TOXIC SOLID WASTE LEACHING FROM TELEPHONE POLES? NAVIGATING AMBIGUOUS DEFINITIONS IN RCRA

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Abstract: This Comment analyzes the U.S. Court of Appeals for the Ninth Circuit’s ruling in Ecological Rights Foundation v. Pacific Gas & Electric Co. The plaintiff alleged that two utility companies operated utility poles that discharged wood preservative in violation of the Clean Water Act and the Resource Conservation and Recovery Act (RCRA). The plaintiff’s RCRA claim depended on whether the wood preservative was a “solid waste” according to the Act. The Ninth Circuit dismissed the claims but acknowledged that RCRA has two definitions of solid waste, and the wood preservative was not a solid waste according to the Plaintiff’s allegations, which only implicated the narrow regulatory definition. The court’s decision leaves open the possibility that RCRA could apply to wood preservative under other circumstances. This Comment analyzes the distinction between the solid waste definitions of RCRA and the circumstances under which RCRA might be applicable to wood preservative.

INTRODUCTION

Thirteen countries have banned the general biocide pentachlorophenol (PCP) outright due to its high toxicity.1 The United States, however, permits the use of PCP as a heavy-duty wood preservative.2 In front of the homes and along the roads of America stand 36 million wooden utility poles that leach


PCP and other toxic compounds into surrounding soil or water. The threat posed to humans and the environment by this pollution is controverted, and existing regulations have not offered avenues into the courts for resolution. The main barrier has been a gap in regulation over treated poles that courts have refused to fill by broadly interpreting existing regulations.

PCP exposure causes high fever, profuse sweating, difficulty breathing, and damage to organs, tissue, and the immune system, and the EPA classifies the chemical as a probable carcinogen. Additionally, the production of PCP creates chlorinated dibenzodioxins ("dioxins") and other micro-contaminants that form part of the PCP mixture that is applied to the utility poles. Akin to one of the toxic compounds in Agent Orange, dioxins cause severe skin diseases such as Chloracne and might cause liver damage and hormone changes. They are also probable carcinogens and, unlike PCP, do not quickly or easily break down once released into the environment, but persist in soil or remain in

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3 Id. at 1–2, 28. These figures represent approximately 60% of the total treated poles and 95.8% of the total treated cross-arms in service within the United States. Id. An estimated 3% of the treated poles are replaced annually. Id.

4 See id. at 27 (noting that major weaknesses in exposure assessment methods limit the validity of reported findings on PCP’s health effects, but that a reasonably strong argument can be made that PCP exposure causes a number of diseases), 37 (finding that PCP use will not present risks inconsistent with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) with amended labeling); Greg Kidd, Wood Preservatives Cause Illness, 20 PESTICIDES AND YOU, no. 2, 2000, at 13, 15 (lamenting EPA inaction on the threat of wood preservatives to health and documenting specific cases of PCP and other wood preservatives on human health), available at http://www.beyondpesticides.org/infoservices/pesticidesandyou/Summer%202000/Wood%20Preservatives%20Cause%20Illness.pdf and http://perma.cc/7AMK-EAJM.

5 See Ecological Rights Found. v. Pac. Gas & Elec. Co., 713 F.3d 502, 510–12, 517–18 (9th Cir. 2013) (noting that the EPA exempts pole pollution from RCRA’s hazardous waste regulations and holding that pole pollution is not subject to RCRA’s solid waste regulations nor the CWA’s point source regulations); Lee Karlsson et al., Pentachlorophenol Contamination of Private Drinking Water from Treated Utility Poles, 103 AM. J. PUB. HEALTH, no. 2, 2013, at 276 (noting that the EPA has exempted pole pollution from regulation under FIFRA.


7 Dioxins and Their Effects on Human Health, WORLD HEALTH ORG. (May 2010), http://www.who.int/mediacentre/factsheets/fs225/en/, available at http://perma.cc/PR5R-8R8E. The chemical name for dioxin is: 2, 3, 7, 8–tetrachlorodibenzo para dioxin (TCDD). Id. The term “dioxins” is often used for a family of structurally and chemically related compounds, which includes the dioxins found in PCP. Id. TCDD is the most toxic dioxin, and the toxicity of related dioxins is expressed as a part of its toxicity. Id. PCP contains some of the more highly chlorinated dioxins but does not usually contain TCDD. AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, TOXICOLOGICAL PROFILE FOR CHLORINATED DIBENZO-P-DIOXINS 2 (1998) [hereinafter ATSDR DIOXINS PROFILE], available at http://www.atsdr.cdc.gov/toxprofiles/tp104.pdf and http://perma.cc/P7PR-6HEV.

8 ENVTL. PROT. AGENCY, supra note 2, at 9.

9 ATSDR DIOXINS PROFILE, supra note 7, at 2 (explaining that TCDD was found in one of the defoliant compounds used in Agent Orange); AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, CHLORINATED DIBENZO-P-DIOXINS (CDDS) FACTSHEET 1 (1999), available at http://www.atsdr.cdc.gov/tfacts104.pdf and http://perma.cc/8NVD-TKS4 (describing health effects of dioxins).
the bodies of animals, where they increase in concentration as they pass through the food chain. These characteristics have earned dioxins a spot among the Stockholm Convention’s “dirty dozen”—environmentally persistent chemicals that the signatory states have vowed to reduce or eliminate.

PCP is combined with oil diluents to create the mixture that is applied to the poles. Gravity pulls the oil and the PCP it contains down to the pole’s base once the pole has been set in the ground, where the mixture leaches into surrounding soil or water. Studies have shown that oil enhances the mobility of PCP and its contaminants in soil and thereby increases the risk of groundwater contamination. This seems to have occurred recently in Vermont. In 2009, the Vermont Department of Health (VDH) responded to complaints of a chemical-like odor in drinking water on two occasions and found PCP levels well over 1000 and 2000 times the maximum level set by the EPA. Subsequent testing suggested that the contamination resulted from PCP-treated poles that had been in contact with the water tables near the complainants’ respective wells.

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10 ATSDR DIOXINS PROFILE, supra note 7, at 4; ATSDR PCP REPORT, supra note 6, at 159. This process is called biomagnification and can result in measurable levels of dioxins in aquatic creatures despite undetectable levels of dioxins in water. ATSDR DIOXINS PROFILE, supra note 7, at 4.


12 ENVTL. PROT. AGENCY, supra note 2, at 28.

13 Id. at 29 (noting that the main mechanism causing migration of PCP and its contaminants is the downward migration of the oil vehicle along the vertical axis of the pole).

14 ENVTL. PROT. AGENCY, supra note 2, at 30 (noting that carrier oil potentially enhances the mobility of PCP once in the soil); Bulle et al., Enhanced Migration of Polychlorodibenzo-p-dioxins and Furans in the Presence of Pentachlorophenol-treated Oil in Soil Around Utility Poles: Screening Model Validation, 29 ENVTL. TOXICOLOGY & CHEMISTRY, no. 3, 2010, at 582, 587 [hereinafter Bulle et al., Enhanced Migration] (recognizing a risk of aquifer contamination under certain conditions); Bulle et al., Sensitivity Study of an OCDD Environmental Fate Screening Model in Soils in the Presence of PCP Wood-Preserving Oil, 73 CHEMOSPHERE S149, S150 (2008) (recognizing that the oil serves as vector and is itself preserved by the PCP, slowing the biodegradation of the oil that makes it capable of carrying the pole pollutants farther); Karlsson et al., supra note 5, at 276 (documenting cases of well water contamination from PCP-treated poles); cf. ATSDR PCP REPORT, supra note 6, at 32 (noting a potential for enhanced toxicity and lethality when combined with oil).

15 See Karlsson et al., supra note 5, at 276 (documenting cases of contaminated groundwater in areas where upgradient PCP-treated poles existed).

16 Id.

17 See id. The first complaint involved pollution from a new utility pole upgradient of the private water source, and the second complaint involved pollution from three utility poles that had recently been replaced upgradient of a private spring. Id.
In cases such as these, finding a cause of action under existing regulations might be difficult. The U.S. Court of Appeals for the Ninth Circuit in *Ecological Rights Foundation v. Pacific Gas and Electric Co.* refused to use the Clean Water Act (CWA) and Resource Conservation and Recovery Act (RCRA) as regulatory tools to upend every pole in the country that emits PCP. The Ninth Circuit reserved the possibility, however, that RCRA might be applicable to pole pollution in specific circumstances. This Comment argues that the accumulation of PCP and its contaminants in soil around utility poles can fall under RCRA’s statutory scope under certain conditions.

I. FACTS AND PROCEDURAL HISTORY

PCP has been used by a number of industries, including agriculture, textiles, oil drilling, and forestry. PCP was first registered for use as a pesticide in 1950 and soon became the most widely used biocide in the United States. In 1984, the EPA completed a review of PCP under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and concluded that PCP’s risks outweighed its benefits. In reaching a settlement agreement with producers, the EPA agreed in 1986 to reregister PCP but with substantial restrictions on its production and use. In 2000, PCP registrants elected to renew applications for PCP only as a heavy-duty wood preservative.

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18 See No Spray Coalition v. City of New York, No. 00 CIV. 5395(JSM), 2000 WL 1401458, at *4 (S.D.N.Y. Sept. 25, 2000), aff’d, 252 F.3d 148 (2d Cir. 2001) (per curiam) (finding the CWA and RCRA not applicable to pesticides at point of spray). FIFRA most clearly applies to the potential threat of PCP and its contaminants to health and the environment because it regulates the general use of the pesticide, but it does not provide for a private right of action. See id. at *1 (noting that the plaintiff’s attempt to litigate general harms of a pesticide under the inapplicable CWA and RCRA were probably due to an inability to do so under FIFRA).

19 See *Ecological Rights Found.*, 713 F.3d at 505, 517.

20 Id. at 518.

21 See infra notes 106–112 and accompanying text.

22 ENVTL. PROT. AGENCY, *supra* note 2, at 1.

23 Id. at 1, 3. PCP has, however, been used for wood preservation since 1936. Id. at 1. The EPA estimates that 1200 metric tons of PCP was used for wood preservation in 1947 and 8000 tons in 1990. See id. at 3 (providing figure from 1947); Memorandum from EPA Office of Prevention, Pesticides and Toxic Substances to Adam Heyward, Project Manager 34, and Nader Elkassabany, Chemical Review Manager [hereinafter EPA Memorandum], available at http://www.epa.gov/opp00001/chem_search/cleared_reviews/csr_PC-063001_19-Feb-99_035.pdf and http://perma.cc/H43G-JK9Q (providing figure from 1990).


25 Id.; see ENVTL. PROT. AGENCY, *supra* note 2, at 3. The EPA restricted the purchase and use of PCP to certified applicators, prohibited its indoor application, required a more stringent manufacturing process to reduce byproduct contaminants, and canceled or limited many of its non-wood preservative uses. ENVTL. PROT. AGENCY, *supra* note 2, at 3.

26 ENVTL. PROT. AGENCY, *supra* note 2, at 3, 8. The term “heavy duty” wood preservative means that the PCP mixture is applied through a specialized process in closed retorts using high pressure. Id.
The EPA’s last review of PCP began in 1997 and ended in 2008 with a Reregistration Eligibility Decision (RED).\textsuperscript{27} In the RED, the EPA found that PCP’s benefits outweighed its costs in light of an apparent lack of viable alternatives to the utility industry.\textsuperscript{28} During this long review process, the EPA’s Science Division had found that PCP poses an “unacceptable” cancer risk to children.\textsuperscript{29} An EPA-contracted study had found treated wood to be a large reservoir of dioxins in the environment and pointed out inconsistencies in the EPA’s estimates of dioxin releases from PCP-treated wood.\textsuperscript{30}

The EPA did not address the earlier findings in its RED.\textsuperscript{31} Although the EPA may be challenged on the basis of its RED,\textsuperscript{32} FIFRA does not permit private actions and otherwise exempts pesticides from regulation once applied to an article such as a utility pole.\textsuperscript{33}

Against this regulatory backdrop, in 2010 the Ecological Rights Foundation (ERF) filed a citizen suit under the CWA and RCRA against Pacific Gas and Electric Company (“PG & E”) and Pacific Bell Telephone Company in

\textsuperscript{27} Beyond Pesticides, 294 F. Supp. 2d at 4; ENVTL. PROT. AGENCY, supra note 2, at 37.

\textsuperscript{28} ENVTL. PROT. AGENCY, supra note 2, at 37 (finding that the mitigation measures and label changes must be implemented), 39 (concluding a cost–benefit analysis).

\textsuperscript{29} EPA Memorandum, supra note 23, at 3, 5–6 (documenting an unacceptable cancer risk for children in a homeowner post-application setting from treated poles, and for an aggregate setting from PCP absent contaminants).

\textsuperscript{30} EASTERN RES. GROUP, REPORT OF THE MEETING TO PEER REVIEW: THE INVENTORY OF SOURCES OF DIOXIN IN THE UNITED STATES 3–2 (1998), available at http://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=12379 and http://perma.cc/A4MF-WQTH (scroll down to “URL’s/Downloads” and follow hyperlink to report). “For example, EPA estimated that 25,000 grams TEQ of dioxin may be found in [PCP] used for wood treatment. This amount of dioxins is over eight times greater than EPA’s central estimate of total releases of dioxins to air, land, and water in 1995.” Id. “[D]ioxins on treated wood appear[] to be the largest flow of dioxins that were quantified, thus making treated wood a large reservoir of dioxins in the environment.” Id. Compare this with the EPA’s subsequently issued RED: “[PCP] is only one of many sources of [dioxins] in the environment making it difficult to quantify the portion of the aggregate environmental risk from [dioxins] that is attributable to [PCP] wood treatment uses.” ENVTL. PROT. AGENCY, supra note 2, at 9.

\textsuperscript{31} See ENVTL. PROT. AGENCY, supra note 2, at 17 (finding that residential risk assessment was not needed based on permitted use of PCP, but using data from another survey while not addressing residential risk assessment data that its Science Chapter had found), 31 (failing to consider overall dioxins releases from all preserved wood sources into the macro-environment as a factor).

\textsuperscript{32} See Beyond Pesticides, 294 F. Supp. 2d at 7. The court dismissed a FIFRA challenge to the EPA’s delay in reaching its RED of PCP because it lacked jurisdiction until the EPA made a final agency action. Id. The court stated that a final agency action would include a refusal to cancel or suspend the pesticide’s use absent a hearing. Id. Thus, a FIFRA challenge to the agency’s reregistration of PCP might be ripe for challenge because the EPA’s 2008 RED of PCP constituted a final agency action. See id.; Ctr. For Biological Diversity v. Env tl. Prot. Agency, No. 11-cv-00293, 2013 WL 1729573, at *14, *19 (N.D. Cal. 2013) (noting that FIFRA provides exclusive jurisdiction to an appellate court for a RED challenge because a RED constitutes an order issued by the Administrator following a public hearing).

\textsuperscript{33} See supra note 18 and accompanying text.
federal district court. ERF alleged that the defendants violated, and were violating, the CWA by discharging “pollutant-bearing storm water runoff” from their utility poles into waters of the United States without a National Pollutant Discharge Elimination System (NPDES) permit and for having never obtained a NPDES permit in the first place, regardless of any discharges. Under ERF’s RCRA claim, the organization alleged that the defendants were contributing to “the past and present handling, storage, treatment, transportation and disposal of any solid or hazardous waste,” which washed off the poles by stormwater into nearby waters and thereby created an “imminent and substantial endangerment to health or the environment.”

The U.S. District Court for the Northern District of California dismissed ERF’s claim for failure to state a claim upon which relief can be granted. The court granted the defendant’s motions; it dismissed the CWA claims on the reasoning that stormwater runoff containing pole pollution is not a point source discharge requiring a NPDES permit, and the RCRA claim on the reasoning that the pole pollution is not a solid waste under the regulatory scope of the statute. ERF then appealed the dismissal of its first CWA claim and its RCRA claim to the Ninth Circuit. The Ninth Circuit affirmed the district court’s ruling.

II. LEGAL BACKGROUND

The Clean Water Act (CWA) generally prohibits the discharge of any pollutant from a point source without a permit pursuant to the National Pollutant Discharge Elimination System (NPDES). The NPDES permitting program is the “centerpiece” of the CWA and the primary method for enforcing the effluent and water-quality standards established by the EPA and state governments. The EPA, or a state to which the EPA has delegated its authority, may issue a NPDES permit “for the discharge of any pollutant” notwithstanding

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35 Ecological Rights Found., 713 F.3d at 507 (noting the poles were located in several California counties, including Alameda, Contra Costa, Marin, and San Francisco).
36 Id. at 507.
37 Id. at 504.
39 Ecological Rights Found., 713 F.3d at 507.
40 Id. at 504.
42 Id. (quoting Natural Res. Def. Council v. Cnty. of Los Angeles, 636 F.3d 1235, 1245 (9th Cir. 2011)).
prohibition elsewhere in the title. 43 NPDES permits are required for discharges from any point source but not for discharges from nonpoint sources. 44

Stormwater that carries away pollutants presents a unique problem under the CWA because it is a significant source of water pollution but is inherently neither a point source nor nonpoint source. 45 Congress amended the CWA to cover certain kinds of stormwater by using a categorical approach. 46 The CWA only requires NPDES permits for stormwater that fits into one of the congressionally defined categories and is discharged from a point source. 47

In Decker v. Northwest Environmental Defense Center, an environmental organization alleged that timber companies had violated the CWA by failing to obtain NPDES permits for their temporary logging roads. 48 In relevant part, the plaintiff claimed that the logging roads were point sources that discharged stormwater runoff that fell into the defined category of “industrial activity.” 49 The Supreme Court dismissed the claim, however, because the Court deferred to the EPA’s interpretation of “industrial,” which only included activities associated with fixed industrial manufacturing or processing sites, not temporary logging roads. 50

The Resource Conservation and Recovery Act (RCRA) is a comprehensive environmental statute that governs the treatment, storage, and disposal of solid and hazardous waste. 51 These two types of waste have broad statutory definitions: “Solid waste” is any discarded material, and “hazardous waste” is a subset of “solid waste” that, “because of quantity, concentration [or other characteristics],” does affect or might affect human health or the environment

44 Ecological Rights Found. v. Pac. Gas & Elec. Co., 713 F.3d 502, 505 (9th Cir. 2013); League of Wilderness Defenders v. Forsgren, 309 F.3d 1181, 1184 (9th Cir. 2002). The CWA defines point source as “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, [or] container . . . from which pollutants are or may be discharged.” 33 U.S.C. § 1362(14). The CWA does not define “nonpoint source,” but the Ninth Circuit has interpreted it to mean those types of pollution that arise from many dispersed activities over large areas, and not traceable to any single discrete source. League of Wilderness Defenders, 309 F.3d at 1184.
45 Ecological Rights Found., 713 F.3d at 505.
46 See id. (characterizing the stormwater amendment as a “two-phase approach”).
47 See id. (recognizing “industrial activity” as the most significant of Phase I stormwater discharges to this case, as it was the only category that the defendant included in its pleadings).
49 Id. at 1336–38 (describing the allegation that the roads are point sources because they channeled stormwater through a system of ditches and culverts and into streams and rivers).
50 Id. at 1336–38.
51 Ecological Rights Found., 713 F.3d at 506.
in certain ways. RCRA can be enforced by the government or private citizens. There are two possible claims under RCRA’s citizen suit provision: violation of its permitting regime, and a violation because of an “imminent and substantial endangerment” to health or the environment.

The EPA implements RCRA’s permitting regime. Owners and operators of facilities that treat, store, or dispose of hazardous waste must apply to the EPA for a permit to do so; the Act charges the EPA’s Administrator to determine what wastes constitute hazardous waste within the permitting regime. These include solid waste that either the Administrator has specifically deemed a hazardous waste or those that exhibit any of four hazardous characteristics. Because the latter condition could be over-encompassing for the purpose of the permitting regime, and because solid waste designation is a precondition for hazardous waste designation, the EPA has also passed regulations that narrowly define solid waste to limit what wastes can in turn meet the four hazardous criteria; the EPA has thus defined “discarded” as “abandoned,” which is “disposed of.”

As amicus, the EPA has further interpreted “disposed of” beyond its regulations; the EPA’s general position is that a product is not “disposed of” when it enters the environment within its normal and expected use pattern and thus can be neither a solid nor hazardous waste under its permitting regime. This interpretation includes pesticides and fertilizers that are applied to land and spent munitions that fall to the ground on a shooting range, because the normal expected use of these products includes application to the land. Thus, this regu-


53 Id. §§ 6972(a), 6973(a).

54 Id. § 6972(a); Conn. Coastal Fishermen’s Ass’n v. Remington Arms Co., 989 F.2d 1305, 1314–15 (2d Cir. 1993).


56 Military Toxics Project, 146 F.3d at 950–51.

57 Id. at 951; 40 C.F.R. § 261.2–3 (2013).

58 Cordiano v. Metacon Gun Club, Inc., 575 F.3d 199, 206, 208 (2d Cir. 2009) (“[T]he words of the statute contemplate that the EPA would refine and narrow the definition of solid waste, for the purpose of the more stringent regulatory treatment afforded to hazardous wastes . . . where the permitting provisions are located.”) (internal quotation marks and citations omitted); 40 C.F.R. § 261.1(b)(1).

59 Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1316 (adopting the interpretation of the EPA as amicus); see also Amicus Curiae the United States of America’s Response to the Court’s August 5, 2008, Order at *5–7, Cordiano, 575 F.3d 199 (No. 07-0795CV), 2008 WL 7566065 [hereinafter Amicus Curiae, Cordiano].

60 Cordiano, 575 F.3d at 208 (noting the EPA’s position on spent munitions); see, e.g., 40 C.F.R. § 261.2(c)(ii) (“[C]ommercial chemical products . . . are not solid wastes if they are applied to the land and that is their ordinary manner of use.”); see also Military Toxics Project, 146 F.3d at 955 (noting the EPA’s self-described “longstanding interpretation” of the regulatory definition of solid waste as
The statutory definition of solid waste turns on whether the product is being used in its normal, intended manner, not the amount of time that the material lies unrecovered.61

The EPA only applies the narrow regulatory definition of solid waste to implement its permitting regime.62 Otherwise, the EPA explicitly applies the broad statutory definition—which stops at “discarded” and does not include the further definitions of “abandoned” and “disposed of” that import the restrictive concept of a product’s normal and expected use.63 The EPA, as amicus, has also interpreted the broad statutory definition of solid waste, that is, a material that has been “discarded,” as encompassing that which has been “left to accumulate long after [it has] served [its] intended purpose.”64 The statutory definition of solid waste thus turns on the amount of time that passes as it accumulates in the environment, and not the manner in which it entered the environment.65

The Ninth and Second Circuits have both, in effect, deferred to the EPA’s dichotomous interpretation of solid waste.66 A citizen plaintiff that brings an “imminent and substantial endangerment” claim under RCRA’s statutory scope must allege that a particular waste is a solid waste that is in turn a “discarded material” which is “left to accumulate long after [it] ha[s] served [its] intended purpose.”67

The Ninth Circuit first deciphered the statutory meaning of solid waste in Safe Air for Everyone v. Meyer.68 There, the plaintiff brought an imminent and substantial endangerment claim against a group of bluegrass farmers and alleged that the farmers had left grass residue in their fields after harvest and subsequently burned it as a solid waste.69 The court ultimately consulted extracircuit interpretations of solid waste for EPA permitting claims to glean the

excluding products such as pesticides and fertilizers, the intended use of which involves application to the land).

61 Cordiano, 575 F.3d at 209; Amicus Curiae, Cordiano, supra note 59, at 99.
62 Military Toxics Project, 146 F.3d at 951; Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1314.
63 See Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1314, 1316. The court noted that the interpretation by the EPA, as amicus, of the statutory solid waste is a function of time and does not include concepts of “abandoned” and “disposed of,” which the United States amicus in Cordiano stated was a function of use. See Cordiano, 575 F.3d at 209; see also Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1316.
64 Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1316.
65 Cordiano, 575 F.3d at 209; Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1316.
66 See Ecological Rights Found., 713 F.3d at 515–18 (gleaning the EPA’s intent from its regulations); Cordiano, 575 F.3d at 207 (deferring to the EPA’s regulatory interpretation of an ambiguous statute and then deferring to amicus’s interpretation of the regulations); Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1316 (adopting an interpretation of the EPA as amicus).
67 Ecological Rights Found., 713 F.3d at 518; Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1316.
68 Safe Air for Everyone v. Meyer, 373 F.3d 1035, 1046 n.14 (9th Cir. 2004).
69 Id. at 1038.
EPA’s intent.\textsuperscript{70} The court concluded that grass residue was not “discarded” because it was destined for beneficial reuse in a continuous process of growing and harvesting crops by the generating industry.\textsuperscript{71}

The Second Circuit interpreted solid waste in\textit{Connecticut Coastal Fishermen’s Ass’n v. Remington Arms Co.} and \textit{No Spray Coalition v. City of New York}.\textsuperscript{72} In the former case, the plaintiff alleged that the defendant violated both RCRA provisions by allowing lead shot and clay skeet to accumulate over the span of decades on a shooting range, which contaminated the environment.\textsuperscript{73} The court proceeded through the steps of\textit{Chevron} analysis and granted deference to the EPA’s solid waste dichotomy.\textsuperscript{74} The court found that the allegations did not amount to a permitting violation within RCRA’s regulatory scope.\textsuperscript{75} The court then found that the lead shot and clay skeet fragments had been “discarded” and “left to accumulate long after [they had] served [their] intended purpose” and were thus solid wastes according to the broad statutory definition.\textsuperscript{76}

In \textit{No Spray Coalition}, the plaintiff alleged that a pesticide became a statutory solid waste under RCRA when sprayed from helicopters and trucks because it was “discarded” at that point.\textsuperscript{77} The Second Circuit upheld the district court’s finding that the pesticide could not be a solid waste that was “discarded” until after it had served its intended purpose.\textsuperscript{78} The Second Circuit rea-

\textsuperscript{70} Id. at 1041–43, 1045. The dissent argued that the majority’s extra-circuit basis for interpretation was misplaced: “[T]he regulatory definition considered in [those cases] is significantly narrower than the statutory definition at issue here. Accordingly, I do not find these cases persuasive in our determination of whether the post-harvest crop residue has been ‘discarded.’” Id. at 1051 (Paez, J., concurring in part and dissenting in part).

\textsuperscript{71} Id. at 1046. The court also cited two other extra-circuit findings on waste re-use through a continuous cycle that add conditions to the first. Id. at 1045. Despite involving permitting claims, these cases were decided prior to the EPA’s firm distinction between the two definitions, but as the court in \textit{Connecticut Coastal Fishermen’s Ass’n} noted, these cases still show that in-process materials destined for re-use cannot be a statutory solid waste because the very nature of a continuous cycle of re-use precludes accumulation for a sufficient period of time. See 989 F.2d at 1316.

\textsuperscript{72} No Spray Coalition v. City of New York, 252 F.3d 148, 150 (2d Cir. 2001) (per curiam); Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1308, 1316.

\textsuperscript{73} Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1309.

\textsuperscript{74} Id. at 1313–15. The court used the statutory interpretation methodology outlined by the Supreme Court in\textit{Chevron, U.S.A., Inc. v. Natural Resources Defense Council}, 467 U.S. 837, 842–43 (1984), which directs a reviewing court to defer to an agency’s reasonable interpretation of an ambiguous statute when congressional intent and purpose are not clear. See Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1313–15.

\textsuperscript{75} Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1315–16. The court dismissed the permitting violation claim before determining whether the spent munitions were “solid waste” according to the regulatory definition. Id.

\textsuperscript{76} Id. at 1316. The court deferred to the EPA, as amicus, which opined that the spent munitions qualified as “solid wastes” only under RCRA’s statutory scope. Id.

\textsuperscript{77} No Spray Coalition v. City of New York, No. 00 CIV. 5395(JSM), 2000 WL 1401458, at *4 (S.D.N.Y. Sept. 25, 2000), aff’d, 252 F.3d 148.

\textsuperscript{78} No Spray Coalition, 252 F.3d at 150; No Spray Coalition, 2000 WL 1401458, at *4.
soned that this had not yet occurred when the pesticide was sprayed from the vehicle applicators because the pesticide had yet to drift through the air and come to rest on mosquitos and their habitats. 79

III. ANALYSIS

In Ecological Rights Foundation v. Pacific Gas and Electric Co., the U.S. Court of Appeals for the Ninth Circuit affirmed the district court’s dismissal of the action for failure to state a claim, without leave to amend. 80 The Ninth Circuit held that the utility poles did not require National Permit Discharge Elimination System (NPDES) permits under the Clean Water Act (CWA), and that the pentachlorophenol (PCP) mixture that leached from the poles was not a solid waste within the Resource Conservation and Recovery Act’s (RCRA) regulatory scope. 81

First, the court found that the PCP-treated poles did not require NPDES permits because they were not point sources. 82 The court noted that the CWA was ambiguous on the issue and that the EPA had not yet determined whether utility poles were point sources, which precluded agency deferral, but the court was nevertheless unpersuaded by the Ecological Rights Foundation’s (ERF) characterization of a point source as any “identifiable thing.” 83 Instead, the court turned to precedent, which overwhelmingly cut against ERF’s expansive reading. 84 Utility poles, the court concluded, simply are not discernible, confined, and discrete conveyances that channel and control stormwater. 85 The court also found that the stormwater runoff that carried the utility pole pollution was not associated with industrial activity, which provided another independent basis to dismiss the CWA claims regardless of whether the poles were point sources. 86

79 No Spray Coalition, 252 F.3d at 150.
81 Id. at 510.
82 Id. at 509.
83 Id. at 509–10.
84 Id. at 510.
85 Id. at 510–12. The court gave four independent reasons: First, the EPA defined “discharge associated with industrial activity” as that which is “directly related to manufacturing, processing, or raw materials storage at an industrial plant.” Id. at 512 (internal quotation marks omitted). A utility pole, the court reasoned, was none of those things, nor would a contrary interpretation be in line with Decker v. Northwest Environmental Defense Center, 133 S. Ct. 1326 (2013), where the Supreme Court granted deference to the EPA’s more recent and narrower interpretation of “industrial activity” as “extend[ing] only to traditional industrial buildings such as factories and associated sites, as well as other relatively fixed facilities.” Ecological Rights Found., 713 F.3d at 512 (declining to determine whether utility poles are more permanent than logging roads). Second, the Court found that stormwater runoff from the poles was not “associated with industrial activity” according to the Standard Industrial Classification System codes. Id. Third, it inferred from the EPA’s explicit rejection of “major electrical powerline corridors” from NPDES that the EPA did not intend
Regarding the RCRA claim, the Ninth Circuit noted that the statutory definition of solid waste as “discarded” was ambiguous and thus looked to the Act’s legislative history. The court observed that Congress designed the Act to “eliminate the last remaining loophole in environmental law” by regulating waste byproducts of the nation’s manufacturing processes and manufactured products. A product cannot therefore be “discarded” and thus a “solid waste” until it has served its intended purpose and is no longer wanted by the consumer.

Because the ERF did not allege that the PCP mixture accumulated in the environment long after serving its intended purpose, the court analyzed the mixture under the EPA’s narrow regulatory definition of solid waste. The court held that the PCP mixture that escapes from a pole by natural means is an expected consequence of the preservative’s ordinary and intended use and thus has not been discarded. The court ended on a different note, however, and stressed that it has not decided whether dangerous accumulations of PCP had resulted from the natural discharge of wood preservative from the defendants’ poles.

To invoke the statutory definition of solid waste under a “substantial endangerment” claim, Ecological Rights Foundation and Safe Air for Everyone v. Meyer demonstrate that a plaintiff must allege that a particular waste has accumulated in the environment for an amount of time that shows that the waste is not destined for immediate reuse or cleanup. These allegations will circumvent the EPA’s regulatory version of solid waste and its restrictive “expected consequence of its ordinary and intended use” language, and instead

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87 Ecological Rights Found., 713 F.3d at 514–15.
88 Id. at 515 (quoting H.R. Rep. No. 94-1491(I), at 4 (1976)).
89 Id.
90 See id. at 518. The court looked to the EPA’s intent, analogizing the PCP mixture to the EPA’s treatment of spent munitions, which the EPA does not consider discarded because it focuses on whether a product was used as it was intended to be used, not on whether the purpose of the product is to perform some function once on the ground. Id. The court then observed that the EPA approved PCP-based wood preservative for use in utility poles under FIFRA, demonstrating that the EPA did not expect or intend for the preservative to be a solid waste under its RCRA regulations. Id. at 516–17. Finally, it noted that the EPA explicitly exempted PCP from hazardous waste status when it is impregnated in wood or dirt, unless as a result of a spill of unused PCP, which also demonstrated that the EPA did not intend to regulate it as a solid waste. Id. at 517.
91 Id. at 516. The court also detailed the untenable results of a contrary finding: About 36 million utility poles would have to be replaced if the PCP mixture was found to be a regulatory solid waste. Id. at 517–18. Furthermore, it would potentially expand RCRA to cover everything from PCP-treated railroad ties to lead paint that naturally chips away from houses. Id.
92 Id. at 518.
93 Ecological Rights Found., 713 F.3d at 518; Safe Air for Everyone v. Meyer, 373 F.3d 1035, 1045 (9th Cir. 2004); see also Conn. Coastal Fishermen’s Ass’n v. Remington Arms Co., 989 F.2d 1305, 1316 (2d Cir. 1993); supra notes 59–65 and accompanying text.
will focus a court’s analysis on how long the pole pollution has accumulated in the environment rather than how it ended up there.\textsuperscript{94}

In \textit{Connecticut Coastal Fishermen’s Ass’n v. Remington Arms Co.}, the U.S. Court of Appeals for the Second Circuit found that seventy years was long enough for 2400 tons of lead shot to accumulate on a shooting range and become a statutory solid waste.\textsuperscript{95} Due to the effects of gravity on the oil that carries the PCP mixture, a newly treated and set pole emits pollution into the environment around its base within the first few years of its installation and at a lesser but constant rate thereafter.\textsuperscript{96} PCP has a half-life of up to sixty-three days, and the half-life can vary depending on soil, water, and sunlight.\textsuperscript{97} Dioxins, however, have half-lives in soil that range from fifteen to one hundred years.\textsuperscript{98} Therefore, in the absence of periodic soil remediation by utility companies, PCP and its contaminants accumulate around the base of each treated pole for significant amounts of time.\textsuperscript{99}

The court in \textit{Connecticut Coastal Fishermen’s Ass’n} did not comment on the amount of lead and clay waste that had accumulated, but it is clear that the site had more waste spread over a larger area than any one pole.\textsuperscript{100} PCP and its contaminants migrate to soil as deep as two meters below the base of a pole,\textsuperscript{101}

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\bibitem{94} Ecological Rights Found., 713 F.3d at 516, 518; Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1316; \textit{cf.} Cnty. Ass’n for Restoration of the Env’t v. George & Margaret LLC, No. 13-CV-3017-TOR, 2013 WL 3188821, at *4 (E.D. Wa. June 21, 2013). Here, a district court in the Ninth Circuit refused to dismiss the plaintiff’s allegations of a RCRA solid waste in the wake of Ecological Rights Foundation, 713 F.3d at 518. Cnty. Ass’n for Restoration of the Env’t, 2013 WL 3188821, at *5. The court found that the use of animal waste as fertilizer was not a beneficial reuse when applied beyond what is necessary to serve as fertilizer. \textit{Id.} at *4. This finding should be read in the context of Congress’s express findings related to agricultural waste: excluding material when put to a beneficial reuse. \textit{Id.; see also Safe Air for Everyone}, 373 F.3d at 1045 (finding that bluegrass residue burned for the purpose of agricultural soil enhancement was a beneficial reuse and thus not a solid waste).
\bibitem{95} Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1308, 1316.
\bibitem{96} ENVTL. PROT. AGENCY supra note 2, at 29–30 (explaining different processes by which pole pollution leaches into environment over time).
\bibitem{98} EPA Memorandum, supra note 23, at 25–26.
\bibitem{99} \textit{Id.} at 35 (estimating that the annual loss of PCP per pole is 6.6 grams); \textit{see} Bulle et al., \textit{Enhanced Migration}, supra note 14, at 587 (noting that PCP that leached from utility poles accounted for approximately forty-seven percent of total national PCP emissions to Canadian soil); \textit{cf.} Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1316 (finding spent munitions to be a solid waste after they had accumulated); Simsbury-Avon Pres. Soc’y v. Metacon Gun Club, Inc., Civil No. 3:04cv803(JBA), 2006 WL 2223946, at *9 (D. Conn. Aug. 2, 2006) (finding insufficient evidence that munitions had been “discarded” on the defendant’s site in light of defendant’s uncontested evidence that spent casings and munitions were periodically removed).
\bibitem{100} \textit{See} Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1308 (describing the extent of munitions waste and annual number of patrons).
\bibitem{101} Bulle et al., \textit{Enhanced Migration}, supra note 14, at 587. The study selected poles that had been installed after 1987, the year in which the EPA had mandated new production methods to reduce byproduct contaminants. \textit{Id.} at 582–83. Any pole—not just one that had been installed before 1987—
\end{thebibliography}
under specific conditions, and nearly up to a foot horizontally. Each of these areas is separated from the next, and each individual location would have much less waste than the contaminated shooting range. This should not influence a finding of solid waste, however, because qualitatively different wastes in varying environments can pose greater or lesser threats irrespective of their comparative quantities. Whether the contaminants, once designated as solid wastes, pose an imminent or substantial threat to health or the environment is a separate issue.

The temporal link between PCP mixture that migrates into and accumulates in soil beneath a pole to the PCP mixture’s intended purpose is attenuated. Unlike the pesticide in *No Spray Coalition v. City of New York* that had not yet served its purpose by reaching and killing its intended target—mosquitos—the PCP mixture that has migrated through the soil has already served its purpose by having preserved the pole from which it escaped. Furthermore, the dioxins that have migrated along with the PCP can remain there for many decades after the PCP itself has degraded—at which point it is no longer part of the substance that was originally used to preserve the wood. Thus, allegations that detail the environmental fates of dioxins in specific soil can therefore contaminate a sufficiently proximate aquifer if placed in a soil conducive to migration.

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102 See EPA Memorandum, supra note 23, at 33–37. One study found that PCP concentration decreased greatly between horizontal distances of three to eight inches. *Id.* at 35. Two studies found that PCP levels were at non-detect levels at a horizontal distance of forty inches from the base of the pole. *Id.* at 35, 37.

103 See *Conn. Coastal Fishermen’s Ass’n*, 989 F.2d at 1308 (noting that the shooting range admitted 40,000 patrons annually and had accumulated 2400 tons of lead shot and 11 million pounds of clay target fragments, which suggests a large area).

104 See *id.* at 1316 (observing that the time during which the waste had accumulated was a factor, without specifying a specific timeframe); *Benjamin v. Douglas Ridge Rifle Club*, 673 F. Supp. 2d 1210, 1222 (D. Or. 2009) (finding that lead shot was a solid waste because it had accumulated since 1955). These cases do not comment on an accumulation beyond an unspecified period of time that shows the material is not destined for reuse. See *Conn. Coastal Fishermen’s Ass’n*, 989 F.2d at 1308, 1316; *Douglas Ridge Rifle Club*, 673 F. Supp. 2d at 1222.

105 See generally *Maine People’s Alliance v. Mallinckrodt, Inc*, 471 F.3d 277 (1st Cir. 2006) (demonstrating necessary evidence to support a finding that a solid waste poses an imminent and substantial risk to health or the environment).


107 See *Id.; cf. Cnty. Ass’n for Restoration of the Env’t*, 2013 WL 3188821, at *4 (finding that fertilizer became waste when applied beyond what was needed to fertilize land); *Zands v. Nelson*, 779 F. Supp. 1254, 1261–62 (S.D. Cal. 1991) (finding that gasoline leaked from tanks at gasoline stations is a disposal of solid waste because it is no longer a useful product after it leaks into the soil, and has thus been “abandoned” via the leakage).

108 See *Conn. Coastal Fishermen’s Ass’n*, 989 F.2d at 1316 (similar accumulations of lead shot found to be solid waste); *cf. No Spray Coalition*, 2000 WL 1401458, at *4 (unlike pesticides that can continue to kill pests according to their approved use).
conditions, and not merely that of PCP, can contribute to a RCRA statutory solid waste finding.109 The Virginia well water contamination cases demonstrate that PCP itself can accumulate to dangerous levels when the poles contact a water table.110 Unlike the pollution in Ecological Rights Foundation that allegedly washed from the poles into streams and tributaries, the PCP mixture in these cases did not wash anywhere but leached into and remained in adjacent water tables and wells, accumulating to levels up to 2000 times past that which the EPA considers safe.111 These facts seem much more in line with what the court in Ecological Rights Foundation expressly reserved from its holding to decide on another day: the circumstances in which dangerous accumulations of pole pollution can trigger RCRA’s statutory version of solid waste.112

CONCLUSION

The statutory definition of solid waste turns on a factor of time, which is just a proxy condition that helps shed light on whether a particular material has actually been thrown away for good or will be picked up for recycle or reuse at some later date. Once a material is deemed a solid waste, it must also create or have the potential to create an imminent and substantial endangerment to health or the environment to incur liability under the Resource Conservation and Recovery Act (RCRA). Scientific studies, as demonstrated by the EPA’s aggregation of data in its 2008 Renewal Eligibility Decision of pentachlorophenol (PCP) under the Federal Insecticide, Fungicide, and Rodenticide Act, do not clearly show the extent of harm that utility pole pollution poses to health and the environment. This limited data would probably not provide a basis for a court to find that every pole across the country, in any and all envi-

109 See Conn. Coastal Fishermen’s Ass’n, 989 F.2d at 1316 (finding importance of accumulation); EPA Memorandum, supra note 97, at 25 (noting dioxins’ environmental persistence).
110 Karlsson et al., supra note 5, at 276; see ENVTL. PROT. AGENCY, supra note 2, at 30 (acknowledging the risk of groundwater contamination by PCP in situations where the pole is directly in contact with a water table or from the leaching of pollution from multiple poles that have been stored together).
111 See Ecological Rights Found., 713 F.3d at 518 (finding that wood preservative that is washed or blown away from utility poles by natural means is an expected consequence of the its intended use and thus not “discarded”); ENVTL. PROT. AGENCY, supra note 2, at 28 (explaining that the main mechanism that emits pole pollution into the environment is not from rainwater that washes it from the pole’s surface, but gravity that pulls the oil vehicle along with the pollutants down the pole and out from its base); Karlsson et al., supra note 5, at 276.
112 See Ecological Rights Found., 713 F.3d at 518 (stating that it did not decide whether pole pollution becomes a solid waste when it accumulates because ERF did not allege that dangerous accumulations of PCP resulted from the natural discharge of the poles); ENVTL. PROT. AGENCY, supra note 2, at 32 (noting that environmental risk from PCP contaminants comes not from stormwater runoff but rather from soil accumulation); Karlsson et al., supra note 5, at 276 (noting accumulations of PCP at 1000 and 2000 times the level that the EPA deems safe).
ronmental conditions, poses an imminent and substantial threat to health or the environment. Yet poles that have been placed in contact with water tables or in soil conditions most amenable to the enhanced migration of the pollutants have caused well water contamination. In these and similar cases, a court might find that PCP and its contaminants fit under the statutory definition of solid waste and in turn pose a threat sufficient to incur liability under RCRA.