FOR PUBLICATION

UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

MICHAEL COVINGTON; KARLA COVINGTON,

Plaintiffs-Appellants,

v.

JEFFERSON COUNTY; STATE OF IDAHO; DISTRICT 7 HEALTH DEPARTMENT,

Defendants-Appellees.

No. 02-36000 D.C. No.

CV-01-00369-BLW

MICHAEL COVINGTON; KARLA COVINGTON,

Plaintiffs-Appellees,

v.

JEFFERSON COUNTY; STATE OF IDAHO,

Defendants,

and

DISTRICT 7 HEALTH DEPARTMENT,

Defendant-Appellant.

No. 02-36035 D.C. No.

CV-01-00369-BLW

OPINION

Appeal from the United States District Court for the District of Idaho B. Lynn Winmill, Chief District Judge, Presiding

Argued and Submitted November 4, 2003—Seattle, Washington

Filed February 5, 2004

Before: Kim McLane Wardlaw, Ronald M. Gould, and Richard A. Paez, Circuit Judges.

Opinion by Judge Gould; Concurrence by Judge Gould

COUNSEL

Margaret B. Hinman, Pike & Smith, Idaho Falls, Idaho, for plaintiffs-appellants-cross-appellees Michael and Karla Covington.

Robin D. Dunn, Dunn & Clark, P.A., Rigby, Idaho, for defendant-appellee Jefferson County.

Gregory L. Crockett, Hopkins Roden Crockett Hansen & Hoopes, PLLC, Idaho Falls, Idaho, for defendant-appellee-cross-appellant District 7 Health Department.

OPINION

GOULD, Circuit Judge:

The Covingtons, who live across from a county dump, brought this citizen's suit against Jefferson County and District 7 Health Department ("D7HD"), charging violations of the Clean Air Act ("CAA") and the Resource Conservation and Recovery Act ("RCRA" a.k.a. the Solid Waste Disposal Act ("SWDA")). On cross-motions for summary judgment, the district court held that the Covingtons lacked standing to advance the CAA claim and had standing to assert the RCRA claims. The district court awarded summary judgment on these RCRA claims to Defendants. The parties cross-appealed. We have jurisdiction pursuant to 28 U.S.C. § 1291. We affirm in part, reverse in part, and remand for trial.

Ι

A

This dispute centers on a landfill directly across the street from the home of the Covingtons. When the Covingtons first bought their home, it was across the street from a gravel pit. In 1995 Jefferson County converted the gravel pit to a non-municipal solid waste landfill ("NMSWL") for bulky waste. Jefferson County owned and operated the landfill at all relevant times. The landfill operation was approved initially and then overseen by District 7 Health Department according to an Operational Plan as required by Idaho regulations. The Operational Plan dealt with siting, operational requirements, and compliance with applicable Idaho regulations. Nonetheless, the Covingtons encountered problems with the landfill.

Under Idaho law, responsibility for regulatory oversight of solid waste facilities is split between the State Department of Environmental Quality ("DEQ") and the District Health Departments ("DHDs"). The division of responsibilities between these two organizations is defined in a Memorandum of Understanding ("MOU").¹

After the approval of the Operational Plan, D7HD inspected the landfill on twenty-five occasions. Although D7HD has been satisfied with Jefferson County's follow-up to D7HD's criticisms, D7HD has on occasion noted the disposal of improper material at the landfill and has commented that the landfill has not always had adequate cover and compaction, leading the landfill to fall under Idaho's "open dump" definition.

The operation of the landfill generated a series of complaints by the Covingtons to Jefferson County and to D7HD. Although the landfill was inspected many times, no changes were made to address the Covingtons' concerns. After giving notice to required governmental and private parties on May 17, 2001, the Covingtons brought a citizen suit against Jeffer-

¹There are two relevant MOUs — one governing relations before February 1, 2000, and one governing relations thereafter. The first MOU did not differentiate between municipal solid waste landfills and NMSWLs. The second did.

son County and D7HD on July 25, 2001, in the United States District Court for the District of Idaho. The suit claimed violations of CAA due to Jefferson County's failure to comply with federal regulatory procedures designed to prevent the improper release of ozone-depleting substances. The suit also asserted three violations of RCRA: (1) that state regulations had been violated, thus violating RCRA; (2) that federal "open dump" criteria had been violated; and (3) that noncontainerized liquid hazardous waste had been deposited at the landfill in violation of 42 U.S.C. § 6924.

After receiving notice of the Covingtons' intent to sue on May 17, 2001, and shortly before the lawsuit was filed, the County and D7HD entered into a formal Plan of Correction on July 23, 2001. Shortly after the lawsuit was filed, the County and D7HD also entered into a revised Plan of Operation on July 31, 2001. The Plan of Correction and revised Plan of Operation included requirements to cap a portion of the landfill, and to prevent and monitor groundwater contamination. Neither the Plan of Correction nor the revised Plan of Operation deterred the Covingtons from filing suit.

After discovery for about ten months, all parties had moved for summary judgment. On cross motions for summary judgment, the district court held that the Covingtons did not have standing to bring the CAA claim but had standing to bring the RCRA claims. On the merits of the RCRA claims, the district court rejected the application of the state regulations, granted summary judgment to Appellees on the federal "open dump" criteria, and held that 42 U.S.C. § 6924 was only an enabling statute with no substantive prohibitions. The Covingtons appeal these decisions, save the ruling on standing under RCRA. D7HD cross-appeals the district court's ruling on standing under RCRA. Thus the appeal and cross appeal bring all issues into play.

The Covingtons, on the cross motions for summary judgment, submitted evidence of serious problems at the landfill.² The Covingtons' affidavits and supporting documents gave evidence that the landfill mismanaged "white goods" (i.e., appliances) by not ensuring that chlorofluorocarbons ("CFCs") were treated as required by federal law.³ The Covingtons raised these concerns before filing suit. The United States Environmental Protection Agency ("EPA") also recognized a failure by the landfill to comply with federal record-keeping law. Although in 1999 the landfill began keeping records of CFC disposition of white goods, the records were generally incomplete.⁴

The Covingtons also offered evidence of fires at the landfill.⁵ In April 2000, the Covingtons observed a fire at the landfill and complained about it to Idaho's DEQ. DEQ personnel in their report noted that treated or formed lumber had been burned. DEQ personnel also detected the smell of pesticides. The Covingtons observed another fire in March 2002. Alerted

²Because this case was decided on summary judgment against Appellants, we state the facts in the light most favorable to the Covingtons. *See Arboireau v. Adidas-Salomon AG*, 347 F.3d 1158, 1160 n.1 (9th Cir. 2003).

³To illustrate, the affidavit of Michael Covington stated "Jefferson County routinely accepted refrigerators and freezers from 1996 to August 1999 without any documentation whether the ozone depleting substances would be recovered or verification that the material had been recovered. The County's records document 102 instances of receipt of refrigerators or other appliances between 1996 and August 1999."

⁴For example, Michael Covington provided affidavit evidence that for the 14 appliances received by the landfill since August 1999, 11 of the 14 certification forms failed to show complete certification of the final disposition of the CFCs.

⁵For example, the Covingtons submitted photographic evidence of an open fire at the landfill on April 13, 2000, and of an ash pit recently used for open burning on March 26, 2002.

to this fire by the Covingtons, Jefferson County and DEQ personnel jointly responded and their report noted that the remains of the fire included items such as oil and water filters, and a metal bed frame. The County, in response, submitted evidence that this second fire was caused by an unauthorized intruder who accessed the landfill through an unlocked gate.

The Covingtons' evidence also raised concerns about the type of waste accepted and disposed at the landfill. The Covingtons presented evidence of improper disposal of biological substances. More specifically, the Covingtons submitted evidence of the disposal of household garbage, spilled grain, grass clippings, straw, manure, and even rotting bird and cow carcasses. It is undisputed that the discarded biological waste (including straw, manure, bird and cow carcasses, and spilled grain) can create methane gas as it decomposes, which is both explosive and creates a foul odor. Though there are means to monitor for methane gas, the landfill does not do so.

The Covingtons also submitted evidence of improper disposal of hazardous material. The evidence documented the disposal of containers with hazardous content warnings, appliances containing fuel and oil, and items leaking oil. DEQ personnel in one of their reports acknowledged that improper items were being disposed of at the landfill, including leaking car batteries, crushed cans with oil, and waste oil.

The Covingtons also presented evidence that insufficient cover was applied to the landfill. Cover refers to placing a layer of dirt or gravel over the waste so as to minimize fires, vectors (scavenging creatures such as birds, animals, and/or insects), and scavenger access. An adequate cover is fundamental for a landfill. Yet, at the landfill, food stuffs and car-

⁶For example, DEQ noted a "rotting cow carcass in [a] scrap metal pile" on a June 25, 2001 site visit.

⁷For example, the Covingtons have provided photographic evidence of disposed wastes leaking oil onto the open ground.

casses were left uncovered for more than a week with mice and flies swarming over the uncovered items. The County conceded that it had no equipment to provide cover until 1997, and though a bulldozer was staged at the landfill, no one operated the bulldozer until 2000. D7HD reported at least three occasions in 1999 that the landfill lacked adequate cover.

The proffered evidence also demonstrated that, to a degree, the landfill was accessible to the public and did not have complete access control. The Covingtons often observed human scavengers in the landfill. In addition to the main gate, there were at least three routes to access the landfill that were not secured until after the Covingtons filed suit. And there was evidence that one of the fires might have been started by unauthorized persons who gained access to the landfill.

The Covingtons also presented evidence of their concern over possible groundwater contamination. But, while some evidence shows lead contamination at an up-gradient well, the Covingtons presented no evidence that this contamination came from the landfill. Moreover, the Appellees' experts presented evidence, not contradicted by the Covingtons, that the groundwater contamination detected reflected the turbidity of the sample and that the sample was preserved with nitric acid. Repeated samples have not verified the contamination first detected.

⁸For example, Karla Covington submitted affidavit evidence that she "observed that daily cover is not provided," that "some items, such as insulation, have been left uncovered for more than 90 days," and that "dead animals [were] left uncovered for two weeks and [that she] saw flies swarming around the carcasses."

⁹Karla Covington provided affidavit evidence about individuals accessing the site and scavenging. Karla Covington's deposition attests that the scavenging "was a very common practice."

[1] D7HD raises a threshold concern about subject matter jurisdiction. Citizen suits under RCRA require proof of notice. For suits alleging present¹⁰ violations of RCRA, the plaintiff must provide notice to the relevant parties sixty-days before filing suit. See 42 U.S.C. § 6972(b)(1)(A). For actions alleging "contribution" to present or past violations of RCRA, ninety-day notice is required. Id. § 6972(b)(2)(A). Both notice provisions are jurisdictional: Absent compliance with a required notice provision, we lack subject matter jurisdiction to hear the RCRA claims. See Ascon Props., Inc. v. Mobil Oil Co., 866 F.2d 1149, 1160 (9th Cir. 1989) (holding that the ninety-day notice requirement is jurisdictional); Hallstrom v. Tillamook County, 831 F.2d 889, 891 (9th Cir. 1987) as amended 844 F.2d 598 (9th Cir. 1987) (holding that the sixtyday notice requirement is jurisdictional). D7HD correctly asserts that more than sixty but less than ninety days elapsed between the Covingtons' notice on May 17, 2001 and the filing of the complaint on July 25, 2001. D7HD therefore contends that we lack jurisdiction over the Covingtons' "contribution" claims. Thus D7HD argues that, if we have no jurisdiction over § 6972(a)(1)(B) "contribution" claims, the entire RCRA claim must fail because the Covingtons have not alleged violation of **RCRA** under § 6972(a)(1)(A), the only remaining viable citizen suit provision.

[2] We reject D7HD's argument. First, for the portion of the Covingtons' suit that alleges current violations of RCRA under 42 U.S.C. § 6972(a)(1)(A), the suit satisfies the notice requirement because the Covingtons provided the requisite

¹⁰See KFC Western, Inc. v. Meghrig, 49 F.3d 518, 520 n.1 (9th Cir. 1995), rev'd in part on other grounds, 516 U.S. 479, 482 (1996) (noting that § 6972(a)(1)(A) claims require present violations because it does not apply to retroactive violations, whereas § 6972(a)(1)(B) "contribution" claims apply both to prospective and to retrospective violations of RCRA).

sixty-day notice. Second, Congress provided an exception to the ninety-day notice period for "action[s] . . . respecting a violation of subchapter III of this chapter." 1 42 U.S.C. § 6972(b)(2)(A). It is not surprising that Congress put aside notice requirements when plaintiffs allege violations of RCRA that involve presence of or mishandling of hazardous waste. The Covingtons made such a claim by alleging a violation of 42 U.S.C. § 6924, see infra Part VI, a provision within subchapter III of RCRA. See 42 U.S.C. Chapter 82 Table of Contents. The Second Circuit has held that a subchapter III claim regarding hazardous waste renders the required postnotice waiting period inapplicable to all of a plaintiff's RCRA claims. See Dague v. City of Burlington, 935 F.2d 1343, 1352 (2d Cir. 1991), rev'd in part on other grounds, 505 U.S. 557 (1992) (stating that allegations of a subchapter III violation made § 6972(b) notice requirements inapplicable to entire "hybrid"¹² suit so long as alleged RCRA violations were "closely related," such as claims that arise "from the operation of a single facility"); cf. Ascon, 866 F.2d at 1159-60 (declining to apply the § 6972(b)(2)(A) exception where hazardous waste was dumped before RCRA's enactment and could not constitute a violation of subchapter III).

[3] We consider *Dague* persuasive and adopt its rule. We hold that neither the sixty-day nor ninety-day notice requirements under RCRA are applicable to non-subchapter III claims in a hybrid suit so long as the non-subchapter III claims are related in time or location (e.g., that the violations all occurred at the same landfill) to any subchapter III claim. Under this rule, the Covingtons' entire hybrid claim alleging a violation of subchapter III and other violations of RCRA at the same landfill is not subject to any notice provision.

¹¹This exception and our decision, *infra*, on "hybrid" claims also apply to the 60-day notice requirement. *See* 42 U.S.C. § 6972(b)(1)(A).

¹²The *Dague* court used "hybrid" to describe a single suit that alleged violations of both subchapter III and other subchapters of RCRA (notably, subchapter IV).

Accordingly, we have subject matter jurisdiction over the Covingtons' hybrid RCRA claim, including the "contribution" claims.

Ш

We next examine whether the Covingtons have standing to advance claims under CAA and RCRA. Each statute requires a distinct analysis. We review the district court's standing determinations de novo. *Hall v. Norton*, 266 F.3d 969, 975 (9th Cir. 2001).

[4] Article III of the Constitution requires that a plaintiff have standing before a case may be adjudicated. This constitutional requirement ensures that litigants have an incentive to develop their case so that a court can correctly address the issues presented. To satisfy Article III a plaintiff must show (1) "'an injury in fact' that is (a) concrete and particularized and (b) actual or imminent . . . ; (2) [that] the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision." Hall, 266 F.3d at 975 (quoting Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc., 528 U.S. 167, 180-81 (2000)). The Covingtons, who invoke federal jurisdiction, have the burden of establishing all three elements. See Lujan v. Defenders of Wildlife, 504 U.S. 555, 561 (1992). The district court held that these elements were satisfied for the RCRA claims but not for the CAA claim. We examine these rulings in turn.

A

[5] We first address whether the Covingtons had standing

¹³There is no prudential standing issue here because Congress has authorized citizen suit provisions for the violations of RCRA and CAA that the Covingtons alleged. *See* 42 U.S.C. § 6972 (RCRA); 42 U.S.C. § 7604(a)(1) (CAA).

for their RCRA claims. Appellees Jefferson County and D7HD first dispute that the Covingtons have satisfied the injury requirement. We disagree. The Covingtons live just across the road from the landfill. If the landfill is not run as required by RCRA, the Covingtons are directly confronted with the risks that RCRA sought to minimize: Fires, explosions, vectors, scavengers, and groundwater contamination, if such occur, threaten the Covingtons enjoyment of life and security of home.¹⁴ Violations of RCRA increase the risks of such injuries to the Covingtons. Such risks from improper operation of a landfill are in no way speculative when the landfill is your next-door neighbor. The Covingtons' factual showing of fires, of excessive animals, insects and other scavengers attracted to uncovered garbage, and of groundwater contamination, evidence a concrete risk of harm to the Covingtons that is sufficient for injury in fact. See, e.g., Hall, 266 F.3d at 976 (holding "evidence of a credible threat to the plaintiff's physical well being from airborne pollutants" sufficient to satisfy the injury requirement) (emphasis added); Churchill County v. Babbitt, 150 F.3d 1072, 1078 (9th Cir. 1998), as amended, 158 F.3d 491 (9th Cir. 1998) (holding that claimant need only establish "the reasonable probability of the challenged action's threat to [his or her] concrete interest") (emphasis added) (internal quotation marks omitted).¹⁵

The Covingtons also submitted evidence of RCRA violations affecting their enjoyment of their home and land. For

¹⁴It is undisputed that the Covingtons are down-gradient from the landfill such that any groundwater contamination at the landfill would flow toward the Covingtons' property.

¹⁵See also Friends of the Earth, Inc. v. Gaston Copper Recycling, Corp., 204 F.3d 149, 160 (4th Cir. 2000) (en banc) (holding that "increased risk . . . constitutes cognizable harm" for injury in fact requirement); Johnson v. Allsteel, Inc., 259 F.3d 885, 888 (7th Cir. 2001) (same); Walters v. Edgar, 163 F.3d 430, 434 (7th Cir.) (1998) ("[a] probabilistic harm, if nontrivial, can support standing"); Mountain States Legal Found. v. Glickman, 92 F.3d 1229, 1234-35 (D.C. Cir. 1996) (incremental increase in the risk of forest fire is sufficient for standing purposes).

example, they alleged that the violations caused them to suffer from watering eyes and burning noses. Moreover, even if the only injuries alleged by the Covingtons were threats to the aesthetic and recreational enjoyment of their property, these harms occasioned by RCRA violations in context are sufficient to satisfy the injury in fact requirement. See Sierra Club v. Morton, 405 U.S. 727, 739 (1972); Ecological Rights Found. v. Pac. Lumber Co., 230 F.3d 1141, 1149 (9th Cir. 2000).

Appellees Jefferson County and D7HD misunderstand the standing inquiry, and by their argument seek to convert the standing issue into a question of whether there have been violations of RCRA. This misses the point of standing: the relevant inquiry here is not whether there has been a breach of RCRA by the County or the Health Department, but whether Appellees' actions have caused "reasonable concern" of injury to the Covingtons. See Laidlaw, 528 U.S. at 183. "[E]nvironmental plaintiffs adequately allege injury in fact when they aver that they use the affected area and are persons for whom the aesthetic and recreational values of the area will be lessened by the challenged activity." Id. (internal citations and quotations omitted) (emphasis added). To meet the injury in fact requirement for standing, the Covingtons need not show that they will prevail on their challenge asserting that there has been a violation of RCRA; they need only show that the conduct they challenge sufficiently injures them. The Covingtons have introduced sufficient evidence to satisfy the injury in fact requirement.

[6] Appellees also dispute causation and redressability. We disagree. Jefferson County operates the landfill, thus any violation of RCRA is directly caused by the County, and any violation can be redressed by requiring the County's compliance with RCRA or by creating a credible deterrent against future violations via the imposition of fines. *Laidlaw*, 528 U.S. at 185-86.

[7] There is also causation and redressability as to D7HD. D7HD, in its cross-appeal contesting RCRA standing, argues that it has only regulatory oversight and gives technical guidance, but that it is not responsible for enforcement or corrective action. This argument, however, is not borne out by the record. Under the February 1, 2000 MOU between the DHDs and the DEQ, the DHDs are responsible for approving applications for the operation of non-municipal solid waste facilities, issuing conditional use permits, and providing regulatory oversight of the operations of NMSWFs. 16 This shows that the D7HD could have suspended the County's operation of the landfill, issued a more stringent conditional use permit, or had more frequent or more rigorous inspections to ensure regulatory compliance. If D7HD declined to take any of these regulatory actions, such inaction, which is correctable by court order or sanction, meets the causation and redressability elements of standing.¹⁷

D7HD argues, however, that DEQ, not a DHD, is responsi-

¹⁶Before the 2000 MOU, DHDs were responsible for "inspect[ing] all . . . solid waste disposal sites and facilities within the district and take[ing] appropriate enforcement action as necessary." DHDs could "request [the then Department of Environment] to take appropriate legal action."

¹⁷Moreover, D7HD acknowledged that it has the power to enter a "Plan of Correction," which is asserted by D7HD to have solved any RCRA problems. This demonstrates D7HD's oversight powers. D7HD argues that the Plan of Correction renders the case moot. It is ironic that D7HD urges, on the one hand, that there is no standing for lack of redressability, and, on the other hand, that the "Plan of Correction" so redresses the challenged problems in this case as to render it moot. In any event, the "Plan of Correction" does not render this case moot. The Plan of Correction does not address all asserted RCRA violations; notably open access and open burning are not addressed in the Plan. Also, the Plan does not address the CAA claims. Even if the new Plan addressed these areas, the case would not be moot because the "contribution" claims could still be asserted for past violations. Finally, the new Plan does not render the injury nonredressable because an injunction or fines would substantially increase the likelihood of compliance with the new Plan — especially since there is evidence of non-compliance with the prior Operational Plan.

ble for "enforcement and corrective action." We are not persuaded. DEQ is the "lead agency" for corrective action, but that does not preclude corrective actions by another agency such as D7HD. D7HD is not precluded from initiating corrective action as part of its regulatory oversight and allowing the DEQ to lead once the action has started. Moreover, D7HD had the ability and the power to implement a "Plan of Correction," as it did here. That D7HD did not use this and the other coercive tools at its ready disposal satisfies the causation requirement.

Second, D7HD argues that there is no redressability because new Idaho regulations render any remedy moot. D7HD asserts that the cover regulations are now more stringent than federal regulations. This argument fails. A RCRA claim against those who "contribute" to violations can be brought for prior violations. The new regulations are, under Idaho law, no more stringent than federal requirements. See Part IV infra. D7HD also maintains that it has no remaining role in solid waste management under the new regulations and that, if D7HD does not have a role in solid waste management, there is no remedy that can redress the prior and ongoing violations. But D7HD cannot so easily distance itself from any failures of the landfill to satisfy RCRA. The DHD's role did not change as a result of the new regulations: The division of responsibility remains as outlined in the 2000 MOU. See www.deq.state.id.us/waste/solid waste/landfills.htm#roles. Idaho law continues to authorize the DHDs to "ascertain that operations standards are met, prepare and/or adopt technical guidance, review and recommend approval of alternative operating . . . requirements." Idaho Code § 39-7406 (2003). Because the D7HD retains the same power as before the new regulations, it follows that D7HD retains the ability to require changes ensuring compliance with RCRA. No sleight of hand can deal D7HD out of this case, given its important statutory

¹⁸D7HD has described its Plan of Correction as a "corrective action."

role to regulate solid waste disposal in Idaho. We hold that the asserted injury of the Covingtons is redressable as to D7HD.

[8] Because the Covingtons satisfied all necessary elements of standing to support their RCRA claims against Jefferson County and against D7HD, we affirm the district court's decision that the Covingtons have standing under RCRA.

В

We next address whether the Covingtons have standing to advance a claim under the Clean Air Act. The Covingtons claim that Jefferson County violated the CAA by not following federal procedures to account for removal or recapture of CFCs and other ozone-depleting substances before disposal or recycling. *See* 42 U.S.C. § 7671g; 40 C.F.R. §§ 82.154(a); 82.156(f); 82.166(i), (m). The district court held that the Covingtons lacked standing, reasoning that there was no evidence of a leak of ozone-depleting substances, ¹⁹ and that the CAA violations caused no injury to the Covingtons. Because part of the Covingtons' claim stems from procedural irregularity, ²⁰

Moreover, in cases of disposal of white goods, if, as here, a CAA claimant demonstrates a failure on the part of the disposer to compile appropriate paperwork showing that CFCs have been removed from the white goods, we presume that the white goods leaked CFCs unless and until the disposer affirmatively demonstrates otherwise. *See infra* note 27. This equitable and practical principle provides an alternative ground on which we reject the district court's conclusion that there was no leakage from the white goods.

¹⁹Appellants' statements in their affidavits that they observed liquids and gas escaping from white goods leads us to reject the district court's conclusion on this matter. For example, Karla Covington provided affidavit evidence that she had observed "liquids draining from materials awaiting metal recycle" including white goods. The district court's conclusion on this score cannot stand in this summary judgment context, where the Covingtons' evidence, even if contested, must be credited.

²⁰The Covingtons have asserted both a failure to comply with procedures to account for removal and/or recapture of CFCs before disposal or recycling of a white good pursuant to 40 C.F.R. §§ 82.156(f); 82.166(i), (m). They also assert that such CFCs have been released in violation of 42 U.S.C. § 7671g(c)(1); 40 C.F.R. § 82.154(a).

the redressability and imminence of injury requirements are relaxed. *See Hall*, 266 F.3d at 976, 977.²¹

[9] The evidence of leakage of white goods provided by the Covingtons is sufficient to show injury in fact because the failure to comply with CAA has increased the risk of harm to the Covingtons' property. The Covingtons have observed liquids leaking from the white goods and they fear that this liquid will contaminate their property. From this, the Covingtons' enjoyment of their property is diminished by the attested leaks. This analysis is parallel to our analysis of injury in fact for the RCRA violations. A credible threat of risks to their home yields a loss of enjoyment of property. That is enough for injury in fact for the CAA claims.

[10] There is also causation: Failure of the landfill to follow CAA procedure allowed CFCs and other ozone-depleting substances to be released in the landfill, instead of being recaptured or properly removed. If the CAA regulation had been followed, no liquids would have leaked from the white goods. Or if liquid had leaked, these violations of federal law would have been documented. Redressability is satisfied, as with the RCRA violations, by the fines and penalties applicable for violations of CAA. *Laidlaw*, 528 U.S. at 185-86. Such CAA fines and penalties can cause Jefferson County to bring the landfill into compliance with the CAA. We conclude that the Covingtons have standing to bring the CAA claim.

IV

[11] The Covingtons next argue that the district court erred

²¹In Cantrell v. City of Long Beach, 241 F.3d 674, 679 n.3 (9th Cir. 2001), we held that "the injury in fact requirements are adjusted for plaintiffs raising procedural issues in that although they must show a 'concrete interest' at stake, they need not show that the substantive environmental harm is *imminent*." (emphasis added). See also Hall, 266 F.3d 976; Lujan v. Defenders of Wildlife, 504 U.S. 555, 572 n.7 (1992).

by disregarding potentially applicable Idaho regulations on solid waste management when analyzing whether there had been a violation of RCRA.²² Under Ninth Circuit precedent, it is a violation of RCRA if a regulated entity does not comply with the state-selected implementation of the RCRA regime so long as the state standard is not "more stringent" than the federal criteria. *See Ashoff v. City of Ukiah*, 130 F.3d 409, 411-12 (9th Cir. 1997).

In *Ashoff*, we held that "if state standards 'become effective pursuant to' RCRA, a citizen can sue in federal court to enforce the standard" because "[t]he federal criteria give the state standards legal effect under federal law." *Id.* at 411. "Thus, a citizen suit could be brought under RCRA for noncompliance with the state selected alternative" so long as the state standards do not "exceed the federal criteria." *Id.* at 411-12. If "a state elects to create more stringent standards, nothing in RCRA gives them legal effect. Their legal effect flows from state law." *Id.* at 412.

Moreover, *Ashoff* also held that it is also a violation of RCRA if a landfill violates the RCRA "open dump" criteria, and the landfill would be subject to a citizen suit, notwith-standing EPA approval of a state program. *Id.* at 411 n.3. The *Ashoff* court rejected the theory that "once the EPA approves a state program, RCRA no longer authorizes citizen suits

²²Because this ruling occurred after discovery on a motion for summary judgment, we treat it as if summary judgment was granted on these questions. The district court's decision to grant summary judgment is reviewed de novo. See Oliver v. Keller, 289 F.3d 623, 626 (9th Cir. 2002). We use the standard in Fed. R. Civ. Pro. 56(c). See, e.g., Ghotra v. Bandila Shipping, Inc., 113 F.3d 1050, 1054 (9th Cir. 1997). "[V]iewing the evidence in the light most favorable to the nonmoving party," we must determine "whether there are any genuine issues of material fact" under the applicable substantive law. Meade v. Cedarapids, Inc., 164 F.3d 1218, 1221 (9th Cir. 1999). We do not weigh the evidence, but are concerned whether a rational trier of fact might resolve the issues in favor of the non-moving party. T.W. Elec. Serv. v. Pac. Elec. Contractors, 809 F.2d 626, 631 (9th Cir. 1987).

under Subtitle C or D." *Id.* at 411 (internal quotation marks omitted). This holding follows the EPA's interpretation of RCRA. *See id.* at 411-12 & n.3 (citing 61 Fed. Reg. 2584, 2593 (Jan. 26, 1996), 49 Fed. Reg. 48300, 48304 (Dec. 12, 1984), 45 Fed. Reg. 85016, 85021 (Dec. 24, 1980)).

Thus, under settled law, if the Idaho standards at issue here are not "more stringent" than the federal criteria under RCRA, a violation of either the state or the federal standards is a violation of RCRA for which a citizen may bring suit. *Id*.

The district court initially erred by not conducting a stringency analysis under *Ashoff* to determine whether violation of state solid waste management regulations could serve as a violation of RCRA. The district court rejected the Covingtons' attempt to prove violations of RCRA by showing that Jefferson County violated state regulations. Without a discussion or evaluation of the applicability of *Ashoff*, the district court held that "[t]he Court rejects the Covingtons' reliance on alleged violations of state standards to support their claim that the County violated the federal regulations." The district court did not apply the rule set forth in *Ashoff*.

For several of Idaho's landfill requirements, this error was not harmless. Idaho law prohibits the creation of solid waste disposal regulations that would "impose conditions or requirements more stringent or broader in scope than the referenced RCRA regulations. . . ." Idaho Code § 39-7404 (2003). The Appellees Jefferson Country and D7HD acknowledge this statutory limitation, but argue nonetheless that the state regulations cited by the Covingtons were "more stringent than the federal regulations." Doubtless this argument is advanced in the hope of avoiding D7HD's prior concessions that there were violations of the applicable Idaho regulations by the landfill. Appellees apparently contend that the state regulations that have been violated are *ultra vires*. We disagree. Comity considerations counsel against lightly concluding that the regulations were promulgated in contravention of the

Idaho statute that authorized their promulgation. After assessing the terms of the Idaho regulations and the federal criteria that they, by Idaho law, may not exceed, we conclude that the relevant state regulations are lawful because they are not more stringent than the federal standards. To elaborate, we will discuss the relevant Idaho regulations in turn.

The first regulation that we address provides a "cover" requirement. Former IDAPA 58.01.06.006.03 (1992).²³ Appellees claim that because RCRA requires "periodic" cover, Idaho's requirement of six-inches of cover at the end of each operating day is more strict. The cover requirements can be evaluated in two dimensions: frequency and amount. As to frequency, the federal standard of RCRA defines periodic cover as cover applied at the "end of each operating day." 40 C.F.R. § 257.3-6. Idaho's cover requirement also applies at the end of each operating day. There is no difference on the required frequency of cover. As to amount of cover, the RCRA regulations found in 40 C.F.R. § 257.3-6, applicable to solid waste facilities generally, do not set a minimum depth of cover, though they require cover "in such a manner as to reduce the risk of fire and to impede vectors access " Id. In contrast, Idaho dictates that six inches of cover be applied. We conclude that this regulation is not more stringent than RCRA, but rather is the "manner" that the state determined was required to reduce fire risk and impede vector access. Six inches is Idaho's implementation of a uniform standard for the amount of cover needed to reduce fire and impede vector access. Because the Idaho cover regulations are no more stringent than the RCRA criteria for cover, the district court should have adopted them as a relevant standard for a RCRA violation. See Ashoff, 130 F.3d at 411-12.

The district court erred in granting summary judgment

²³The Operational Plan for the landfill required six inches of cover "at such frequency to control disease vectors, fires, odors, blowing litter, or scavenging."

because the district court disregarded the violations of Idaho's cover regulations that were supported by the Covingtons' proof. That error was significant because a D7HD Health Specialist found three violations of the Idaho cover requirement. These documented violations defeat the district court's summary judgment on the claim that the landfill operation offended Idaho's cover requirements, and thus violated RCRA, because disputed issues of material fact remain.

We next turn to the Idaho open burning regulations. IDAPA §§ 58.01.01.603.01; 58.01.06.010(d)(ii) (2002). Open burning at landfills is generally prohibited, but the regulations make certain limited exceptions if the burning is infrequent and the materials are agricultural wastes, silvicultural wastes, land clearing debris, diseased trees, or debris from emergency cleanup operations. IDAPA 58.01.06.010(d)(ii). These restrictions are no stricter than the federal criteria that generally ban open burning with limited exceptions for "infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, diseased trees, debris from emergency clean-up operations, and ordnance." 40 C.F.R. § 257.3-7.

Idaho's open burning criterion should have been examined by the district court because there are disputed issues of material fact regarding whether it had been violated. There is evidence of at least two fires at the dump. The first fire involved the burning of treated wood, which does not fall within an exception to the prohibition on open burning. The second fire included metal filters and a metal bed frame which are also not included in either the federal or the state exceptions. Because neither of these fires fall within the state's listed exceptions, they violated Idaho's open burning prohibitions. IDAPA §§ 58.01.01.603.01; 58.01.06.03.k (2002). Although the Appellees contend that the second fire was started by someone else, the Covingtons presented evidence that the fire occurred on the dump, and this is sufficient to create an issue

of fact on the landfill's responsibility.²⁴ Further, the County's defense to the second fire does not give defense for the first fire, nor for the third fire that the Covingtons witnessed. Summary judgment on this claim was improper because issues of disputed material fact remained.

[12] The Covingtons also asserted violations of Idaho's criteria for groundwater contamination and the prevention of explosive gas, but they fail to cite any specific state criteria that would support their argument. As such, there are no regulations against which the *Ashoff* analysis can be performed. The district court properly dismissed on summary judgment the Covingtons' claims of groundwater contamination and explosive gas based on Idaho regulations.

We conclude that the district court erred in not conducting an *Ashoff* stringency analysis, that Idaho's cover and open burning requirements are no stricter than the federal requirements of RCRA, and that there is evidence of past violations of Idaho's cover and open burning requirements that should have been sufficient to allow the Covingtons to proceed to trial. Our analysis shows that the Covingtons presented sufficient evidence of violations of the state standards under *Ashoff* to prove a claim under RCRA. The district court erred in granting summary judgment against the Covingtons on these two grounds.

 \mathbf{V}

We next address whether the district court properly granted summary judgment to Appellees based upon the asserted violations of RCRA's sanitary landfill criteria. RCRA authorizes

²⁴If someone else started the second fire, this might give the landfill a defense on open burning, but would undercut the landfill's argument regarding lack of access addressed *infra*. It would seem that the landfill, if burning occurred, has potential liability either for open burning or for open access.

citizen suits for violations of the federal sanitary landfill criteria, 40 C.F.R. § 257.3 et seq., even if the EPA approved the state's program. See Ashoff v. City of Ukiah, 130 F.3d 409, 411 & n.3 (9th Cir. 1997). The Covingtons argue that Appellees have directly violated several provisions of the federal criteria. The district court awarded summary judgment to Appellees on each of these provisions. For each asserted violation of these federal regulations, we examine whether the district court correctly granted summary judgment.

A

[13] The Covingtons claim that the landfill contaminated their drinking water. Under the applicable regulation, 40 C.F.R. § 257.3-4, "[a] facility or practice shall not contaminate an underground drinking water source beyond the solid waste boundary." The district court correctly granted summary judgment to Appellees on this claim. It is uncontested that the only contaminants found were located up-gradient from the landfill and that the contaminant (lead) was introduced by the testing procedure. While the risk of groundwater contamination is sufficient to give the Covingtons standing, there is inadequate evidence of groundwater contamination to survive summary judgment. We conclude that evidence of contamination of groundwater up-gradient from the landfill is not probative that the landfill has corrupted the water downgradient from it. We therefore affirm the district court's grant of summary judgment.

B

The Covingtons next claim that the Defendants violated RCRA's cover requirement. As discussed *supra*, the applicable federal criteria require "periodic cover," defined as "the application and compaction of soil or other suitable material over disposed solid waste at the end of each operating day or at such frequencies and in such a manner as to reduce the risk of fire and to impede vectors access to the waste." 40 C.F.R.

§ 257.3-6. The district court held that this criterion was met because "[t]he only evidence in the record shows that the County applied 'periodic application of cover material.' "We disagree.

[14] The district court focused too narrowly on the term "periodic" as the required frequency, without giving due weight to the fact that the federal regulatory language stresses cover "at the end of each operating day," and we interpret this regulation to mean that daily cover is the minimum required under federal law. Cf. Revisions to Criteria for Municipal Solid Waste Facilities, 62 Fed. Reg. 40708, 40709-10 (July 29, 1997).25 Under a proper reading of the daily cover requirement, there is a genuine issue of fact whether this requirement has been met. A D7HD Health Specialist noted in inspection reports at least three times when daily cover was not applied. The Covingtons presented evidence of rotting bird and cow carcasses that lay uncovered for more than a week. If this evidence is credited at trial, a rational trier of fact could find for the Covingtons on this issue. In light of our determination on the correct legal standard requiring daily cover, the district court erred in granting summary judgment on the cover requirement.

C

[15] The Covingtons next claim that Appellees violated RCRA's open burning prohibition. The controlling regulation, 40 C.F.R. § 257.3-7, prohibits a landfill from "engag[ing] in open burning of residential, commercial, institutional or industrial solid waste." The Covingtons' evidence of fires, discussed above, which included the burning of treated wood and metal, contradicts the district court's conclusion that "there is no evidence that the two incidents of burning that occurred violated the federal regulation." Because the burn-

²⁵The EPA has stated that an option available to the landfill to reduce cover costs is to have fewer operating days. *Id.* at 40710.

ings discussed above do not fall within an exception in the federal criteria, and it is not permissible at such a landfill to burn treated wood and metal, the Covingtons have presented sufficient evidence to have survived summary judgment.

D

The Covingtons next claim that Appellees violated RCRA's requirement prohibiting the buildup of explosive gases. The applicable regulation, 40 C.F.R. § 257.3-8, limits the allowable concentration of explosive gases to a maximum that must be less than 25% of the lower explosive limit (i.e., the point at which explosion may occur) for the gases in facility structures, and less than 25% of the lower explosive limit at the property boundary. Jefferson County and D7HD argue that the Covingtons cannot prove the existence of any explosive gas, much less explosive gas in the quantities prohibited by RCRA. The Covingtons concede that they cannot prove the existence of explosive methane gas, nor that the RCRA limit was exceeded. But the Covingtons contend that the reason they cannot provide evidence of the existence of methane gas is precisely because the Appellees did not monitor the landfill property for such gases.²⁶

[16] A landfill that accepts waste products that can produce explosive gases, while not monitoring for such gases, places the public at risk. Such a landfill should not be able to avoid RCRA's requirements by asserting that a plaintiff lacks evidence of explosive gases. Individuals in the position of the Covingtons have no ability whatsoever to monitor gases within the landfill's structures, and have little ability to monitor gases at the landfill's property boundaries. If we were to accept Appellees' argument that the Covingtons cannot prove

²⁶Monitoring explosive gases is not expensive. The EPA estimates generally that monitoring for methane gas would cost less than \$100 every three months. *See Revisions to Criteria for Municipal Solid Waste Facilities*, 62 Fed. Reg. 40708, 40710 (July 29, 1997).

dangerous concentrations of explosive gas, any landfill operator could elect not to monitor its gases and, absent a plaintiff's trespass and covert installation of monitoring and telemetry equipment, thereby ensure that a plaintiff would be unable to prove a RCRA violation from concentration of dangerous gases. Even in a case where concentrations of explosive gas presented grave dangers to the public, a plaintiff would be unable to prove a violation of the explosive gas concentration maximums solely because the landfill had failed to monitor for such a violation. To avoid this inequitable result, we hold that if a plaintiff establishes (1) that a landfill accepts wastes that routinely may produce explosive gas and (2) that the landfill fails to monitor for such gas, then the plaintiff is entitled to a rebuttable presumption that the explosive gas requirement of 40 C.F.R. § 257.3-8 has been violated. The burden then rests on the defendant landfill to prove that the quantity of explosive gases did not exceed the RCRA threshold.²⁷ Applying this presumption, we conclude that the Covingtons presented sufficient evidence to raise a presumption of dangerous gas concentration, and thus a genuine issue of fact whether the regulatory prohibitions were violated. The Covingtons presented evidence demonstrating that the landfill routinely accepts biological wastes that can produce methane gas, and that Jefferson County and D7HD did not establish a reasonable system to monitor the concentration of any explosive gas. At trial, the same presumption may arise upon the same showing by the Covingtons. Jefferson County and D7HD may then present evidence to rebut the presumption, and if the presumption is rebutted the burden of proof will be

²⁷This analytical framework applies equally to the potential defense of Jefferson County and D7HD that the Covingtons are unable to prove any improper release of CFCs if that inability to prove improper release arose from the Appellees' failure to maintain the records required by law. *See In The Matter of Lake County, Montana*, 2001 WL 1035755 (E.P.A. July 24, 2001) (holding that a landfill could not "hide behind" the Complainant's inability to prove a violation of 40 C.F.R. § 82.156(f)(2) because the landfill operator had failed to test for CFCs before disposing of white goods that might have contained CFCs).

on the Covingtons to make their case that dangerous gas concentrations exceeded regulatory limits.

 \mathbf{E}

The Covingtons claim a violation of RCRA's open access requirement. As required by 40 C.F.R. § 257.3-8, a facility must prevent the public's exposure to potential health and safety hazards by prohibiting uncontrolled access to a disposal site. The district court held that "uncontradicted evidence shows that access to the landfill is controlled at least to some extent and there is no evidence that the extent of public access allowed is exposing the public to potential health and safety hazards." There are two parts to this holding: (1) that there is some control of access; and (2) that the there is no evidence of public hazard. We reject the district court's analysis on both counts.

First, that *some* access may be controlled does not mean that all access is controlled. The Covingtons introduced evidence to show that there is (or was) easy access to the landfill and that this access created a public hazard. The Covingtons submitted evidence that there were several access routes to the landfill, including a gate that was left open on at least two occasions, the absence of a fence on the southern edge of the landfill until the summer of 2001, and an unsecured gate on the northeast corner of the landfill until March 2002. The evidence submitted by the Covingtons, taken as a whole, is sufficient to permit a rational factfinder to conclude that parties who wanted to enter the landfill did so with impunity notwithstanding "fences, earthen berms, signage, locked gates and personnel." A rational trier of fact, crediting the Covingtons' evidence, and giving them all reasonable inferences, could find that human scavengers were able to access the landfill after the main gate was closed, that a D7HD inspector could access the landfill when the landfill was closed, and ultimately that Jefferson County and D7HD violated RCRA's access restrictions.

[17] Second, the Covingtons' evidence was sufficient to support a conclusion that access created a public hazard. For example, the County urges that the second fire was caused by an unauthorized person who entered the landfill with solid waste to burn, and after igniting the materials, left the landfill. This is sufficient evidence of uncontrolled access for the Covingtons' claim on this ground to survive summary judgment. We reverse the district court's summary judgment dismissing the claim that uncontrolled access offended the federal regulation.

* * *

In conclusion, we affirm the district court's grant of summary judgment on the Covingtons claim of contamination of the underground drinking water. We reverse the district court's grant of summary judgment on the Covingtons' claims of violations of RCRA's regulatory criteria regarding cover, open burning, explosive gases, and uncontrolled access.

VI

Finally, we address whether the district court erred when it ruled that 42 U.S.C. § 6924 is merely an enabling statute, containing no substantive requirements. The district court, citing *Jones v. Inmont Corp.*, 584 F. Supp. 1425, 1431 (S.D. Ohio 1984), held that 42 U.S.C. § 6924 only authorizes the EPA to promulgate regulations. We disagree. The *Jones* court rested its interpretation of § 6924 on the version of the statute that existed on April 26, 1984. At that time, § 6924 contained only one provision: the section that is currently labeled § 6924(a).²⁸

(Text continued on page 1653)

²⁸The entire text of the former § 6924, and current version of § 6924(a), reads as follows:

Not later than eighteen months after October 21, 1976, and after opportunity for public hearings and after consultation with appropriate Federal and State agencies, the Administrator shall promulgate regulations establishing such performance standards,

applicable to owners and operators of facilities for the treatment, storage, or disposal of hazardous waste identified or listed under this subchapter, as may be necessary to protect human health and the environment. In establishing such standards the Administrator shall, where appropriate, distinguish in such standards between requirements appropriate for new facilities and for facilities in existence on the date of promulgation of such regulations. Such standards shall include, but need not be limited to, requirements respecting—

- (1) maintaining records of all hazardous wastes identified or listed under this chapter which is treated, stored, or disposed of, as the case may be, and the manner in which such wastes were treated, stored, or disposed of;
- (2) satisfactory reporting, monitoring, and inspection and compliance with the manifest system referred to in section 6922(5) of this title;
- (3) treatment, storage, or disposal of all such waste received by the facility pursuant to such operating methods, techniques, and practices as may be satisfactory to the Administrator;
- (4) the location, design, and construction of such hazardous waste treatment, disposal, or storage facilities;
- (5) contingency plans for effective action to minimize unanticipated damage from any treatment, storage, or disposal of any such hazardous waste;
- (6) the maintenance of operation of such facilities and requiring such additional qualifications as to ownership, continuity of operation, training for personnel, and financial responsibility (including financial responsibility for corrective action) as may be necessary or desirable; and
- (7) compliance with the requirements of section 6925 of this title respecting permits for treatment, storage, or disposal.

No private entity shall be precluded by reason of criteria established under paragraph (6) from the ownership or operation of facilities providing hazardous waste treatment, storage, or disposal services where such entity can provide assurances of finanThe provision then was an enabling clause. However, on November 8, 1984, Congress enacted the Hazardous and Solid Waste Amendments of 1984, Pub. L. No. 98-616 (1984), which significantly expanded § 6924. The amendments added substantive provisions, including that six months after their enactment "the placement of bulk or noncontainerized liquid hazardous waste . . . (whether or not absorbents have been added) in any landfill is prohibited." See Pub. L. 98-616, Title II, Sec. 201(c) codified at 42 U.S.C. § 6924(c)(1) (2003) (emphasis added). This is substantive law. See Vasquez v. Hillery, 474 U.S. 254, 282 n.15 (1986) (stating that a "substantive law . . . defines particular substantive claims for relief"); Meadows v. Dom. Rep., 817 F.2d 517, 524 (9th Cir. 1987) ("Substantive law is defined as '[t]he basic law of rights and duties' ") (citing Black's Law Dictionary 1281 (5th ed. 1979)); Guam v. Okada, 694 F.2d 565, 569 (9th Cir. 1982) (stating that in the context of criminal law, "substantive law defines those acts which are considered crimes and establishes the punishment to be imposed upon violators"). If a statute proscribes conduct, then we consider it substantive, because it imposes a duty upon all not to engage in that conduct.

[18] In this case there is still more. Congress intended a scheme where certain disposals of liquid hazardous waste were prohibited whereas other disposals of liquid hazardous waste were permissible within a regulatory framework. *Compare* 42 U.S.C. § 6924(c)(1) (2003) (prohibiting the placement of bulk or noncontainerized liquid hazardous waste) with id. at § 6924(c)(2) (requiring the Administrator to promulgate regulations regarding the disposal of containerized liquid hazardous waste). This comparison reinforces our con-

cial responsibility and continuity of operation consistent with the degree and duration of risks associated with the treatment, storage, or disposal of specified hazardous waste.

See 42 U.S.C. § 6924(a) (2004).

clusion that Congress prohibited the placement of noncontainerized hazardous waste in landfills and that a citizen can sue to enforce that prohibition. *See* 42 U.S.C. § 6972. To ignore Congress's plain intent and to refuse to enforce the prohibition in § 6924(c)(1) would undermine the regulatory regime created by Congress.

Summary judgment for the Appellees on this claim was error.

VII

[19] We affirm the district court that the Covingtons had standing for the RCRA claims. We reverse the district court's holding that the Covingtons did not have standing for the CAA claims. We affirm in part and reverse in part the district court's grant of summary judgment on the claimed violations of state and federal sanitary landfill requirements, as set forth specifically above. We reverse the district court's holding that 42 U.S.C. § 6924(c)(1) is not substantive. We remand for further proceedings consistent with our opinion.

Costs on appeal are awarded to the Covingtons and these costs shall be borne equally by Appellees Jefferson County and D7HD.

AFFIRMED IN PART, REVERSED IN PART, AND REMANDED.

GOULD, Circuit Judge, concurring:

As a court we need not today reach any further conclusion on standing beyond that in Part III.B. However, there is an additional theory under which I believe the Covingtons may have standing to advance their Clean Air Act ("CAA") claims based on ozone degradation. I feel it appropriate to set forth this theory because of its potential application in any other cases where widespread or even global environmental impact is threatened by a federal statutory wrong.¹

It is beyond doubt that the release of CFCs degrades the stratospheric ozone layer. See David W. Fahey, Twenty Questions and Answers About the Ozone Layer in Scientific Assessment of Ozone Depletion: 2002, Global Ozone Research and Monitoring Project — Report No. 47, 498 pp., Geneva, 2003, Q.8-Q.10, now available at http://www.unep.org/ozone/pdf/11-qa.pdf (hereinafter "Twenty Questions").² Some of the CFCs improperly released by the landfill will enter the stratospheric ozone layer and allow more UV radiation to reach the surface of the Earth. Id. at O.8-O.9.

Depending on the type of CFC released, the improperly released gas will have an atmospheric lifetime of 45 to 100 years. Id. at Q.11. In that extensive time span, each CFC, converted to chlorine monoxide (ClO) after reactions with sunlight, can destroy hundreds of molecules of stratospheric ozone because the ClO is a catalyst. ClO first reacts with an oxygen atom (O) to form a chlorine atom (Cl) and an oxygen molecule (O_2) . The chlorine atom (Cl) reacts with an ozone molecule (O_3) to re-form ClO along with an oxygen molecule (O_3) . The ClO, then, is ready to begin the ozone-depletion

¹Because this argument was not briefed by the parties, and its resolution is not necessary to decide this case, I reserve judgment on the question posed in my concurrence. However, I set forth my preliminary views because I believe that the issues raised inevitably may have to be confronted in the future if and when plaintiffs relying on federal statutes raise claims of injury based on globally shared harm with no unique personal injury.

²The answers to the twenty question were reviewed, discussed, and accepted by over 74 atmospheric scientists, *see* Twenty Questions at Q.1 n.1.

³An atmospheric life span is how long it takes for natural processes to remove 60% of the gas. Twenty Questions at Q.11.

cycle once more.⁴ Once released, CFCs by natural processes creates ClO, which is an unrelenting destroyer of ozone.⁵ Because this process occurs at the molecular level, it is difficult for us to fathom the cumulative impact of repetitive small destructions of ozone, but science knows that the impact of this process, if unrestrained, will be devastating to all life on earth.⁶

Science is conclusive that stratospheric ozone gives humans necessary protection from otherwise life-threatening ultraviolet-B (UV-B) radiation. Id. at Q.5 (noting that unless stratospheric ozone blocks harmful UV-B radiation, the UV-B radiation would reach the earth and increase the incidence of skin cancer, cataracts, and suppressed immune systems). The Covingtons, with every person on this planet, face an increased risk of these maladies if the landfill releases CFCs

(1)
$$ClO + O \rightarrow Cl + O_{\gamma}$$

(2)
$$Cl + O_3 \rightarrow ClO + O_2$$

The net result of this reaction is that the CIO converts one oxygen atom and one ozone molecule into two oxygen molecules $(O+O_3 \rightarrow 2\ O_2)$. As is apparent, the CIO, after converting to a simple chlorine atom (Cl), returns to chlorine monoxide by devouring an ozone molecule.

⁵And this reaction is the *least* devastating of the three methods by which ozone is destroyed by CFCs. *See id.* at Q.16-Q.17 (including explanation of polar stratospheric clouds).

⁶Only the random fortuity of external reactions with the ClO molecule prevents this ozone-depleting reaction from occurring *ad infinitum*. *Id.* at Q.16.

⁷There is also a potential destructive impact of UV-B on terrestrial plant life (including farm crops), single-cell organisms (which are at the base of all food chains), and aquatic ecosystems. *Id.* at Q.5. Not only humans but other life forms are threatened by loss of ozone, which is not surprising because all species apparently evolved with ozone cover. *See generally* Charles Darwin, *On the Origin of Species* (1st ed. 1859); Richard Dawkins, *The Blind Watchmaker* (1986).

⁴To be precise, the chemical reaction, as described in Twenty Questions, occurs as follows:

into the air. The Covingtons fear this "pollut[ion of] their environment."

It may seem counter-intuitive to assert that grave environmental harms can follow from the improper release of fluids and gases from about a hundred or so discarded refrigerators in rural Idaho. And, of course, the scope of harm that could flow from one landfill is perhaps minor. Yet the cumulative harm from continuing unrestrained release of CFCs from thousands of landfills over decades of time presents a clearer picture of risk to the environment. It is not our task to assess risks of environmental harm from release of CFCs, insofar as a judgment has already been made by Congress in the Clean Air Act, recognizing this injury. While the landfill here only contributes to a fraction of overall ozone depletion, it cannot be doubted that the actions of the landfill operators to a degree increase ozone depletion, which in turn increases UV-B radiation reaching the earth, which in turn increases the risk of maladies that flow from increased UV-B radiation, to the detriment of every person on the earth.

Though the landfill's release of CFCs contributes to a process that can cause global harm if not restrained, that alone does not resolve the standing question. The Covingtons suffer no greater injury than any other person, and that poses a very challenging question under some standing precedents. Under some precedents, the existence of a widely shared injury may be thought to compel a conclusion that the injury was not "concrete and particularized." E.g., United States v. Richardson, 418 U.S. 166, 176-77 (1974) (stating that generalized grievances do not give rise to a concrete injury); Lujan v. Defenders of Wildlife, 504 U.S. 555, 573-74 (1992) (same). This theory may be summed, at least by detractors, as "injury to all is injury to none" for standing purposes. Yet I do not think that this theory is compelled by precedent, and no Supreme Court case has squarely confronted the proper standing rule to be applied in a case where the alleged injury is shared by all persons. A theory that "injury to all is injury to none" seems wrong in theory, for it would deny standing to every citizen such that no matter how badly the whole may be hurt, none of the parts could ever have standing to go to court to cure a harmful violation. The Supreme Court has recognized this very concern. See United States v. Students Challenging Regulatory Agency Procedures (SCRAP), 412 U.S. 669, 688 (1973) ("To deny standing to persons who are in fact injured because many others are also injured, would mean that the most injurious and widespread . . . actions could be questioned by nobody. We cannot accept that conclusion.").

The issue then is whether current Supreme Court precedent supports standing for a citizen suit asserting environmental claims raising a threat of widespread or even global injury. This issue is not easy in view of apparent shifts in direction or emphasis from the Supreme Court's precedent over time. But the most recent Supreme Court precedent appears to have rejected the notion that injury to all is injury to none for standing purposes. Instead, recent precedent holds that a generalized injury, by itself, is no bar to standing. See Fed. Election Comm'n v. Akins, 524 U.S. 11, 23-24 (1998) (holding that in order for a "generalized grievance" to bar standing, the harm must be widely shared and of "an abstract and indefinite nature") (emphasis added). A concrete actual injury, even though shared by others generally is sufficient to provide injury in fact. It appears to be abstractness, not wide dispersal, of an injury that may prevent the injury from being sufficient to confer standing. Id. at 24. As the Court in Akins clarified, "an injury . . . widely shared . . . does not, by itself, automatically disqualify an interest for Article III purposes. Such an interest, where sufficiently concrete, may count as an 'injury in fact." Id. (emphasis added). See also Pye v. United States, 269 F.3d 459, 469 (4th Cir. 2001) ("[s]o long as the plaintiff ... has a concrete and particularized injury, it does not matter that legions of other persons have the same injury"). Akins can be seen to shift the focus from the widespread (or generalized) nature of an injury, the focus of prior precedent, and to turn the focus upon the concreteness of the injury, however widespread. Stated another way, the Supreme Court's precedent may be read to support a general rule of standing along these lines: If the injury is not concrete, there is no injury in fact even if the injury is particularized; and if the injury is concrete and particularized, there is injury in fact even if the injury is widespread. Concreteness of injury, so long as it is particularized, appears to be the touchstone for the injury in fact element of standing. *See Defenders of Wildlife*, 504 U.S. at 560.

Applying this principle in the context of environmental litigation under the CAA makes sense because violations that damage air quality will quite often be injurious to thousands or even millions of persons. Environmental harms such as acid rain, contaminated water, and bad air, if they occur, do not target individuals. They affect us all. This principle reaches its zenith in the case of a claim of damage to an ozone layer which, if it occurs, can destroy or impair life across the globe. After *Akins*, the superordinate question about the injury requirement here is whether the injury suffered by the Covingtons is concrete rather than "abstract and indefinite." I believe that it is, for several reasons.

First, as explained above, the scientific evidence shows a marginal increase in the risk of serious maladies from increased UV-B radiation that results from the landfill's release of CFCs. I recognize that the environmental follies and errors committed at one landfill in rural Idaho, no matter how egregious, can cause only a small increase in risk to the world, including threat to the Covingtons. But the size of the injury to the environment, even if small from improper CFC

⁸For an injury to be particularized it must "affect the plaintiff in a personal and individual way." *Defenders of Wildlife*, 504 U.S. at 560 n.1. The increased risk of skin cancer, cataracts, and/or a suppressed immune system affect the Covingtons in a personal and individual way. Because the asserted injury is so clearly particularized, my analysis focuses more on whether the injury is sufficiently concrete in light of the widespread injury.

releases at one landfill, would appear to have no bearing on whether the increased risk to the Covingtons is "concrete." See Central Delta Water Agency v. United States, 306 F.3d 938, 948, 950 (9th Cir. 2002) (holding that " 'to require actual evidence of environmental harm, rather than an increased risk based on a violation of the statute, misunderstands the nature of environmental harm' a credible threat of harm is sufficient to constitute actual injury for standing purposes") (quoting Ecological Rights Found. v. Pac. Lumber Co., 230 F.3d 1141, 1151 (9th Cir. 2000)); Hall v. Norton, 266 F.3d 969, 976 (9th Cir. 2001) (holding that "evidence of a credible threat to the plaintiff's physical well-being from airborne pollutants" is sufficient to satisfy the injury requirement); Churchill County v. Babbitt, 150 F.3d 1072, 1078 (9th Cir. 1998) as amended, 158 F.3d 491 (9th Cir. 1998) (claimant need only establish "the reasonable probability of the challenged action's threat to [his] concrete interest") (internal quotation marks omitted). See also SCRAP, 412 U.S. at 689 n.14 (rejecting the theory that a minimum quantum of injury is needed for standing). Because the injury in fact requirement "is qualitative, not quantitative, in nature," Ass'n of Cmty. Orgs. for Reform Now v. Fowler, 178 F.3d 350, 357-58 (5th Cir. 1999), the probability of harm necessary for injury in fact varies with the severity of the probable harm. Mountain States Legal Found. v. Glickman, 92 F.3d 1229, 1234 (D.C. Cir. 1996) ("[t]he more drastic the injury . . . the lesser the increment in probability necessary to establish standing"). Here, if ozone is lost, more radiation makes it through the atmosphere to create a risk of higher incidence of skin cancer, cataracts, and/or a depressed immune system. Twenty Questions at Q.5. These are deadly serious maladies, and the risk of such grave harms minimizes the required probability of their occurrence for injury in fact purposes. Thus the Covingtons' exposure and fear of exposure to heightened risk of such harms appear to be concrete injuries.

Second, whatever we may personally feel about small but increased risks of serious human maladies arising from ozone destruction, Congress recognized this precise injury by outlawing the disposal of refrigerants in a way that allows CFCs to enter the environment and by requiring the EPA to promulgate regulations to govern the disposal and recycling of such CFCs. See 42 U.S.C. § 7671g. Federal regulations require certain procedures to be followed to ascertain and ensure that no CFCs are released into the environment during the disposal process. See 40 C.F.R. §§ 82.156(f); 82.166(i), (m). Congress explicitly decided that any citizen could sue to enforce these laws. See 42 U.S.C. § 7604(a)(1); § 7604(f)(3) (as amended by Pub. L. 101-549, § 707(e)). Congress made CFC control a requirement of the CAA, a requirement expressly enforceable by citizen suit. I cannot ignore the danger that Congress recognized, sought to prevent, and accordingly deemed an injury. The Covingtons' asserted harms fall within the injuries recognized by Congress. The Covingtons, as part of the public, have a corresponding right to vindicate their statutory protections. "Congress has the power to define injuries . . . that will give rise to a case or controversy where none existed before " Defenders of Wildlife, 504 U.S. at 580 (Kennedy, J., concurring); Akins, 524 U.S. at 22 (noting that the statute at issue "[sought] to protect individuals such as respondents from the kind of harm they say they have suffered"). See also Friends of the Earth, Inc. v. Gaston Copper Recycling, Corp., 204 F.3d 149, 156 (4th Cir. 2000) (en banc) (noting that the plaintiff "alleged precisely [those] types of injuries that Congress intended to prevent"); Baur v. Veneman, No. 02-6249, slip op. at 16 (2d Cir. Dec. 16, 2003) ("there is a tight connection between the type of injury which [the plaintiff] alleges and the fundamental goals of the statutes which he sues under — reinforcing [his] claim of cognizable injury"). The dan-

⁹See also Cass Sunstein, Standing Injuries, 1993 Sup. Ct. Rev. 37, 58 (1994); Jerry L. Mashaw, "Rights" in the Federal Administrative State, 92 Yale L.J. 1129, 1168 (1983);1 Laurence H. Tribe, American Constitutional Law 397 (3d ed. 2000) ("there is good reason to afford Congress a wide berth in specifying . . . new forms of 'injury'"); 3 Richard J. Pierce, Jr., Administrative Law Treatise § 16.8 (4th ed. 2002) ("Through the pro-

gers to citizens from ozone depletion following CFC release, which Congress recognized and sought to control, is reinforced by Congress's recognition of the individual nature of this harm by an explicit grant of a right to citizen suit when interested officials do not timely act to protect the air.

Third, the Supreme Court has held that even less concrete injury than present here is sufficient for standing purposes. In Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc., 528 U.S. 167 (2000), the Court declared that the relevant inquiry is whether there is harm to the plaintiff, not whether there is harm to the environment. Id. at 181. The Court then examined the claimed harm to the plaintiffs, which largely included the plaintiffs refraining from using a river because of subjective fears of its pollution. The Court held that these sworn statements "adequately documented injury in fact" because the plaintiffs' "reasonable concerns" about the pollution directly affected the plaintiffs' "recreational, aesthetic, and economic interests." Id. at 183-84. If subjective fear of river pollution alone is enough for injury in fact, then a fortiori objective and certain increased risks of skin cancer, cataracts, and depressed immune systems may satisfy the injury in fact standard.

For these reasons, I believe that the Covingtons' injury from increased risks of maladies caused by ozone depletion, which will follow from mishandling of white goods at the landfill, is concrete and particularized. And, upon analysis, the remaining elements of constitutional standing appear satisfied.

cess of statutory enactment, the legislature can make legally cognizable forms of injury that the Court previously would have considered unduly abstract Once the legislature has declared a form of injury legally cognizable . . . the Court's power and authority to decline to recognize that form of injury is severely limited.").

There appears to be causation. There is a scientifically proven link between CFCs and ozone-depletion. The release of CFCs thus causes an increased risk of harm to the Covingtons. To hold that there is no causation here "would permit virtually any contributory cause to the complex calculus of environmental harm to be ignored as too small to supply the causal nexus required for standing." City of Los Angeles v. Nat'l Highway Traffic Safety Admin., 912 F.2d 478, 498 (D.C. Cir. 1990), overruled by Florida Audubon Soc'y v. Bentsen, 94 F.3d 658 (D.C. Cir. 1996). Moreover, when system-wide harms are probabilistic, "with widespread impact, courts must be especially careful not to manipulate the causation requirements of standing so as to prevent the anticipated regulatory beneficiaries from gaining access to court." Id. at 495 n.5 (citing Cass Sunstein, Standing and the Privatization of Public Law, 88 Colum. L. Rev. 1432, 1463 (1988); Daniel Meltzer, Deterring Constitutional Violations by Law Enforcement Officials: Plaintiffs and Defendants as Private Attorneys General, 88 Colum. L. Rev. 247, 304 (1988)). By proscribing the unregulated release of CFCs and by authorizing citizen suits to enforce this prohibition, Congress unmistakably expressed a belief that the release of CFCs causes injury to residents of the United States. "Congress has the power to . . . articulate chains of causation that will give rise to a case or controversy where none existed before" Defenders of Wildlife, 504 U.S. at 580 (Kennedy, J., concurring). See also Pierce § 16.8 ("Courts should also defer to legislative determinations of causal relationships").

Finally, I believe that the injury is imminent and redressable. The increased risk of intensified exposure to UV-B radiation occurs on release of the CFCs, making the injury imminent. Moreover, the injury is redressable: Though a citi-

¹⁰I cite this analysis in *City of Los Angeles* because it is persuasive as applied here. Further, the overruling of *City of Los Angeles* by the D.C. Circuit en banc was made in light of the Supreme Court's constriction of standing as exemplified in *Defenders of Wildlife*. The rejection of further contraction of standing in *Akins* and *Laidlaw* is pertinent to my analysis.

zen's suit cannot recapture the CFCs that have been released, the civil penalties authorized under the Clean Air Act are more than sufficient to meet the redressability standard because they will deter future violations. *See Laidlaw*, 528 U.S. 167, 185-86 (2000).

I recognize that the ozone depletion theory might permit constitutional standing sufficient for any person to sue Jefferson County for its operation of the landfill. However, it may be noted that the Second Circuit has held that although "any citizen could have standing standing is not to be denied simply because many people suffer the same injury." Baur slip op. at 16 (quoting SCRAP, 412 U.S. at 687) (internal quotation marks omitted). 11 If courts would accept personal standing based solely on ozone depletion claims, most likely future cases would still follow the mold in this case: that is, concerned neighbors who witness ongoing violations of federal law designed to minimize release of CFCs can be expected to sue to stop such violations. If this is incorrect, however, the courts would have the ability to limit the scope of permissible litigation through the application of the prudential standing doctrine. See, e.g., Allen v. Wright, 468 U.S. 737, 750-51 (1984).

¹¹The Second Circuit in *Baur* held that an individual plaintiff had sufficiently asserted injury in fact by alleging that a USDA regulation allowing the use of "downed" livestock (livestock that collapse and die for unknown reasons) for human consumption created an increased risk of death to the plaintiff. The plaintiff alleged that some downed livestock may have died from Bovine Spongiform Encephalopathy ("BSE" or "Mad Cow" disease) and that allowing these animals to be consumed by humans increased the plaintiff's individual risk of contracting the human variant of this deadly disease. The Second Circuit held that this was sufficient for injury in fact notwithstanding that the probability of risk was small, given that BSE, at the time of the opinion, had not been detected in the United States, and that the plaintiff's injury was widespread and undifferentiated (affecting potentially every consumer of meat throughout the United States). This holding is only reinforced by the subsequent discovery of a case of BSE in a downed cow near Yakima, Washington. See, e.g., Shankar Vedantam, Mad Cow Case Found in U.S. for First Time, Wash. Post, Dec. 24, 2003, at A1.

The Supreme Court's standing precedents, when sensibly read as a whole, may reject the idea that "injury to all is injury to none." A widespread injury, in itself, is no bar to constitutional standing. The landfill has increased the Covingtons' risk of UV-B related health maladies. I see nothing in the Constitution or in Supreme Court precedent that would prevent the Covingtons from having constitutional standing on that basis alone.

¹²A respectable counterpoint would be the theory that injury to all does not justify private litigation and may be redressed only by the political branches, or the federal government's institution of litigation. However, for the reasons expressed above, I favor the idea that Article III permits an open standing theory on issues of widespread or even global impact, subject to prudential standing limits.