is not supported by the record. For example, Safety Data Sheets prepared by industry clarify that "in the presence of moisture" these substances can cause chemical burns, and list "ingestion, inhalation, skin, and eye" as likely routes of exposure. AR Doc. 409, p. 5, Appx __; *see also* Doc. 32, App'x ___ (referencing chemical burns from cement to lungs and digestive system), Doc. 127, App'x ___ (CKD can cause severe burns to any area of the body when moist, including digestive system), Doc. 156, App'x ___ (premixed concrete).

Whether the types of injuries described in the petition, including corrosive damage to the respiratory tract, are the same as the injuries described in the 1980 Background Document is irrelevant to whether they meet the statutory definition of either causing or significantly contributing to an increase in mortality or serious illness, 42 U.S.C. § 6903(5)(A), or posing a substantial present or potential hazard

to human health or the environment when improperly managed. 42 U.S.C. § 6903(5)(B).

EPA also rejected the petition's evidence of injury from corrosive dust at the WTC disaster by claiming that "the available data do not lend themselves to identifying waste management exposures to workers, as distinct from other exposures." Doc. 458, at 31632, App'x __. EPA described waste management exposures as those occurring "in the course of clearing and removing debris from the site and transporting and landfilling it." *Id.* The implication is that EPA need consider injuries only to waste management workers and not the general public in its regulation of hazardous waste. Application of RCRA only to wastes that may injure waste management workers would severely constrict the coverage of the statute, and EPA's advocacy of that position is somewhat alarming, as the agency charged with administering the statute.

While RCRA's purposes certainly encompass the protection of waste management workers, it was enacted primarily to protect the public at large, as well as the environment. Congress declared that "the national policy of the United States" is to reduce or eliminate the generation of hazardous waste, and that "[w]aste that is nevertheless generated should be treated, stored or disposed of so as to minimize the present and future threat to human health and the environment." 42 U.S.C. § 6902(b). The waste that RCRA covers is not defined by whether

injuries occur in the course of waste management activities, but by whether the waste is covered by RCRA's definitions of solid or hazardous waste. These definitions, as EPA admits, depend on whether the waste is discarded or abandoned, *see* Doc. 458, at 31632, n. 31, App'x __, (which the debris at the WTC certainly was), not on whether it is waste management workers versus members of the general public who may be injured by the waste. *See* 42 U.S.C. § 6903(27), defining solid waste as "any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility *and other discarded material* … ." (emphasis added). Likewise, the definition of hazardous waste at § 42 U.S.C. § 6903(5) quoted above describes waste that may cause human health or environmental injury, and is not limited in any way by to whom the injury may occur, or in the course of what activities.

EPA is again melding and confusing concepts in the statute, implying that because the RCRA definition of hazardous waste references hazards created when waste is mismanaged, 42 U.S.C. § 6903(5)(B), the hazards of wastes need only be considered when they are being managed by waste management workers. This is an absurd reading of the statute. If the materials at the WTC or elsewhere meet the definition of a hazardous waste, it is irrelevant to whom and in what context they may cause injuries.

VI. THE DETERMINATION THAT NON-AQUEOUS ALKALINE WASTES ARE NOT HAZARDOUS UNDER RCRA RUNS COUNTER TO THE EVIDENCE BEFORE EPA

Petitioners' second request is expand the scope of the RCRA hazardous waste corrosivity characteristic to include nonaqueous wastes, by deleting the phrase "it is aqueous" from 40 CFR § 261.22(a)(1). In support of this request, petitioners provided examples of the numerous harms to public health and the environment which can be caused by non-aqueous corrosive materials, including calcium hydroxide (lime) and calcium oxide (quick lime), which are present in building demolition dust, including the dust from the collapse of the WTC, as well as other materials. Petitioners identified solid sodium hydroxide and potassium hydroxide as two of the most severe alkaline corrosives which are entirely exempt from RCRA regulation as corrosive simply because they are not aqueous. A contractor hired by EPA to compile a list of potential damage cases from caustic substances also noted an incident in Ohio in which Smith Chemical, a former chemical manufacturing facility was contaminated by sodium hydroxide and other basic solids were found. Doc. 394, App'x ___.

Rather than contend with the many potential and actual injuries and environmental harms which are caused by nonaqueous corrosive materials, EPA chose to focus exclusively on WTC dust. By failing to consider other harms caused by nonaqueous materials, EPA "entirely failed to consider an important aspect of

the problem [and] offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Motor Vehicle Manufacturers Ass'n.*, 463 US at 43.

A. WORLD TRADE CENTER DUST

The petition and petitioners' comments on the tentative denial produced evidence of harms caused by, *inter alia*, the WTC disaster dust, CKD, and building demolition dust as examples of corrosive solids that warrant regulation. The petition's evidence of these hazards was dismissed as "anecdotal or focused on illustrating the intrinsic hazards of some alkaline materials." Doc. 458 at 31,627 App'x __. As explained above, EPA generally and improperly discounted evidence of "intrinsic hazards" of wastes. And there is nothing wrong with using "anecdotal" evidence to demonstrate harm from non-aqueous wastes. EPA does not indicate what other kind of evidence there could be. In a footnote to the denial of the petition, EPA acknowledged the existence of, but did not meaningfully address, calcium oxide, calcium hydroxide and calcium sulfate, three non-aqueous caustic substances which the petitioners cited as examples of threats to human health or the environment. Doc. 458, at 31,630, App'x __[20]

[20] EPA does also mention calcium silicates, calcium hydroxide, and calcium oxide as components of concrete dust in the tentative denial, but does not discuss them substantively. *See* Doc. 435, at 21295, 21305, App'x __.

EPA advanced three basic reasons why injuries caused by dust from the collapse of the World Trade Center do not support regulating non-aqueous corrosive materials. (1) One cannot establish a causal connection between the corrosive properties of the dust and the resultant injuries because the dust was a complex mixture with several other toxic components; (2) the WTC injuries are not the type that EPA sought to prevent by establishing the corrosivity characteristic, namely "gross tissue injuries," and (3) petitioners' evidence does not demonstrate that the injuries claimed were related to improper treatment, storage, transport, or disposal of solid waste. Doc. 458 at 31628, 31629-31630, 31632, App'x __.

As discussed above in Sec. V.B, above and further below, these contentions are not valid. Regarding EPA's first point, the statutory definition of a hazardous waste does not require that the waste be the sole cause of a hazard to human health or the environment, and therefore EPA cannot decline to regulate wastes such as the non-aqueous dusts at the WTC because they are part of complex mixtures that contain other hazardous components.

EPA's second point, that it need not consider the injuries from WTC dust such as the injuries to the respiratory tract described in the petition, because they are not the kind of "gross tissue injuries" that EPA sought to regulate when it established the corrosivity characteristic in 1980, is also not supported by the

statute. Whether or not these were the kind of injuries EPA sought to regulate in 1980, these wastes pose the kind of risks to health covered by the statutory definition of hazardous wastes, and therefore must be regulated as hazardous. EPA fails to consider that corrosive effects can cause injuries beyond skin tissue or corneal damage, such as injuries to the respiratory tract or digestive system caused by inhaling or ingesting nonaqueous corrosive dusts or gases.

There is no reason to regulate some, but not all, corrosive injuries. As discussed above, "corrosive injury" is not a term defined in the 1980 Background Document or anywhere else and its attempted application as a gatekeeping tool by EPA is meritless.

As to EPA's third point, nothing in the statute requires that the injuries caused by regulated wastes be sustained in the course of waste management. As petitioners' comments on the tentative denial explained, no other RCRA hazardous waste regulation is based on the hazards to any one occupational category of exposed persons. The statutory interpretation EPA posits would exclude everyone but waste management workers from the protection of the statute, a result that obviously was not intended.

Therefore, the studies EPA cites to purportedly show that the types of injuries suffered by those nearby the WTC collapse were not "gross tissue injuries" and thus not corrosive, and that the corrosive properties of the dust and respiratory

injuries cannot be quantitatively correlated, Doc. 458, at 31,631, App'x __, are irrelevant to the consideration of whether non-aqueous wastes should be included in the corrosivity characteristic.

Regarding causation, it is unclear why EPA requires specific laboratory-controlled documentation of injuries caused by contact with nonaqueous corrosive materials when its charge is to prevent "*potential* hazard to human health and the environment." 42 U.S.C. § 6903(5)(B) (emphasis added). EPA's requirement that causation be proven between specific injuries to an injured 9/11 first responder and the pH of the specific dust they inhaled, and that the first responder also not have inhaled any other substances that may have harmed them, is moving the goalposts *ad absurdum*. Materials in the record include evidence that exposure to "the high alkalinity of WTC dust produced bronchial hyperreactivity, persistent cough, and increased risk of asthma" among cleanup workers. Doc. 690, at 250, Appx. ___. This is enough to indicate the potential danger to human health from non-aqueous corrosive dusts.

The reason that EPA has not revised its corrosivity characteristic is not, as EPA states, that it has received "insufficient information to support regulation of corrosive solids." Doc. 740, at 46, Appx __. The reason is that EPA has invented reasons to ignore the information it has received by focusing on certain types of injury to certain groups of people, and demanding unreasonable levels of absolute

certainty before regulating. This approach stands in sharp contrast to RCRA's protective mission to regulate "potential" hazards to human health or the environment. 42 U.S.C. § 6903(5)(B).

B. HARMS FROM OTHER CORROSIVE NON-AQUEOUS MATERIALS

The tentative and final denials of the petition's request to include nonaqueous wastes in the corrosivity characteristic focus on the WTC dust issue to the exclusion of all others. That the WTC dust cannot be definitively pegged as the exclusive cause of corrosive injuries to first responders is not a reason to deny this part of the petition. This is a reality acknowledged even by industry, as manufacturers certify that cement dust and CKD has pH from 10 to 13 and declare them to be hazardous corrosive materials through their Safety Data Sheets required by OSHA, which say inhalation can cause serious, potentially irreversible lung/respiratory tract issues due to chemical (caustic) burns, including third degree burns. Docs. 32, 127, 131, 156, 158, 409, Appx ___.

The Tentative Denial provided an example of a death of a worker due to immersion in watery sludge from a pulp and paper plant. Doc. 435, at 21307 App'x __. The sludge did not meet the technical definition of an "aqueous liquid" under the agency's current "paint filter" test and so was not regulated by the corrosivity characteristic. EPA agreed that this type of clearly hazardous corrosive waste needed to be controlled by RCRA, but instead of eliminating the problematic and

needless “aqueous” standard, EPA stated it “believes this damage case may illustrate the value of clarifying the Agency’s approach to determining what wastes are aqueous.” Doc. 453, at 21307 App’x __. However, EPA has not made any such clarification. There will always be other situations where some physical form of a corrosive material makes it difficult to determine a water content, and EPA has advanced no justification for why this problematic standard should continue.

Petitioners identified solid sodium hydroxide and potassium hydroxide as two of the most severe alkaline corrosives which are entirely exempt from RCRA regulation as corrosive simply because they are not aqueous. A contractor hired by EPA to compile a list of potential damage cases from caustic substances also noted an incident in Ohio in which Smith Chemical, a former chemical manufacturing facility, was contaminated by sodium hydroxide and other alkaline solids were found. Petitioner identified an additional instance where 54,000 pounds of corrosive solids contributed to the placement of the Kearsarge Metallurgical Corporation site in New Hampshire on the National Priorities List. Doc. 452, at 22, App’x __. Detailed information to support the corrosive nature and danger of solid sodium hydroxide exists within the record, including instances of fatal ingestion and fatal dermal exposure for humans. *See generally* Doc. 646, at 3, App’x ___.

EPA rejected the studies submitted by the Petitioners on past incidents where humans exposed to lime or animals exposed to sodium hydroxide solutions

having pH levels of 11.5-12.5, detailed above, resulted in chemical burns as "not relevant in responding to the petitioners' specific request to revise the corrosivity characteristic regulation" or "anecdotal." Doc 458, at 31627, App'x __. The information submitted contained scientific evidence of corrosive hazards posed by non-aqueous materials, precisely the kind EPA claims to have sought. It is unclear whether EPA disfavors these studies because they do not meet the agency's narrow and ill-defined "corrosive injury" standard or because they do not pose the kinds of waste management considerations EPA has arbitrarily confined its reasoning to. Neither is an appropriate basis for discounting the studies.

In sum, the denial of the petition's request to regulate non-aqueous wastes should be reversed because it entirely failed to consider an important aspect of the problem and offered an explanation for its decision that runs counter to the evidence before the agency.

CONCLUSION

For the foregoing reasons, the petition for review should be granted, and the Final Denial should be held unlawful and set aside by this Court.

Respectfully submitted,

_____/s/_____

Paula Dinerstein
D.C. Bar No. 333971
Kevin Bell
Public Employees for Environmental

962 Wayne Ave., Suite 610
Silver Spring, MD 20910
202-265-7337
pdinerstein@peer.org
kbell@peer.org

Attorneys for Petitioner

CERTIFICATE OF COMPLIANCE

I hereby certify that this brief complies with the type-volume limit, typeface requirements and type-style requirements of the Federal Rules of Appellate Procedure and D.C. Circuit Rules.

1. This document complies with the type-volume limitation of Fed.R.App.P 21(d)(1). It contains 12.996 words.
2. This document complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this document has been prepared in a proportionally spaced typeface using Times New Roman, 14 point.

/s/ Paula Dinerstein_____
Paula Dinerstein

Attorney for Petitioner PEER

ADDENDUM OF STATUTES AND REGULATIONS

5 U.S.C. § 706. SCOPE OF REVIEW

To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall—

(1) compel agency action unlawfully withheld or unreasonably delayed; and

(2) hold unlawful and set aside agency action, findings, and conclusions found to be—

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

(B) contrary to constitutional right, power, privilege, or immunity;

(C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;

(D) without observance of procedure required by law;

(E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title [5 USC §§ 556 and 557] or otherwise reviewed on the record of an agency hearing provided by statute; or

(F) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.

In making the foregoing determinations, the court shall review the whole record or those parts of it cited by a party, and due account shall be taken of the rule of prejudicial error.

42 U.S.C. § 6902. OBJECTIVES AND NATIONAL POLICY

(a) Objectives. The objectives of this Act [42 USC §§ 6901 et seq.] are to promote the protection of health and the environment and to conserve valuable material and energy resources by—

(1) providing technical and financial assistance to State and local governments and interstate agencies for the development of solid waste management plans (including resource recovery and resource conservation systems) which will promote improved solid waste management techniques (including more effective organizational arrangements), new and improved methods of collection, separation, and recovery of solid waste, and the environmentally safe disposal of nonrecoverable residues;

(2) providing training grants in occupations involving the design, operation, and maintenance of solid waste disposal systems;

(3) prohibiting future open dumping on the land and requiring the conversion of existing open dumps to facilities which do not pose a danger to the environment or to health;

(4) assuring that hazardous waste management practices are conducted in a manner which protects human health and the environment;

(5) requiring that hazardous waste be properly managed in the first instance thereby reducing the need for corrective action at a future date;

(6) minimizing the generation of hazardous waste and the land disposal of hazardous waste by encouraging process substitution, materials recovery, properly conducted recycling and reuse, and treatment;

(7) establishing a viable Federal-State partnership to carry out the purposes of this Act [42 USC §§ 6901 et seq.] and insuring that the Administrator will, in carrying out the provisions of subtitle C of this Act [42 USC §§ 6921 et seq.], give a high priority to assisting and cooperating with States in obtaining full authorization of State programs under subtitle C [42 USC §§ 6921 et seq.];

(8) providing for the promulgation of guidelines for solid waste collection, transport, separation, recovery, and disposal practices and systems;

(9) promoting a national research and development program for improved solid waste management and resource conservation techniques, more effective organizational arrangements, and new and improved methods of collection, separation, and recovery, and recycling of solid wastes and environmentally safe disposal of nonrecoverable residues;

(10) promoting the demonstration, construction, and application of solid waste management, resource recovery, and resource conservation systems which preserve and enhance the quality of air, water, and land resources; and

(11) establishing a cooperative effort among the Federal, State, and local governments and private enterprise in order to recover valuable materials and energy from solid waste.

(b) National policy. The Congress hereby declares it to be the national policy of the United States that, wherever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible. Waste that is nevertheless generated should be treated, stored, or disposed of so as to minimize the present and future threat to human health and the environment.

42 U.S.C. § 6903. DEFINITIONS

As used in this Act [42 USC §§ 6901 et seq.]:

(1) The term “Administrator” means the Administrator of the Environmental Protection Agency.

(2) The term “construction,” with respect to any project of construction under this Act [42 USC §§ 6901 et seq.], means (A) the erection or building of new structures

and acquisition of lands or interests therein, or the acquisition, replacement, expansion, remodeling, alteration, modernization, or extension of existing structures, and (B) the acquisition and installation of initial equipment of, or required in connection with, new or newly acquired structures or the expanded, remodeled, altered, modernized or extended part of existing structures (including trucks and other motor vehicles, and tractors, cranes, and other machinery) necessary for the proper utilization and operation of the facility after completion of the project; and includes preliminary planning to determine the economic and engineering feasibility and the public health and safety aspects of the project, the engineering, architectural, legal, fiscal, and economic investigations and studies, and any surveys, designs, plans, working drawings, specifications, and other action necessary for the carrying out of the project, and (C) the inspection and supervision of the process of carrying out the project to completion.

(2A) The term “demonstration” means the initial exhibition of a new technology process or practice or a significantly new combination or use of technologies, processes or practices, subsequent to the development stage, for the purpose of proving technological feasibility and cost effectiveness.

(3) The term “disposal” means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

(4) The term “Federal agency” means any department, agency, or other instrumentality of the Federal Government, any independent agency or establishment of the Federal Government including any Government corporation, and the Government Printing Office [Government Publishing Office].

(5) The term “hazardous waste” means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—

(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(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.

(6) The term “hazardous waste generation” means the act or process of producing hazardous waste.

(7) The term “hazardous waste management” means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous wastes.

(8) For purposes of Federal financial assistance (other than rural communities assistance), the term “implementation” does not include the acquisition, leasing, construction, or modification of facilities or equipment or the acquisition, leasing, or improvement of land[.]

(9) The term “intermunicipal agency” means an agency established by two or more municipalities with responsibility for planning or administration of solid waste.

(10) The term “interstate agency” means an agency of two or more municipalities in different States, or an agency established by two or more States, with authority to provide for the management of solid wastes and serving two or more municipalities located in different States.

(11) The term “long-term contract” means, when used in relation to solid waste supply, a contract of sufficient duration to assure the viability of a resource recovery facility (to the extent that such viability depends upon solid waste supply).

(12) The term “manifest” means the form used for identifying the quantity, composition, and the origin, routing, and destination of hazardous waste during its transportation from the point of generation to the point of disposal, treatment, or storage.

(13) The term “municipality” (A) means a city, town, borough, county, parish, district, or other public body created by or pursuant to State law, with responsibility for the planning or administration of solid waste management, or an Indian tribe or authorized tribal organization or Alaska Native village or organization, and (B) includes any rural community or unincorporated town or village or any other public entity for which an application for assistance is made by a State or political subdivision thereof.

(14) The term “open dump” means any facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated

under section 4004 [42 USC § 6944] and which is not a facility for disposal of hazardous waste.

(15) The term “person” means an individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body and shall include each department, agency, and instrumentality of the United States.

(16) The term “procurement item” means any device, good, substance, material, product, or other item whether real or personal property which is the subject of any purchase, barter, or other exchange made to procure such item.

(17) The term “procuring agency” means any Federal agency, or any State agency or agency of a political subdivision of a State which is using appropriated Federal funds for such procurement, or any person contracting with any such agency with respect to work performed under such contract.

(18) The term “recoverable” refers to the capability and likelihood of being recovered from solid waste for a commercial or industrial use.

(19) The term “recovered material” means waste material and byproducts which have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process.

(20) The term “recovered resources” means material or energy recovered from solid waste.

(21) The term “resource conservation” means reduction of the amounts of solid waste that are generated, reduction of overall resource consumption, and utilization of recovered resources.

(22) The term “resource recovery” means the recovery of material or energy from solid waste.

(23) The term “resource recovery system” means a solid waste management system which provides for collection, separation, recycling, and recovery of solid wastes, including disposal of nonrecoverable waste residues.

(24) The term “resource recovery facility” means any facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse.

(25) The term “regional authority” means the authority established or designated under section 4006 [42 USC § 6946].

(26) The term “sanitary landfill” means a facility for the disposal of solid waste which meets the criteria published under section 4004 [42 USC § 6944].

(26A) The term “sludge” means any solid, semisolid or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effects.

(27) The term “solid waste” means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880) [33 USC § 1342], or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 USC §§ 2011 et seq.].

(28) The term “solid waste management” means the systematic administration of activities which provide for the collection, source separation, storage, transportation, transfer, processing, treatment, and disposal of solid waste.

(29) The term “solid waste management facility” includes—

(A) any resource recovery system or component thereof,

(B) any system, program, or facility for resource conservation, and

(C) any facility for the collection, source separation, storage, transportation, transfer, processing, treatment or disposal of solid wastes, including hazardous wastes, whether such facility is associated with facilities generating such wastes or otherwise.

(30) The terms “solid waste planning”, “solid waste management”, and “comprehensive planning” include planning or management respecting resource recovery and resource conservation.

(31) The term “State” means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

(32) The term “State authority” means the agency established or designated under section 4007 [42 USC § 6947].

(33) The term “storage”, when used in connection with hazardous waste, means the containment of hazardous waste, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of such hazardous waste.

(34) The term “treatment”, when used in connection with hazardous waste, means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous.

(35) The term “virgin material” means a raw material, including previously unused copper, aluminum, lead, zinc, iron, or other metal or metal ore, any undeveloped resource that is, or with new technology will become, a source of raw materials.

(36) The term “used oil” means any oil which has been—

(A) refined from crude oil,

(B) used, and

(C) as a result of such use, contaminated by physical or chemical impurities.

(37) The term “recycled oil” means any used oil which is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes oil which is re-refined, reclaimed, burned, or reprocessed.

(38) The term “lubricating oil” means the fraction of crude oil which is sold for purposes of reducing friction in any industrial or mechanical device. Such term includes re-refined oil.

(39) The term “re-refined oil” means used oil from which the physical and chemical contaminants acquired through previous use have been removed through a refining process.

(40) Except as otherwise provided in this paragraph, the term “medical waste” means any solid waste which is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals. Such term does not include any hazardous waste identified or listed under subtitle C [42 USC §§ 6921 et seq.] or any household waste as defined in regulations under subtitle C [42 USC §§ 6921 et seq.].

(41) The term “mixed waste” means waste that contains both hazardous waste and source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.)

42 U.S.C. § 6921. IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

(a) Criteria for identification or listing. Not later than eighteen months after the date of the enactment of this Act [enacted Oct. 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 subtitle [42 USC §§ 6921 et seq.], 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.

(1) Not later than eighteen months after the date of enactment of this section [enacted Oct. 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 1004(5) [42 USC § 6903(5)]), which shall be subject to the provisions of this subtitle [42 USC §§ 6921 et seq.]. Such regulations shall be based on the criteria promulgated under subsection (a) and shall be revised from time to time thereafter as may be appropriate. The Administrator, in cooperation with the

Agency for Toxic Substances and Disease Registry and the National Toxicology Program, shall also identify or list those hazardous wastes which shall be subject to the provisions of this subtitle [42 USC §§ 6921 et seq.] solely because of the presence in such wastes of certain constituents (such as identified carcinogens, mutagens, or teratagens [teratogens]) at levels in excess of levels which endanger human health.

(2)

(A) Notwithstanding the provisions of paragraph (1) of this subsection, drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy shall be subject only to existing State or Federal regulatory programs in lieu of subtitle C [42 USC §§ 6921 et seq.] until at least 24 months after the date of enactment of the Solid Waste Disposal Act Amendments of 1980 [Oct. 21, 1980] and after promulgation of the regulations in accordance with subparagraphs (B) and (C) of this paragraph. It is the sense of the Congress that such State or Federal programs should include, for waste disposal sites which are to be closed, provisions requiring at least the following:

(i) The identification through surveying, platting, or other measures, together with recordation of such information on the public record, so as to assure that the location where such wastes are disposed of can be located in the future; except however, that no such surveying, platting, or other measure identifying the location of a disposal site for drilling fluids and associated wastes shall be required if the distance from the disposal site to the surveyed or platted location to the associated well is less than two hundred lineal feet; and

(ii) A chemical and physical analysis of a produced water and a composition of a drilling fluid suspected to contain a hazardous material, with such information to be acquired prior to closure and to be placed on the public record.

(B) Not later than six months after completion and submission of the study required by section 8002(m) of this Act [42 USC § 6982(m)], the Administrator shall, after public hearings and opportunity for comment, determine either to promulgate regulations under this subtitle [42 USC §§ 6921 et seq.] for drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy or that such regulations are unwarranted. The Administrator shall publish his decision in the Federal Register accompanied by an explanation and justification of the

reasons for it. In making the decision under this paragraph, the Administrator shall utilize the information developed or accumulated pursuant to the study required under section 8002(m) [42 USC § 6982(m)].

(C) The Administrator shall transmit his decision, along with any regulations, if necessary, to both Houses of Congress. Such regulations shall take effect only when authorized by Act of Congress.

(3)

(A) Notwithstanding the provisions of paragraph (1) of this subsection, each waste listed below shall, except as provided in subparagraph (B) of this paragraph, be subject only to regulation under other applicable provisions of Federal or State law in lieu of this subtitle [42 USC §§ 6921 et seq.] until at least six months after the date of submission of the applicable study required to be conducted under subsection (f), (n), (o), or (p) of section 8002 of this Act [42 USC § 6982(f), (n), (o), or (p)] and after promulgation of regulations in accordance with subparagraph (C) of this paragraph:

(i) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels.

(ii) Solid waste from the extraction, beneficiation, and processing of ores and minerals, including phosphate rock and overburden from the mining of uranium ore.

(iii) Cement kiln dust waste.

(B)

(i) Owners and operators of disposal sites for wastes listed in subparagraph (A) may be required by the Administrator, through regulations prescribed under authority of section 2002 of this Act [42 USC § 6912]—

(I) as to disposal sites for such wastes which are to be closed, to identify the locations of such sites through surveying, platting, or other measures, together with recordation of such information on the public record, to assure that the locations where such wastes are disposed of are known and can be located in the future, and

(II) to provide chemical and physical analysis and composition of such wastes, based on available information, to be placed on the public record.

(ii)

(I) In conducting any study under subsection (f), (n), (o), or (p), of section 8002 of this Act [42 USC § 6982(f), (n), (o), or (p)], any officer, employee, or authorized representative of the Environmental Protection Agency, duly designated by the Administrator, is authorized, at reasonable times and as reasonably necessary for the purposes of such study, to enter any establishment where any waste subject to such study is generated, stored, treated, disposed of, or transported from; to inspect, take samples, and conduct monitoring and testing; and to have access to and copy records relating to such waste. Each such inspection shall be commenced and completed with reasonable promptness. If the officer, employee, or authorized representative obtains any samples prior to leaving the premises, he shall give to the owner, operator, or agent in charge a receipt describing the sample obtained and if requested a portion of each such sample equal in volume or weight to the portion retained. If any analysis is made of such samples, or monitoring and testing performed, a copy of the results shall be furnished promptly to the owner, operator, or agent in charge.

(II) Any records, reports, or information obtained from any person under subclause (I) shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that records, reports, or information, or particular part thereof, to which the Administrator has access under this subparagraph if made public, would divulge information entitled to protection under section 1905 of title 18 of the United States Code, the Administrator shall consider such information or particular portion thereof confidential in accordance with the purposes of that section, except that such record, report, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act [42 USC §§ 6901 et seq.]. Any person not subject to the provisions of section 1905 of title 18 of the United States Code who knowingly and willfully divulges or discloses any information entitled to protection under this subparagraph shall, upon conviction, be subject to a fine of not more than $5,000 or to imprisonment not to exceed one year, or both.

(iii) The Administrator may prescribe regulations, under the authority of this Act [42 USC §§ 6901 et seq.], to prevent radiation exposure which presents an unreasonable risk to human health from the use in construction or land reclamation (with or without revegetation) of (I) solid waste from the extraction, beneficiation, and processing of phosphate rock or (II) overburden from the mining of uranium ore.

(iv) Whenever on the basis of any information the Administrator determines that any person is in violation of any requirement of this subparagraph, the Administrator shall give notice to the violator of his failure to comply with such requirement. If such violation extends beyond the thirtieth day after the Administrator's notification, the Administrator may issue an order requiring compliance within a specified time period or the Administrator may commence a civil action in the United States district court in the district in which the violation occurred for appropriate relief, including a temporary or permanent injunction.

(C) Not later than six months after the date of submission of the applicable study required to be conducted under subsection (f), (n), (o), or (p), of section 8002 of this Act [42 USC § 6982(f), (n), (o), or (p)], the Administrator shall, after public hearings and opportunity for comment, either determine to promulgate regulations under this subtitle [42 USC §§ 6921 et seq.] for each waste listed in subparagraph (A) of this paragraph or determine that such regulations are unwarranted. The Administrator shall publish his determination, which shall be based on information developed or accumulated pursuant to such study, public hearings, and comment, in the Federal Register accompanied by an explanation and justification of the reasons for it.

(c) Petition by State Governor. At any time after the date eighteen months after the enactment of this title [enacted Oct. 21, 1976], the Governor of any State may petition the Administrator to identify or list a material as a hazardous waste. The Administrator shall act upon such petition within ninety days following his receipt thereof and shall notify the Governor of such action. If the Administrator denies such petition, because of financial considerations, in providing such notice to the Governor he shall include a statement concerning such considerations.

(d) Small quantity generator waste.

(1) By March 31, 1986, the Administrator shall promulgate standards under sections 3002, 3003, and 3004 [42 USC §§ 6922, 6923, and 6924] for hazardous waste generated by a generator in a total quantity of hazardous waste greater than one hundred kilograms but less than one thousand kilograms during a calendar month.

(2) The standards referred to in paragraph (1), including standards applicable to the legitimate use, reuse, recycling, and reclamation of such wastes, may vary from the standards applicable to hazardous waste generated by larger quantity generators, but such standards shall be sufficient to protect human health and the environment.

(3) Not later than two hundred and seventy days after the enactment of the Hazardous and Solid Waste Amendments of 1984 [Nov. 8, 1984] any hazardous waste which is part of a total quantity generated by a generator generating greater than one hundred kilograms but less than one thousand kilograms during one calendar month and which is shipped off the premises on which such waste is generated shall be accompanied by a copy of the Environmental Protection Agency Uniform Hazardous Waste Manifest form signed by the generator. This form shall contain the following information:

(A) the name and address of the generator of the waste;

(B) the United States Department of Transportation description of the waste, including the proper shipping name, hazard class, and identification number (UN/NA), if applicable;

(C) the number and type of containers;

(D) the quantity of waste being transported; and

(E) the name and address of the facility designated to receive the waste.

If subparagraph (B) is not applicable, in lieu of the description referred to in such subparagraph (B), the form shall contain the Environmental Protection Agency identification number, or a generic description of the waste, or a description of the waste by hazardous waste characteristic. Additional requirements related to the manifest form shall apply only if determined necessary by the Administrator to protect human health and the environment.

(4) The Administrator's responsibility under this subtitle [42 USC §§ 6921 et seq.] to protect human health and the environment may require the promulgation of standards under this subtitle [42 USC §§ 6921 et seq.] for hazardous wastes which are generated by any generator who does not generate more than one hundred kilograms of hazardous waste in a calendar month.

(5) Until the effective date of standards required to be promulgated under paragraph (1), any hazardous waste identified or listed under this section generated by any generator during any calendar month in a total quantity greater than one hundred kilograms but less than one thousand kilograms, which is not treated, stored, or disposed of at a hazardous waste treatment, storage, or disposal facility with a permit under section 3005 [42 USC § 6925], shall be disposed of only in a

facility which is permitted, licensed, or registered by a State to manage municipal or industrial solid waste.

(6) Standards promulgated as provided in paragraph (1) shall, at a minimum, require that all treatment, storage, or disposal of hazardous wastes generated by generators referred to in paragraph (1) shall occur at a facility with interim status or a permit under this subtitle [42 USC §§ 6921 et seq.], except that onsite storage of hazardous waste generated by a generator generating a total quantity of hazardous waste greater than one hundred kilograms, but less than one thousand kilograms during a calendar month, may occur without the requirement of a permit for up to one hundred and eighty days. Such onsite storage may occur without the requirement of a permit for not more than six thousand kilograms for up to two hundred and seventy days if such generator must ship or haul such waste over two hundred miles.

(7)

(A) Nothing in this subsection shall be construed to affect or impair the validity of regulations promulgated by the Secretary of Transportation pursuant to the Hazardous Materials Transportation Act [49 USC §§ 5101 et seq.].

(B) Nothing in this subsection shall be construed to affect, modify, or render invalid any requirements in regulations promulgated prior to January 1, 1983 applicable to any acutely hazardous waste identified or listed under section 3001 [this section] which is generated by any generator during any calendar month in a total quantity less than one thousand kilograms.

(8) Effective March 31, 1986, unless the Administrator promulgates standards as provided in paragraph (1) of this subsection prior to such date, hazardous waste generated by any generator in a total quantity greater than one hundred kilograms but less than one thousand kilograms during a calendar month shall be subject to the following requirements until the standards referred to in paragraph (1) of this subsection have become effective:

(A) the notice requirements of paragraph (3) of this subsection shall apply and in addition, the information provided in the form shall include the name of the waste transporters and the name and address of the facility designated to receive the waste;

(B) except in the case of the onsite storage referred to in paragraph (6) of this subsection, the treatment, storage, or disposal of such waste shall occur at a facility with interim status or a permit under this subtitle [42 USC §§ 6921 et seq.];

(C) generators of such waste shall file manifest exception reports as required of generators producing greater amounts of hazardous waste per month except that such reports shall be filed by January 31, for any waste shipment occurring in the last half of the preceding calendar year, and by July 31, for any waste shipment occurring in the first half of the calendar year; and

(D) generators of such waste shall retain for three years a copy of the manifest signed by the designated facility that has received the waste.

Nothing in this paragraph shall be construed as a determination of the standards appropriate under paragraph (1).

(9) The last sentence of section 3010(b) [42 USC § 6930(b)] shall not apply to regulations promulgated under this subsection.

(e) Specified wastes.

(1) Not later than 6 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 [enacted Nov. 8, 1984], the Administrator shall, where appropriate, list under subsection (b)(1), additional wastes containing chlorinated dioxins or chlorinated-dibenzofurans. Not later than one year after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 [enacted Nov. 8, 1984], the Administrator shall, where appropriate, list under subsection (b)(1) wastes containing remaining halogenated dioxins and halogenated-dibenzofurans.

(2) Not later than fifteen months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 [enacted Nov. 8, 1984], the Administrator shall make a determination of whether or not to list under subsection (b)(1) the following wastes: Chlorinated Aliphatics, Dioxin, Dimethyl Hydrazine, TDI (toluene diisocyanate), Carbamates, Bromacil, Linuron, Organo-bromines, solvents, refining wastes, chlorinated aromatics, dyes and pigments, inorganic chemical industry wastes, lithium batteries, coke byproducts, paint production wastes, and coal slurry pipeline effluent.

(f) Delisting procedures.

(1) When evaluating a petition to exclude a waste generated at a particular facility from listing under this section, the Administrator shall consider factors (including additional constituents) other than those for which the waste was listed if the Administrator has a reasonable basis to believe that such additional factors could cause the waste to be a hazardous waste. The Administrator shall provide notice and opportunity for comment on these additional factors before granting or denying such petition.

(2)

(A) To the maximum extent practicable the Administrator shall publish in the Federal Register a proposal to grant or deny a petition referred to in paragraph (1) within twelve months after receiving a complete application to exclude a waste generated at a particular facility from being regulated as a hazardous waste and shall grant or deny such a petition within twenty-four months after receiving a complete application.

(B) The temporary granting of such a petition prior to the enactment of the Hazardous and Solid Waste Amendments of 1984 [enacted Nov. 8, 1984] without the opportunity for public comment and the full consideration of such comments shall not continue for more than twenty-four months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 [enacted Nov. 8, 1984]. If a final decision to grant or deny such a petition has not been promulgated after notice and opportunity for public comment within the time limit prescribed by the preceding sentence, any such temporary granting of such petition shall cease to be in effect.

(g) EP Toxicity. Not later than twenty-eight months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 [enacted Nov. 8, 1984] the Administrator shall examine the deficiencies of the extraction procedure toxicity characteristic as a predictor of the leaching potential of wastes and make changes in the extraction procedure toxicity characteristic, including changes in the leaching media, as are necessary to insure that it accurately predicts the leaching potential of wastes which pose a threat to human health and the environment when mismanaged.

(h) Additional characteristics. Not later than two years after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 [enacted Nov. 8, 1984], the Administrator shall promulgate regulations under this section identifying

additional characteristics of hazardous waste, including measures or indicators of toxicity.

(i) Clarification of household waste exclusion. A resource recovery facility recovering energy from the mass burning of municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this subtitle [42 USC §§ 6921 et seq.], if—

(1) such facility—

(A) receives and burns only—

(i) household waste (from single and multiple dwellings, hotels, motels, and other residential sources), and

(ii) solid waste from commercial or industrial sources that does not contain hazardous waste identified or listed under this section, and

(B) does not accept hazardous wastes identified or listed under this section, and

(2) the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

(j) Methamphetamine production. Not later than every 24 months, the Administrator shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Environment and Public Works of the Senate a report setting forth information collected by the Administrator from law enforcement agencies, States, and other relevant stakeholders that identifies the byproducts of the methamphetamine production process and whether the Administrator considers each of the byproducts to be a hazardous waste pursuant to this section and relevant regulations.

42 U.S.C. § 6974. PETITION FOR REGULATIONS; PUBLIC PARTICIPATION

(a) Petition. Any person may petition the Administrator for the promulgation, amendment, or repeal of any regulation under this Act [42 USC §§ 6901 et seq.]. Within a reasonable time following receipt of such petition, the Administrator shall take action with respect to such petition and shall publish notice of such action in the Federal Register, together with the reasons therefor.

(b) Public participation.

(1) Public participation in the development, revision, implementation, and enforcement of any regulation, guideline, information, or program under this Act [42 USC §§ 6901 et seq.] shall be provided for, encouraged, and assisted by the Administrator and the States. The Administrator, in cooperation with the States, shall develop and publish minimum guidelines for public participation in such processes.

(2) Before the issuing of a permit to any person with any respect to any facility for the treatment, storage, or disposal of hazardous wastes under section 3005 [42 USC § 6925], the Administrator shall—

(A) cause to be published in major local newspapers of general circulation and broadcast over local radio stations notice of the agency's intention to issue such permit, and

(B) transmit in writing notice of the agency's intention to issue such permit to each unit of local government having jurisdiction over the area in which such facility is proposed to be located and to each State agency having any authority under State law with respect to the construction or operation of such facility.

If within 45 days the Administrator receives written notice of opposition to the agency's intention to issue such permit and a request for a hearing, or if the Administrator determines on his own initiative, he shall hold an informal public hearing (including an opportunity for presentation of written and oral views) on whether he should issue a permit for the proposed facility. Whenever possible the Administrator shall schedule such hearing at a location convenient to the nearest population center to such proposed facility and give notice in the aforementioned manner of the date, time, and subject matter of such hearing. No State program which provides for the issuance of permits referred to in this paragraph may be authorized by the Administrator under section 3006 [42 USC § 6926] unless such program provides for the notice and hearing required by the paragraph.

42 U.S.C. § 6976. JUDICIAL REVIEW

(a) Review of final regulations and certain petitions. Any judicial review of final regulations promulgated pursuant to this Act and the Administrator's denial of any petition for the promulgation, amendment, or repeal of any regulation under this Act [42 USC §§ 6901 et seq.] shall be in accordance with sections 701 through 706 of title 5 of the United States Code, except that—

(1) a petition for review of action of the Administrator in promulgating any regulation, or requirement under this Act [42 USC §§ 6901 et seq.] or denying any petition for the promulgation, amendment or repeal of any regulation under this Act [42 USC §§ 6901 et seq.] may be filed only in the United States Court of Appeals for the District of Columbia, and such petition shall be filed within ninety days from the date of such promulgation or denial, or after such date if such petition for review is based solely on grounds arising after such ninetieth day; action of the Administrator with respect to which review could have been obtained under this subsection shall not be subject to judicial review in civil or criminal proceedings for enforcement; and

(2) in any judicial proceeding brought under this section in which review is sought of a determination under this Act [42 USC §§ 6901 et seq.] required to be made on the record after notice and opportunity for hearing, if a party seeking review under this Act [42 USC §§ 6901 et seq.] applies to the court for leave to adduce additional evidence, and shows to the satisfaction of the court that the information is material and that there were reasonable grounds for the failure to adduce such evidence in the proceeding before the Administrator, the court may order such additional evidence (and evidence in rebuttal thereof) to be taken before the Administrator, and to be adduced upon the hearing in such manner and upon such terms and conditions as the court may deem proper; the Administrator may modify his findings as to the facts, or make new findings, by reason of the additional evidence so taken, and he shall file with the court such modified or new findings and his recommendation, if any, for the modification or setting aside of his original order, with the return of such additional evidence.

(b) Review of certain actions under 42 USC §§ 6925 and 6926. Review of the Administrator's action (1) in issuing, denying, modifying, or revoking any permit under section 3005 [42 USC § 6925] (or in modifying or revoking any permit which is deemed to have been issued under section 3012(d)(1)), or (2) in granting, denying, or withdrawing authorization or interim authorization under section 3006 [42 USC § 6926], may be had by any interested person in the Circuit Court of Appeals of the United States for the Federal judicial district in which such person resides or transacts such business upon application by such person. Any such application shall be made within ninety days from the date of such issuance, denial, modification, revocation, grant, or withdrawal, or after such date only if such application is based solely on grounds which arose after such ninetieth day. Action of the Administrator with respect to which review could have been obtained under

this subsection shall not be subject to judicial review in civil or criminal proceedings for enforcement. Such review shall be in accordance with sections 701 through 706 of title 5 of the United States Code.

40 C.F.R. § 260.20: GENERAL

(a) Any person may petition the Administrator to modify or revoke any provision in parts 260 through 266, 268 and 273 of this chapter. This section sets forth general requirements which apply to all such petitions. Section 260.21 sets forth additional requirements for petitions to add a testing or analytical method to part 261, 264 or 265 of this chapter. Section 260.22 sets forth additional requirements for petitions to exclude a waste or waste-derived material at a particular facility from § 261.3 of this chapter or the lists of hazardous wastes in subpart D of part 261 of this chapter. Section 260.23 sets forth additional requirements for petitions to amend part 273 of this chapter to include additional hazardous wastes or categories of hazardous waste as universal waste.

(b) Each petition must be submitted to the Administrator by certified mail and must include:

(1) The petitioner's name and address;

(2) A statement of the petitioner's interest in the proposed action;

(3) A description of the proposed action, including (where appropriate) suggested regulatory language; and

(4) A statement of the need and justification for the proposed action, including any supporting tests, studies, or other information.

(c) The Administrator will make a tentative decision to grant or deny a petition and will publish notice of such tentative decision, either in the form of an advanced notice of proposed rulemaking, a proposed rule, or a tentative determination to deny the petition, in the Federal Register for written public comment.

(d) Upon the written request of any interested person, the Administrator may, at his discretion, hold an informal public hearing to consider oral comments on the tentative decision. A person requesting a hearing must state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The Administrator may in any case decide on his own motion to hold an informal public hearing.

(e) After evaluating all public comments the Administrator will make a final decision by publishing in the FEDERAL REGISTER a regulatory amendment or a denial of the petition.

40 C.F.R. § 261.10 CRITERIA FOR IDENTIFYING THE CHARACTERISTICS OF HAZARDOUS WASTE.

(a) The Administrator shall identify and define a characteristic of hazardous waste in subpart C only upon determining that:

(1) A solid waste that exhibits the characteristic may:

(i) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(ii) Pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed; and

(2) The characteristic can be:

(i) Measured by an available standardized test method which is reasonably within the capability of generators of solid waste or private sector laboratories that are available to serve generators of solid waste; or

(ii) Reasonably detected by generators of solid waste through their knowledge of their waste.

40 C.F.R. § 261.11: Criteria for listing hazardous waste.

(a) The Administrator shall list a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria:

(1) It exhibits any of the characteristics of hazardous waste identified in subpart C.

(2) It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than 50 milligrams per kilogram, an inhalation LC 50 toxicity (rat) of less than 2 milligrams per liter, or a dermal LD 50 toxicity (rabbit) of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. (Waste listed in accordance with these criteria will be designated Acute Hazardous Waste.)

(3) It contains any of the toxic constituents listed in appendix VIII and, after considering the following factors, the Administrator concludes that the waste is 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:

(i) The nature of the toxicity presented by the constituent.

(ii) The concentration of the constituent in the waste.

(iii) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in paragraph (a)(3)(vii) of this section.

(iv) The persistence of the constituent or any toxic degradation product of the constituent.

(v) The potential for the constituent or any toxic degradation product of the constituent to degrade into non-harmful constituents and the rate of degradation.

(vi) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems.

(vii) The plausible types of improper management to which the waste could be subjected.

(viii) The quantities of the waste generated at individual generation sites or on a regional or national basis.

(ix) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent.

(x) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent.

(xi) Such other factors as may be appropriate.

Substances will be listed on appendix VIII only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms.

(Wastes listed in accordance with these criteria will be designated Toxic wastes.)

(b) The Administrator may list classes or types of solid waste as hazardous waste if he has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in section 1004(5) of the Act.

(c) The Administrator will use the criteria for listing specified in this section to establish the exclusion limits referred to in § 261.5(c).

40 C.F.R. § 261.21: CHARACTERISTIC OF IGNITABILITY.

(a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

(1) It is a liquid, other than a solution containing less than 24 percent alcohol by volume and at least 50 percent water by weight, that has a flash point less than 60 °C (140 °F), as determined by using one of the following ASTM standards: ASTM D93–79, D93–80, D3278–78, D8174–18, or D8175–18 as specified in SW–846 Test Methods 1010B or 1020C (all incorporated by reference, see § 260.11 of this subchapter).

(2) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

(3) It is an ignitable compressed gas.

(i) The term “compressed gas” shall designate any material or mixture having in the container an absolute pressure exceeding 40 p.s.i. at 70° F or, regardless of the pressure at 70° F, having an absolute pressure exceeding 104 p.s.i. at 130° F; or any liquid flammable material having a vapor pressure exceeding 40 p.s.i. absolute at 100° F as determined by ASTM Test D-323.

(ii) A compressed gas shall be characterized as ignitable if any one of the following occurs:

(A) Either a mixture of 13 percent or less (by volume) with air forms a flammable mixture or the flammable range with air is wider than 12 percent regardless of the lower limit. These limits shall be determined at atmospheric temperature and

pressure. The method of sampling and test procedure shall be the ASTM E 681–85 (incorporated by reference, see § 260.11 of this subchapter), or other equivalent methods approved by the Associate Administrator, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation.

(B) It is determined to be flammable or extremely flammable using 49 CFR 173.115(l).

(4) It is an oxidizer. An oxidizer for the purpose of this subchapter is a substance such as a chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter.

(i) An organic compound containing the bivalent -O-O- structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals must be classed as an organic peroxide unless:

(A) The material meets the definition of a Division 1.1, 1.2, or 1.3 explosive, as defined in § 261.23(a)(8), in which case it must be classed as an explosive,

(B) The material is forbidden to be offered for transportation according to 49 CFR 172.101 and 49 CFR 173.21,

(C) It is determined that the predominant hazard of the material containing an organic peroxide is other than that of an organic peroxide, or

(D) According to data on file with the Pipeline and Hazardous Materials Safety Administration in the U.S. Department of Transportation, it has been determined that the material does not present a hazard in transportation.

(b) A solid waste that exhibits the characteristic of ignitability has the EPA Hazardous Waste Number of D001.

40 C.F.R. § 261.22: CHARACTERISTIC OF CORROSIVITY

(a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:

(1) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using Method 9040C in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW-846, as incorporated by reference in § 260.11 of this chapter.

(2) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55° C (130° F) as determined by Method 1110A in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW-846, and as incorporated by reference in § 260.11 of this chapter.

(b) A solid waste that exhibits the characteristic of corrosivity has the EPA Hazardous Waste Number of D002.

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Public Employees for Environmental Responsibility,

Petitioner

v. No. 21-1187

Environmental Protection Agency,

Respondent

On Petition for Review of a Final Order of the Environmental Protection Agency

DECLARATION OF PAULA DINERSTEIN

I, Paula Dinerstein, hereby declare as follows:

1. I am the General Counsel for Petitioner Public Employees for Environmental Responsibility ("PEER") and PEER's counsel in this case. I make this declaration in support of PEER's Petition for Review of a Final Order of the Environmental Protection Agency (EPA).
2. PEER is a non-profit corporation which serves public employees at all levels of government who are facing environmental problems. PEER's mission is reflected in its Articles of Incorporation and By-Laws. True and correct copies of these documents are attached as Ex. A and Ex. B hereto.

3. PEER's Articles of Incorporation and By-Laws reflect that its purposes include educating government agencies and the public about environmental ethics, assisting those in government who speak out on behalf of environmental ethics, and assisting those in government who dissent for ethical reasons. Ex. A, p. 1, No. 3; Ex. B, p. 1, Article 2.
4. PEER furthered these purposes by filing the petition that is at issue in this case and bringing this appeal.
5. Beginning in 2011, PEER represented an EPA whistleblower, Dr. Cate Jenkins, who disclosed, among other things, facts relating to EPA's corrosivity characteristic regulation and its consequences to Congress and the FBI. PEER also represented Dr. Jenkins in whistleblower litigation concerning her employment at EPA before the Merit Systems Protection Board and the Department of Labor Office of Administrative Law Judges.
6. PEER' s organizational model is to facilitate public employees and others to bring environmental issues to PEER and allowing PEER to engage in advocacy and litigation concerning those issues. This is what PEER did here in filing the petition with Dr. Jenkins and now appealing its denial. PEER's members and supporters who are affected by environmental harms caused by government action and inaction benefit from the unique

expertise of public employee whistleblowers like Dr. Jenkins who work with PEER.

7. On September 8, 2011, PEER, along with Dr. Jenkins, submitted a petition for rulemaking seeking to have the EPA amend its Corrosivity Characteristic regulation so that corrosive materials with a pH of 11.5 to 12.5 would be covered by the hazardous characteristic. That petition was denied in a final order of the EPA on June 15, 2021.
8. The petition to EPA and this petition for review of its denial were brought as part of PEER's work on behalf of its members and in furtherance of the environmental concern originally brought to PEER by Dr. Jenkins in keeping with PEER's organizational purposes.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 20th day of December, 2021, in Silver Spring, Maryland.

Paula Dinerstein

Paula Dinerstein

Exhibit A

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS
BUSINESS REGULATION ADMINISTRATION

THIS IS TO CERTIFY that the pages attached hereto constitute a full, true and complete copy of:

CERTIFICATE AND ARTICLES OF INCORPORATION OF

PUBLIC EMPLOYEES FOR ENVIRONMENTAL RESPONSIBILITY, INC.

AS RECEIVED AND FILED ON DECEMBER 21, 1992.

as the same appears of record in this office.

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the seal of this office to be affixed, this the 21ST day of DECEMBER, 1992.

Joan Parrott-Fonseca
Deputy Director

Barry K. Campbell
Acting Administrator
Business Regulation Administration

PATRICIA E. GRAYS
Assistant Superintendent of Corporations
Corporations Division

Government of the District of Columbia
Sharon Pratt Kelly, Mayor

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS
BUSINESS REGULATION ADMINISTRATION

C E R T I F I C A T E

THIS IS TO CERTIFY that there were received and accepted for record in the Department of Consumer and Regulatory Affairs, Corporations Division, on the 21ST day of DECEMBER, 1992, Articles of Incorporation of:

PUBLIC EMPLOYEES FOR ENVIRONMENTAL RESPONSIBILITY, INC.

The above named corporation is duly incorporated and existing pursuant to and by virtue of the Nonprofit Corporation Act of the District of Columbia and authorized to conduct its affairs in the District of Columbia as of the date mentioned above.

WE FURTHER CERTIFY that the above entitled corporation is at the time of issuance of this certificate in Good Standing, according to the records of the Corporations Division, having filed all annual reports required by the District of Columbia Nonprofit Corporation Act.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of this office to be affixed this 21ST day of DECEMBER, 1992 .

Joan Parrott-Fonseca
Deputy Director

Barry K. Campbell
Acting Administrator
Business Regulation Administration

Assistant Patricia E. Grays
Superintendent of Corporations
Corporations Division

Sharon Pratt Kelly
Mayor

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS
BUSINESS REGULATION ADMINISTRATION

C E R T I F I C A T E

THIS IS TO CERTIFY that all applicable provisions of the DISTRICT OF COLUMBIA NONPROFIT CORPORATION ACT have been complied with and accordingly, this CERTIFICATE of INCORPORATION is hereby issued to

PUBLIC EMPLOYEES FOR ENVIRONMENTAL RESPONSIBILITY, INC.

as of DECEMBER 21ST , 1992 .

Joan Parrott-Fonseca
Deputy Director

Barry K. Campbell
Acting Administrator
Business Regulation Administration

Patricia E. Grays
Assistant Superintendent of Corporations
Corporations Division

Sharon Pratt Kelly
Mayor

PUBLIC EMPLOYEES FOR ENVIRONMENTAL RESPONSIBILITY, INC.

ARTICLES OF INCORPORATION

Under the District of Columbia
Nonprofit Corporation Act

FILED
21 DEC 1992
BY:

The undersigned incorporators, desiring to form a corporation under the District of Columbia Nonprofit Corporation Act, as amended and as it may be amended or revised (hereinafter "the Act") do hereby certify:

1. Name. The Corporation's name is Public Employees for Environmental Responsibility, Inc.

2. Duration. The period of duration is perpetual.

3. Purpose and activities. The Corporation (a) is organized exclusively for charitable, educational, scientific, literary, and religious purposes, including (without limitation), to educate employees of government resource management and environmental protection agencies nationwide, and the public, about environmental ethics, to assist those who speak out on behalf of environmental ethics, and to protect the integrity of individual employees and scientists within the government who dissent for ethical reasons; (b) may engage in all activities permitted by the Act incidental to or in furtherance of those purposes, except as restricted herein; and (c) shall comply with the laws, rules, and regulations set forth in and promulgated pursuant to the Internal Revenue Code of 1954 (hereinafter "the Code")[1] and applicable to organizations

[1] All references in these Articles to the "Internal Revenue Code of 1954" or "the Code" shall be deemed to include both amendments to and statutes which succeed cited provisions (i.e. the corresponding provision(s) of any subsequent federal tax laws and

described in Sec. 501(c)(3), to which contributions are deductible under Sec. 170(c)(2), thereof.

4. Restrictions of a private foundation. To the extent required by Sec. 508(e)(1) of the Code and/or Sec. 29-531 of the Act, the Corporation:

(a) shall distribute its income for each taxable year at such time(s) and in such manner(s) as not to become subject to tax on undistributed income imposed by Sec. 4942 of the Code;

(b) shall not engage in any act of self-dealing which is taxable under Sec. 4941 of the Code;

(c) shall not retain any excess business holdings which would subject it to tax under Sec. 4943 of the Code;

(d) shall not make any investments which would subject it to tax under Sec. 4944 of the Code; and

(e) shall not make any taxable expenditures which would subject it to tax under Sec. 4945 of the Code.

5. Membership. The Corporation shall have no members.

6. Directors. The size and manner of election or appointment to the Corporation's Board of Directors shall be as provided in its Bylaws.

7. Application of Earnings. The Corporation shall issue no stock and its net earnings shall be devoted exclusively to

---

recodifications).

charitable, educational, scientific, literary, and religious purposes, as provided in Article 3 hereof, and no part thereof shall inure to the benefit of or be distributable to its directors, officers, or other private persons, except that the Corporation may pay reasonable compensation for services rendered and expenses incurred on its behalf, and may otherwise make payments and distributions in furtherance of the purposes set forth in Article 3 hereof.

8. Distribution on Dissolution. Upon dissolution of the Corporation, the Board of Directors shall distribute the assets of the Corporation as follows:

(a) All liabilities of the Corporation shall be paid, satisfied, and discharged, or adequate provision shall be made therefor;

(b) Assets held by the Corporation upon condition requiring return, transfer, or conveyance, which condition occurs by reason of the dissolution, shall be returned, transferred, or conveyed in accordance with such requirements;

(c) Assets received and held by the Corporation subject to limitations, permitting their use only for charitable, religious, eleemosynary, benevolent, educational, or similar purposes, but not held upon a condition requiring return, transfer, or conveyance by reason of the dissolution, shall be transferred or conveyed to one or

more domestic or foreign corporations, societies, or organizations engaged in activities substantially similar to those of the corporation's purposes as set forth in Article 3 hereof, pursuant to a plan of distribution adopted pursuant to the Act;

(d) Other assets, if any, shall be distributed by the Board of Directors in such a manner as it determines to be consistent with the Corporation's purposes as set forth in Article 3 hereof and with applicable provisions of law, either by direct distribution or by distribution to one or more organizations organized and operated exclusively for charitable, educational, scientific, literary, and religious purposes, as shall at the time qualify as tax exempt under Sec. 501(c)(3) of the Code.

9. Registered Agent and Office. The address of the Corporation's initial registered agent in the District of Columbia is Louis Clark and its initial registered office address is 810 First Street, NE, Suite 630, Washington, D.C. 20002-3633.

10. Initial Directors. The number of Directors constituting the initial Board of Directors is three and their respective names and addresses are:

Louis Clark	810 First Street, NE, Suite 630 Washington, D.C. 20002-3633
Jeffrey DeBonis	2490 1/2 Friendly Street Eugene, Oregon 97405

Donald Ross	1290 Avenue of the Americas Room 3450 New York, NY 10104

11. Incorporators. The names and addresses of the incorporators, each of whom is over 21 years of age, are:

Deborah H. Karpatkin	401 Broadway, Suite 1100 New York, New York 10013
Donald Ross	1290 Avenue of the Americas Room 3450 New York, NY 10104
Pamela Maurath	1290 Avenue of the Americas Room 3450 New York, NY 10104

Deborah H. Karpatkin

Donald Ross

Pamela Maurath

State of New York)
County of New York) ss.:

On this day there personally appeared before me Donald Ross and Pamela Maurath, two of the incorporators referred to in Article 11 of the foregoing Articles of Incorporation of the Public Employees for Environmental Responsibility, Inc., who acknowledged execution thereof and swore to or affirmed the truth of the facts therein stated.

Witness my hand and notarial seal this 3rd day of December, 1992.

Irene E. Sherrock
Notary Public

My Commission Expires:

IRENE E. SHERROCK
Notary Public, State of New York
No. 31-4638530
Qualified in New York County
Commission Expires March 30, 19.9.4

State of New York)
County of New York) ss.:

On this day there personally appeared before me Deborah H. Karpatkin, one of the incorporators referred to in Article 11 of the foregoing Articles of Incorporation of the Public Employees for Environmental Responsibility, Inc., who acknowledged execution thereof and swore to or affirmed the truth of the facts therein stated.

Witness my hand and notarial seal this 2 day of December, 1992.

Richard Sussman
Notary Public

My Commission Expires:

RICHARD SUSSMAN
Notary Public, State of New York
No. 31-4861904
Qualified in New York County
Commission Expires May 19, 1994

Exhibit B

BYLAWS
OF
PUBLIC EMPLOYEES FOR ENVIRONMENTAL RESPONSIBILITY

ARTICLE 1

OFFICES

Section 1. Offices. The principal office of Public Employees for Environmental Responsibility, Inc., hereafter referred to as PEER, **shall be located in the District of Columbia at 2001 S Street, NW, Suite 570, Washington, DC 20009**. This Corporation may have such other offices as the Board of Directors may determine are necessary from time to time.

> *Amendment duly adopted by the Board on October 15, 2015:* the bolded language will be changed effective February 1, 2016 to read: "**shall be located at 962 Wayne Avenue, Silver Spring, Maryland, 20910**."

Section 2. Registered Office. The Corporation shall have and continuously maintain in the District of Columbia a registered office and a registered agent whose office is identical with such registered office as required by the District of Columbia Nonprofit Corporation laws. The registered office may be, but need not be, identical with the principle office.

ARTICLE 2

PURPOSE

Section 1. General Purpose. The purposes of PEER are exclusively those of a charitable, religious, educational, or scientific organization under Sec. 501(c)(3) of the Internal Revenue Code.

Section 2. Specific Purpose. Within the limits of Article 2 Section 1 above, the specific purpose of PEER shall be:

To educate the public and employees of government resource management and environmental protection agencies nationwide about environmental ethics, to assist those who speak out on behalf of environmental ethics, and to protect the integrity of individual employees and scientists within the government who dissent for ethical reasons.

ARTICLE 3

MEMBERS

PEER shall have no members.

ARTICLE 4

BOARD OF DIRECTORS

Section 1. General Powers. The affairs of PEER shall be managed by its Board of Directors. The Board of Directors shall govern the activities, financial affairs, and property of PEER and may exercise all corporate powers available under its Bylaws, Articles of Incorporation and the laws of the District of Columbia.

Section 2. Board Members. The Board of Directors shall consist of between three (3) and eleven (11) Directors. The exact number of Directors, within this range, shall by fixed by resolution of the Board of Directors, and changed when necessary from time to time.

Section 3. Selection and Tenure. The Directors, other than the initial Directors, shall be elected annually by a majority vote of the Board of Directors in office at the time of the election, for a term of one (1) year, or until the election and qualification of their respective successors, except as hereinafter otherwise provided for filling vacancies. The election of all Directors shall take place annually, through a vote, at the annual Board of Directors' meeting. There shall be no limit to the number of terms a Director may serve.

Section 4. Quorum. At all meetings of the Board of Directors, a majority of the Directors shall constitute a quorum for the transaction of business. Unless a quorum is demanded by a Director, the Directors present may act.

Section 5. Voting. Each member of the Board of Directors shall have one vote. A majority vote of the members of the Board at any meeting at which a quorum is present is necessary and sufficient to make a decision of the Board of Directors of PEER, unless otherwise provided in these Bylaws.

Section 6. Removal of Directors. All or any number of Directors may be removed, with or without cause, at a meeting called expressly for that purpose, by a vote of a majority of those entitled to vote at an election of Directors.

Section 7. Vacancies. Any vacancy in the Board of Directors shall be filled by the remaining members of the Board without undue delay. A vacancy may be filled, whether created by an increase in the number of Director positions or other causes, by the majority vote of then-serving Directors, though they may constitute less than a quorum of the Board of Directors.

Section 8. Regular Meetings. Regular meetings of the Board of Directors shall be held, and once a year an annual Board of Directors' meeting shall be held for the purpose of electing new Directors and Officers and transacting any other business of the Corporation. Other regular meetings of the Board of Directors may be set by the Board of Directors.

Section 9. Special Meetings. Special meetings of the Board of Directors may be called by the President or any two members of the Board.

Section 10. Telephonic Meetings. When necessary, and when proper notice is given, meetings may be held by telephone conferences in which all participating Directors may simultaneously hear each other speak during the meeting. A Director participating in such a meeting is deemed present for purposes of a quorum.

Section 11. Conduct of Meetings. At all meetings of the Board of Directors, the President or Vice President, or in their absence a chairperson chosen by the Directors present, shall preside.

Section 12. Notice. Notice of the time and location of any meeting of the Board of Directors shall be given at least ten (10) days, but not more than sixty (60) days, prior to such meeting by written notice delivered either in person or by mailing it to the address for each director listed in the records of the Corporation. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail, so addressed, with first class postage paid. Neither the business to be transacted nor the purpose of any meeting of the Board need be specified in the notice or waiver of notice of such meetings, unless specifically required by law or by the Bylaws.

Section 13. Waiver of Notice. Any Director may waive notice of any meeting.

A. The attendance of a Director at any meeting shall constitute a waiver of notice of such meeting, except where a Director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened.

B. Whenever any notice is required to be given of any meeting, a waiver of that notice in writing and signed by the person or persons entitled to such notice, whether before or after the time of the meeting, shall be deemed to be equivalent of giving notice.

Section 14. Informal Action By Directors. Any action required by law to be taken at a meeting of Directors, or any action which may be taken at a meeting of Directors, may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the Directors.

Section 15. Compensation. Directors as such shall not receive any compensation for their services, but may be reimbursed by PEER for expenses incurred in performing those services.

ARTICLE 5

OFFICERS

Section 1. Officers. The officers of PEER shall be a President, one or more Vice Presidents (the number to be determined by the Board of Directors), a Secretary, a Treasurer, and such other officers as may be elected in accordance with this Article. Any two or more offices may be held by the same person, except the offices of President and Secretary.

Section 2. Election and Term of Office. The officers of PEER shall be elected annually by a majority vote of the Board of Directors, for a term of one year, at the annual meeting of the Board of Directors. Each officer shall hold office until his or her successor has been duly elected and qualified.

Section 3. Removal. Any Officer elected or appointed by the Board of Directors may be removed by the Board of Directors whenever in its judgment the best interests of PEER would be served thereby, but such removal shall be without prejudice to the contract rights, if any, of the officer so removed.

Section 4. Vacancies. If any office of PEER becomes vacant by death, resignation, retirement, disqualification, or any other cause, the majority of the Directors then in office, although less than a quorum, may elect or appoint an Officer to fill such vacancy, and the Officer so elected shall hold office for the unexpired portion of the term of that office.

Section 5. President. The President shall preside at all meetings of members of the Board of Directors. The president shall be the principal officer of PEER and shall in general supervise and control all of the affairs of PEER, and shall perform other duties as may be assigned to him or her by the Board of Directors. The President shall serve as an ex-officio member of all committees. The President may sign, with the Secretary or any other proper officer of PEER, authorized by the Board of Directors, any deeds, mortgages, bonds, contracts, or other instruments which the Board of Directors has authorized to be executed, except in cases where the signing and execution thereof is expressly delegated to some other officer or agent by the Board of Directors, by these Bylaws or by statute.

Section 6. Vice President. In the absence of the President or in the event of the President's inability or refusal to act, the Vice-President shall perform the duties of the President, and when so acting shall have all the powers of and be subject to all the restrictions upon the President. The Vice-President shall perform other such duties as from time to time may be assigned by the President or by the Board of Directors.

Section 7. Secretary. The Secretary shall keep the minutes of the meetings of the members of the Board of Directors in one or more books provided for that purpose; see that all notices are duly given in accordance with the provisions of these Bylaws or as required by law; be custodian of the corporate records; keep a register of the mailing address of each Board member which shall be provided by such Board member; and in general perform all duties incident to the office of Secretary and such other duties as from time to time may be assigned by the President or by the Board of Directors.

Section 8. Treasurer. The Treasurer shall have charge and custody of and be responsible for all funds and securities of PEER; receive and give receipts for moneys due and payable to PEER and deposit all such monies in the name of PEER in such banks or other depositories as shall be selected in accordance with these Bylaws; and shall oversee or conduct all financial transactions of PEER and in general perform all duties incident to the office of Treasurer and such other duties as from time to time may be assigned by the President or Board of Directors.

ARTICLE 6

INDEMNITY

PEER shall indemnify to the fullest extent permitted by law against all expenses and liabilities including reasonable counsel fee, any person who has been made, or is threatened to be made, a party to an action, suit or proceeding, whether civil, criminal, administrative, investigative, or otherwise (including an action, suit, or proceeding by or in the right of the Corporation), by reason of the fact that the person is or was a Director of Officer of PEER. Directors and Officers shall be indemnified to the fullest extent permitted by law against all such expenses and liabilities, whether or not still a Director of Officer at the time such expenses are incurred, except in such cases wherein the Director or Officer is adjudged guilty of willful misfeasance or malfeasance in the performance of his or her duties; provided that in the event of a settlement the indemnification herein shall apply only when the board approves such settlement and reimbursement as being for the best interest of PEER. The foregoing right of indemnification shall be in addition to and not exclusive of all other rights to which Directors and Officers of PEER may be entitled.

ARTICLE 7

COMPENSATION

No member of the Board of Directors shall receive any compensation for work performed in the course of fulfilling the responsibilities of a Director. The Board may allow reimbursement for unusual or burdensome costs incurred by Directors in the course of fulfilling their responsibilities. Directors may serve concurrently as Officers or employees of PEER and may be compensated for work in that capacity. PEER may pay compensation to its Officers or employees. Directors and Officers of PEER may enter into transactions or contracts with PEER or otherwise act on behalf of PEER, notwithstanding that they may also be acting as individuals, subject to the limitations of law, the Articles of Incorporation and these Bylaws regarding such dealings. All transactions of PEER involving the personal financial interests of Directors, Officers or employees shall be at arm's length. Directors shall disclose and declare any personal financial interests pertinent to specific matters before the Board of Directors, and where appropriate shall disqualify themselves from voting on matters affecting their personal financial interests.

ARTICLE 8

PROHIBITION AGAINST SHARING IN CORPORATE EARNINGS

No member, Director, Officer, or employee of or member of a committee or person connected with PEER, or any other private individual shall receive at any time any of the net earnings or pecuniary profit from the operation of PEER; provided, that this shall not prevent the payment to any such person of such reasonable compensation for services rendered to or for PEER in effecting any of its purposes as shall be fixed by the Board of Directors; and no such person or persons shall be entitled to share in the distribution of any of the corporate assets upon the dissolution of PEER.

ARTICLE 9

SHARES OF STOCK AND DIVIDENDS PROHIBITED

PEER shall not have or issue shares of stock. No dividends shall be paid and no part of the income of PEER shall be distributed to the members or Directors of PEER, except as compensation or reimbursement made in accordance with the law, Articles of Incorporation and Bylaws.

ARTICLE 10

NEGOTIABLE INSTRUMENTS

All bonds, deeds, contracts, notes, mortgages, checks, drafts, or other obligations of PEER shall be signed by such persons or persons as may be authorized by these Bylaws or by the Board of Directors.

ARTICLE 11

FISCAL YEAR

The fiscal year of PEER shall be October 1 to September 30.

ARTICLE 12

AMENDMENTS

The Board of Directors, by a two-thirds vote of those Directors present at a properly called and duly constituted meeting at which a quorum is present, shall have power to make, alter, amend and repeal the Bylaws or the Articles of Incorporation of PEER, except as otherwise provided by law.

CERTIFICATE OF THE SECRETARY

I, the undersigned do hereby certify:

1. That I am the duly elected and acting Secretary of PEER, a District of Columbia non-profit corporation; and

2. That the foregoing Bylaws constitute the Bylaws of PEER, as duly adopted at a meeting of the Board of Directors properly held on the 22nd Day of January, 1994 and amended on October 15, 2015.

IN WITNESS WHEREOF, I have hereunto subscribed my name this 16th Day of December, 2015

_____

Laura Dumais

Secretary of Public Employees for Environmental Responsibility, Inc.

Revised 12/14/2015

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Public Employees for Environmental Responsibility,

Petitioner

v. No. 21-1187

Environmental Protection Agency,

Respondent

On Petition for Review of a Final Order of the Environmental Protection Agency

DECLARATION OF STEPHEN M. JACKSON

I, Stephen M. Jackson, hereby declare as follows:

1. I make this Declaration based upon personal knowledge of each of the facts stated herein, and if called as a witness, could competently testify thereto.
2. This Declaration is being submitted pursuant to 28 U.S.C. § 1746.
3. I am a member and supporter of the Petitioner in this case, Public Employees for Environmental Responsibility (PEER). I first became aware of PEER and became a supporter in the spring of 2021. In September 2021, I contacted PEER for assistance with my employment

at the Butte County Public Works Department in Oroville, California at the Neal Road Recycling and Waste Facility ("the landfill").

4. PEER currently represents me in a whistleblower proceeding before the U.S. Department of Labor concerning my employment at the landfill.
5. The landfill is a solid waste disposal facility that has a permit to operate under RCRA through the California Environmental Protection Agency (CalEPA). It has a Class 3 permit for a non-hazardous waste landfill, and therefore is not allowed to accept hazardous waste.
6. I was initially hired at the landfill in August 2018 as an engineering technician.
7. I am concerned about the handling of alkaline corrosive wastes at the landfill, and how it may injure my health and that of my co-workers and also harm the environment in the area that I work and live.
8. If this waste were designated hazardous, the landfill would not be able to accept it and it would be handled with additional precautions and protections required for hazardous waste.
9. Throughout 2019, after the nearby Camp Fire, large amounts of concrete waste were brought to the landfill. This was permitted because such waste is not designated as hazardous.

10. There was a literal mountain of concrete waste at the landfill, which was placed next to a conservation easement area within the landfill but outside the allowable waste footprint.
11. Concrete waste is typically handled by landfill staff driving over it with bulldozers to break it up, and then with rock crushers to further break down and grind the concrete.
12. I have several concerns with this process as it occurs at the landfill. First, concrete waste often includes or is mixed with asbestos pipe from the demolished buildings. The asbestos material is not separated out, but is broken up and crushed along with the rest of the concrete, posing a serious health hazard to those like myself who work in the vicinity.
13. Second, the crushing of the concrete released corrosive concrete dust into the air that I and my co-workers breathed.
14. Third, the concrete waste was outside where rain events could wash particles of concrete into the adjoining conservation easement area and downstream into the community watershed, where the corrosive material could cause environmental harm.
15. I am also concerned about the treatment of alkaline wastes such as concrete in the landfill because I live on and operate a small ranch several miles downstream. The water supply for my home and ranch is a

domestic well. That well is fed by the Tuscan aquifer, which also lies below the landfill.

16. Each time I turn on my tap to get a drink of water, I think about the landfill and how it may have contaminated the Tuscan aquifer, and therefore the water I drink. I worry that it could be harming my health and that of my family and others in the area.

17. I am aware that PEER in the above-captioned case is challenging EPA's denial of its petition to amend the regulation concerning the corrosivity characteristic at 40 CFR 261.22 to expand its coverage to wastes with a pH between 11.5 and 12.5, and to cover non-aqueous materials, such as solids and gases.

18. I support these changes to the regulation and believe they would better protect me and my colleagues who work at non-hazardous landfills from exposure to materials that are not getting the protections stemming from hazardous waste designation, but should be.

19. As a landfill employee, I made protected disclosures about, among other things, unauthorized discharges of contaminated leachate that could have harmed the environment and drinking water.

20. Following some of my disclosures, in October 2019, I was reassigned to a position outside the landfill on the County Roads crew, and thus I am not currently stationed at the landfill.

21. However, I contended in my whistleblower proceeding that this reassignment was retaliatory. On June 24, 2021, the Department of Labor, through the Occupational Safety and Health Commission (OSHA), found in my favor and ordered that I be reinstated to my position at the landfill.

22. The OSHA decision is currently on appeal to an administrative law judge of the Department of Labor, and is currently in mediation.

23. While I remain in my position on the Roads Crew pending the final resolution of my whistleblower case, it is my hope and expectation that I will return to a position working at the landfill.

24. I am concerned that when I return to working at the landfill, I will be exposed to corrosive alkaline wastes that could injure me or harm my health because of the failure of EPA to regulate materials in the 11.5 to 12.5 pH range as hazardous, including solids like concrete and concrete dust. I am very concerned about working in an environment where there could be wastes that are actually hazardous, but proper procedures for hazardous waste are not followed.

25. I am also concerned that I am currently being harmed by the handling of alkaline corrosive wastes at the landfill when those wastes migrate to areas near where I live or into the aquifer that provides my drinking water.

26. This is especially true given my experience with improper discharges from the landfill.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 17th day of December, 2021, in Oroville, California.

Stephen M. Jackson

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Public Employees for Environmental Responsibility,

Petitioner

v.

Environmental Protection Agency,

Respondent

No. 21-1187

On Petition for Review of a Final Order of the Environmental Protection Agency

DECLARATION OF JONATHAN POLLACK

I, Johnathan Pollack, hereby declare as follows:

1. I make this Declaration based upon personal knowledge of each of the facts stated herein, and if called as a witness, could competently testify thereto.
2. This Declaration is being submitted pursuant to 28 U.S.C. § 1746.
3. I am a resident of East Greenbush, NY and live nearby the Dunn Landfill, a Construction and Demolition landfill located in the towns of East Greenbush and Rensselaer, NY with an address of 315 Partition St Ext, Rensselaer, NY 12144.
4. I am a member and supporter of the Petitioner in this case, Public Employees for Environmental Responsibility (PEER). PEER has

consulted with members of my community since February of 2020 concerning health and environmental risks posed by the Dunn Landfill.

5. The landfill is a solid waste disposal facility for construction and demolition debris and does not accept hazardous wastes.
6. As a nearby resident, I am affected by numerous problems caused by my proximity to the landfill, including impacts to local ground and surface water quality from runoff into the Quackenderry Creek which runs alongside the landfill, wind erosion of materials deposited at the landfill, dust blown from the landfill into the surrounding community, spills of waste being transported to the landfill on local roads, and impacts to local wildlife. These conditions have materially interfered with my ability to enjoy my home, my community, and the quality of the local environment.
7. It is my hope and expectation that I will continue living in my current residence and that conditions at the landfill and in my community will improve.
8. I am aware that PEER in the above-captioned case is challenging EPA's denial of its petition to amend the regulation concerning the corrosivity characteristic at 40 CFR 261.22 to expand its coverage to wastes with a pH between 11.5 and 12.5, and to cover non-aqueous materials, such as solids and gases.

9. I support these changes to the regulation and believe they would better protect me and my community who live nearby a non-hazardous landfill and those living near other non-hazardous landfills from exposure to materials that are not getting the protections stemming from hazardous waste designation but should be.

10. I am concerned that I and my community are exposed to possible discharges or leakage of corrosive alkaline materials could damage the environment near my home, including possible human exposure to corrosive materials and damage to aquatic life that could injure me or harm my health because of the failure of EPA to regulate materials in the 11.5 to 12.5 pH range as hazardous.

11. I have had to alter my behavior by spending less time outdoors and planning my activities to avoid the landfill and affected areas because of the hazards emanating from the landfill, including the threat of corrosive wastes which should be but are not being managed as hazardous.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 19th day of December, 2021, in East Greenbush, NY.

Jonathan P. Pollack

Jonathan Pollack