

21-1354

Talarico Bros. Bldg. Corp., et al. v. Union Carbide Corp., et al.

IN THE
UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT

August Term, 2021
Argued: May 20, 2022
Decided: July 13, 2023

No. 21-1354

TALARICO BROS. BUILDING CORP., JOSEPH LOZINA, SR., JOSEPH LOZINA, JR., JOHN GRACE, PHILIP PALMERI, MARK SCHULER, THERESA SCHULER, CONSTANTINO ARGONA, CHRISTINE ARGONA, JOHN RAYMOND, HAROLD WADE, WALTER MICHAELS, BARBARA MICHAELS, ROBERT WARD, BETTY MOTICKA, THE WHEELHOUSE, INC., THOMAS HARRISON, DEBORAH HARRISON, GARY EBERSOLE, DIETRICK BROTHERS, INC., PAUL ZIUKO, DIANE ZIUKO, 8001 BUFFALO AVE., INC., 9524 NIAGARA FALLS BOULEVARD, LLC, BOWLEN ENTERPRISES, LTD., 9540 NFB, LLC, GREATER NIAGARA BUILDING CENTER, INC., AND JOSEPH C. WEBER, INC.,

Plaintiffs-Appellants,

v.

UNION CARBIDE CORPORATION, OCCIDENTAL CHEMICAL CORPORATION, AND BAYER CROPSCIENCE INC.,

Defendants-Appellees.

Before: JACOBS, NARDINI, and ROBINSON, Circuit Judges.

Twenty-eight individuals and businesses commenced this citizen suit under the Resource Conservation and Recovery Act (“RCRA”), which creates a private right of action against any entity that has “contributed . . . to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment.” 42 U.S.C. § 6972(a)(1)(B). The plaintiffs complain of elevated levels of radiation detected on their land and seek to hold responsible three entities that operated nearby chemical plants during the twentieth century.

The United States District Court for the Western District of New York (Skretny, L.) dismissed the complaint for failure to state a claim, holding, among other things, that the radioactive materials found on the plaintiffs’ properties fall outside the scope of RCRA because they were recycled industrial byproducts rather than discarded waste. The defendants raise a host of additional arguments in support of dismissal.

For the reasons explained herein, we affirm in part, vacate in part, and remand for proceedings consistent herewith.

JOHN G. HORN (Paul D. Sylvestri and Daniel J. Altieri, on the brief), Harter Secrest & Emery LLP, Buffalo, NY, for Plaintiffs-Appellants.

MATTHEW L. BUSH (John Ewald, on the brief), King & Spalding LLP, New York, NY, for Defendant-Appellee Union Carbide Corporation.

Kevin M. Hogan and Joshua S. Glasgow, Phillips Lytle LLP, Buffalo, NY, for Defendant-Appellee Occidental Chemical Corporation.

James Wylie Donald, McCarter & English LLP, Washington, DC, for Defendant-Appellee Bayer CropScience Inc.

DENNIS JACOBS, Circuit Judge:

In this citizen suit under the Resource Conservation and Recovery Act (“RCRA”), twenty-eight individuals and businesses complain of elevated levels of radiation detected on the properties they own or occupy. It is alleged that three operators of nearby chemical plants contaminated multiple sites throughout a swath of Western New York by disposing of toxic byproducts over decades, beginning eighty-odd years ago.

The United States District Court for the Western District of New York (Skretny, L.) dismissed the first amended complaint, reasoning that the radioactive material found on the plaintiffs’ properties was not “discarded” solid waste subject to regulation by RCRA, but rather waste that was recycled for gravel and other construction uses. That conclusion was premature; whether the material was “discarded” depends on the circumstances, and the complaint states just enough to warrant discovery.

In other respects, though, the complaint is truncated and unhelpful: we are left guessing who did what, when, where, and how. It is a fair question whether these blanks can ever be filled in, given that the relevant facts reach back to the

1940s. Nevertheless, RCRA is a remedial environmental statute with considerable give. For the reasons explained below, we conclude that, as to defendants Union Carbide Corporation and Occidental Chemical Corporation, the complaint plausibly alleges the elements of a citizen suit under RCRA, or the plaintiffs have identified extrinsic evidence that may render amendment fruitful. However, as against defendant Bayer CropScience Inc., there are no particularized allegations from which liability can reasonably be inferred. We therefore affirm in part; and we vacate in part and remand to give the plaintiffs an opportunity to seek leave to amend their complaint.

BACKGROUND

Defendants (and, as relevant, their corporate predecessors) Union Carbide Corporation (“Union Carbide”), Occidental Chemical Corporation (“Occidental”), and Bayer CropScience Inc. (“Bayer”) (together, the “Defendants”) operated chemical manufacturing plants during the twentieth century. The plaintiffs are twenty-eight owners and/or occupants of residential and commercial properties located near the Defendants’ facilities in Niagara and Erie Counties (together, the “Plaintiffs”).

According to the first amended complaint (the “Complaint”), the Defendants’ industrial activity generated volumes of radioactive byproducts from materials containing thorium, uranium, phosphorus, zirconium, and other elements. One such byproduct was slag, a fragmented, rock-like material that can be used as aggregate for construction purposes. Starting in the 1940s and continuing through at least the 1970s, the Defendants allegedly disposed of their radioactive waste on the Plaintiffs’ properties, where elevated radiation levels have since been detected.

In support of these claims, the Complaint references government-sponsored radiological evaluations dating back half a century. One publication, called the Oak Ridge Report, summarized the results of a 1984 study of radiation hotspots conducted in the Niagara Falls area. J.K. Williams & B.A. Berven, Oak Ridge National Laboratory, Results of Radiological Measurements Taken in the Niagara Falls, New York, Area (1986); see Am. Compl. ¶¶ 38–39. According to that study, surveyors identified phosphate slag at dozens of sites, Oak Ridge Report at xi, 6–7; Plaintiffs allege that several of their properties were among those impacted. The slag was used in asphalt driveways and parking lots, and was thought to have originated from the production of elemental phosphorus by

Occidental's corporate predecessor. Id. at xi, 5. The Oak Ridge Report also determined that some soil and rock samples contained thorium-bearing material, which may have originated from mineral extraction elsewhere in the region. Id. at 5.

It is alleged that, more recently, investigations conducted on behalf of certain Plaintiffs confirmed the continuing presence of elevated levels of radiation at several of the properties that were evaluated. The EPA also allegedly found elevated radiation levels at or near three locations—Upper Mountain Road, Niagara Falls Boulevard, and Robert Street—which encompass multiple of the Plaintiffs' properties. With respect to at least some of those sites, the EPA determined that the radioactive materials “may present an imminent and substantial endangerment to public health, welfare, or the environment.” Am. Compl. ¶ 44. The Complaint states upon information and belief that the remaining Plaintiffs' properties are contaminated with material that matches or is very similar to material detected at locations the EPA found to be dangerous.

As of the filing of the Complaint, the EPA had removed radioactive waste from two discrete areas at certain of the Plaintiffs' properties located on the Niagara Falls Boulevard site. When those projects ran out of money, the EPA

demobilized, advising the Plaintiffs that it had no definite plan or timetable for resuming the work. A significant volume of waste allegedly remains at those sites and will cost millions to remedy.

The Plaintiffs commenced this action in 2017, asserting a federal claim under RCRA's citizen suit provision and five claims under New York state law. They seek injunctive relief as authorized by RCRA, including an order that the Defendants fully evaluate each of the Plaintiffs' properties and, where necessary, remove any and all radioactive solid wastes found there. The Defendants jointly moved to dismiss the Complaint on several grounds. In opposition, the Plaintiffs attempted to supplement the record with more than a dozen documents, which the district court evidently (and correctly) ignored when ruling on the motion.¹ The court dismissed the RCRA claim under Rule 12(b)(6) and declined to exercise supplemental jurisdiction over the state law claims. This appeal followed.

¹ When "presented with matters outside the pleadings," a district court must either "exclude[] the extrinsic documents" or "convert the motion to one for summary judgment." Chambers v. Time Warner, Inc., 282 F.3d 147, 154 (2d Cir. 2002) (citations omitted). We assume the former route was taken here, given that there was no conversion to summary judgment and the court's opinion does not mention the documents.

DISCUSSION

We review de novo a district court's dismissal of a complaint for failure to state a claim. See Mirkin v. XOOM Energy, LLC, 931 F.3d 173, 176 (2d Cir. 2019). This appeal also implicates subject matter jurisdiction and timeliness. As to those issues, we review the court's legal conclusions de novo and factual findings for clear error. See Somoza v. N.Y.C. Dep't of Educ., 538 F.3d 106, 112 (2d Cir. 2008) (statute of limitations); APWU v. Potter, 343 F.3d 619, 623–24 (2d Cir. 2003) (jurisdiction).

I

On appeal, the Defendants renew the argument that the federal courts lack jurisdiction over claims by certain of the Plaintiffs. The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), 42 U.S.C. § 9601 et seq., was enacted a few years after RCRA to facilitate "the prompt and effective cleanup of hazardous waste sites." Niagara Mohawk Power Corp. v. Chevron U.S.A., Inc., 596 F.3d 112, 120 (2d Cir. 2010) (citing B.F. Goodrich Co. v. Murtha, 958 F.2d 1192, 1197–98 (2d Cir. 1992)). "[T]o prevent time-consuming litigation which might interfere with" that goal, section 113(h) of CERCLA withdraws "federal jurisdiction over challenges to ongoing CERCLA

removal [or remedial] actions [by the EPA], including those brought under RCRA.” Potter, 343 F.3d at 624 (internal quotation marks and citations omitted).

Specifically, section 113(h) provides that “[n]o federal court shall have [federal question] jurisdiction . . . to review any challenges to removal or remedial action selected under” the Act. 42 U.S.C. § 9613(h). This provision is a “blunt withdrawal of federal jurisdiction.” Potter, 343 F.3d at 624 (quoting McClellan Ecological Seepage Situation v. Perry, 47 F.3d 325, 328 (9th Cir. 1995)).

The term “remove” is broadly defined “to include not only the cleanup and removal of [waste], but also the undertaking of studies, investigations, testing, and other information gathering activities” Id.; see also 42 U.S.C. §§ 9601(23), 9604(b). And a suit constitutes a “challenge” to EPA activity under section 113(h) if it so much as “interferes with the implementation of a CERCLA remedy.” Broward Gardens Tenants Ass’n v. E.P.A., 311 F.3d 1066, 1072 (11th Cir. 2002) (citing Costner v. URS Consultants, Inc., 153 F.3d 667, 675 (8th Cir. 1998)); see also Razore v. Tulalip Tribes of Wash., 66 F.3d 236, 239 (9th Cir. 1995) (holding court lacked jurisdiction over citizen suit that, if successful, would

“dictate specific remedial actions and . . . alter the [EPA’s] method and order for cleanup” (internal quotation marks omitted)).

Still, EPA activity does not bar access to the courts indefinitely: jurisdiction is restored upon the conclusion of the removal or remedial work. See El Paso Nat. Gas Co. v. United States, 750 F.3d 863, 882 (D.C. Cir. 2014) (“[N]othing in [CERCLA section 113(h)] . . . obviously bars a renewed RCRA claim after a removal or remedial action has concluded.”); Cannon v. Gates, 538 F.3d 1328, 1332 (10th Cir. 2008) (“Section 9613(h) . . . does not preclude actions to challenge a remedial plan *after* that plan has been completed.”); see also Boarhead Corp. v. Erickson, 923 F.2d 1011, 1019 (3d Cir. 1991) (“[Section 113(h)] shows Congress concluded that disputes about who is responsible for a hazardous site [and] what measures actually are necessary to . . . remove the hazard . . . should be dealt with after the site has been cleaned up.”).

In dispute here is whether the EPA is in fact actively engaged in removal or remedial work at any of the Plaintiffs’ properties. The Complaint states that the EPA initiated radiological evaluations at the Upper Mountain Road Driveway, Robert Street, and Niagara Falls Boulevard sites, and removed radioactive solid wastes from certain areas along Niagara Falls Boulevard. Am.

Compl. ¶ 65. It is further alleged that the EPA ceased investigation and clean-up efforts due to budgetary constraints and demobilized from the region, leaving behind significant contamination. Id.

While their motion to dismiss was pending, the Defendants obtained permission to supplement the record to show that the EPA had resumed its work at the Niagara Falls Boulevard site. Since then, however, the EPA has published yet more recent updates indicating that the agency completed most if not all of its work in the Niagara Falls and Lewiston, New York region by the spring of 2021.² So while there seems to be no present bar to jurisdiction, at least with regard to some of the properties the Plaintiffs identify, the district court on remand may undertake additional jurisdictional fact-finding to explore this issue further. See Potter, 343 F.3d at 627 (“Where jurisdictional facts are placed in

² See E.P.A., “EPA Completes Cleanups at Three Niagara County Sites and Continues Investigation at Two Other Sites” (January 2023), available at <https://www.epa.gov/ny/niagara-county-radiation-removal-sites>; E.P.A., “EPA Completes Cleanup Activities at the Niagara Falls Boulevard Site Niagara Falls, New York” (July 2020), available at https://www.epa.gov/sites/default/files/2020-07/documents/niagara_falls_blvd_rad_fact_sheet_july_2020_final.pdf. We can take judicial notice of these government newsletters. See Cangemi v. United States, 13 F.4th 115, 124 n.4 (2d Cir. 2021) (taking judicial notice of the U.S. Army Corps of Engineers’ website).

dispute, the court has the power and obligation to decide issues of fact by reference to evidence outside the pleadings.” (alteration omitted) (quoting LeBlanc v. Cleveland, 198 F.3d 353, 356 (2d Cir. 1999))).

II

“RCRA is a comprehensive environmental statute that governs the treatment, storage, and disposal of solid and hazardous waste.” Meghrig v. KFC W., Inc., 516 U.S. 479, 483 (1996) (citing Chi. v. Env'tl. Def. Fund, 511 U.S. 328, 331–32 (1994)). Although “[c]hief responsibility for the implementation and enforcement of RCRA rests with” the EPA, the Act “permits private citizens to enforce its provisions in some circumstances.” Id. at 483–84; see also 42 U.S.C. § 6972 (citizen suit provision). As relevant here, the statute authorizes suit against any entity that has “*contributed . . . to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment.*” 42 U.S.C. § 6972(a)(1)(B) (emphasis added).

The district court held that the Plaintiffs failed to plausibly allege that the radioactive material on their properties constitutes “solid waste,” reasoning that the radiation attributable to recycled slag falls outside the scope of RCRA

because the slag was not “discarded.” See Talarico Bros. Bldg. Corp. v. Union Carbide Corp., No. 17 Civ. 1041, 2021 WL 1610200, at *12–13 (W.D.N.Y. Apr. 26, 2021). The Plaintiffs contest this holding. Also contested is whether the Plaintiffs have established that any such material “may present an imminent and substantial endangerment,” and that each individual Defendant “contributed” to the presence of the waste on the Plaintiffs’ properties.

A. “Solid Waste”

RCRA defines solid waste as “any garbage, refuse, sludge . . . and other discarded material, including . . . material resulting from industrial, commercial, mining, and agricultural operations” 42 U.S.C. § 6903(27). The statute “does not further define ‘discarded material,’” Conn. Coastal Fishermen’s Ass’n v. Remington Arms Co., 989 F.2d 1305, 1314 (2d Cir. 1993), creating ambiguity as to whether the term encompasses recycled waste. The few circuits to have considered the issue seem to agree that byproducts “destined for future recycling by another industry *may* be considered ‘discarded’ . . . if they can reasonably be considered part of the waste disposal problem” addressed by RCRA. Safe Food & Fertilizer v. E.P.A., 350 F.3d 1263, 1268 (D.C. Cir. 2003), on reh’g in part, 365 F.3d 46 (D.C. Cir. 2004) (citing Am. Petroleum Inst. v. E.P.A., 906 F.2d 729, 740–41

(D.C. Cir. 1990)); see also Owen Elec. Steel Co. of S.C. v. Browner, 37 F.3d 146, 150 (4th Cir. 1994) (endorsing the D.C. Circuit’s standard); United States v. ILCO, Inc., 996 F.2d 1126, 1131–32 (11th Cir. 1993) (same). We agree.

Not all waste is problematic, though the issue is muddled. The House Report on RCRA observed that “[m]uch industrial and agricultural waste is reclaimed or put to new use” —for example, agricultural waste that is “returned to the soil as fertilizer or soil conditioners.” H.R. Rep. No. 94-1491(I), at 2–3 (1976), reprinted in 1976 U.S.C.C.A.N. 6238, 6240. That sort of waste, the House Report explained, is “not considered to be discarded material within the meaning of [RCRA].” Id. Relying on that guidance, other circuits have concluded that industrial byproduct is not “discarded” waste if it is “destined for immediate reuse in another phase of the [same] industry’s ongoing production process.” Am. Mining Cong. v. E.P.A., 824 F.2d 1177, 1185 (D.C. Cir. 1987) (“AMC I”); see also, e.g., Safe Air for Everyone v. Meyer, 373 F.3d 1035, 1045 (9th Cir. 2004) (holding residue generated from the cultivation of bluegrass was not discarded because, among other things, it was reused “in a continuous process of growing and harvesting Kentucky bluegrass seeds, the generating industry”).

Still, some recycled waste can be “discarded material” within the meaning of RCRA. See AMC I, 824 F.2d at 1179 (“Congress indeed intended that materials being recycled or held for recycling can be [solid] wastes”) (internal quotation marks and citation omitted). “The statute and the legislative history [of RCRA] suggest that Congress expected EPA to regulate as solid and hazardous wastes certain materials that are destined for recycling.” Revisions to the Definition of Solid Waste, 73 Fed. Reg. 64,668-01, 64,671 (Oct. 30, 2008) (citations omitted). Likewise, the House Report on RCRA cautioned that the “improper management” of certain types of discarded waste “could pose significant threats to human life and the environment.” H.R. Rep. No. 94-1491(I) at 4; see also 42 U.S.C. § 6902(a)(6) (stating RCRA seeks to “minimiz[e] the generation of hazardous waste . . . by encouraging . . . *properly conducted* recycling and reuse” (emphasis added)). Accordingly, the EPA has promulgated regulations for hazardous solid waste distinguishing legitimate (non-regulable) and sham (regulable) recycling. See generally Revisions to the Definition of Solid Waste, 73 Fed. Reg. 64,668-01.

In the present case the district court held that the “Defendants’ disposal of slag material recycled as asphalt base is not the discard of solid waste under

RCRA” because “[s]uch reuse is not part ‘of the waste disposal problem’ that RCRA addresses.” Talarico Bros., 2021 WL 1610200, at *12–13 (citation omitted) (quoting Am. Petroleum Inst., 906 F.2d at 741). That conclusion was premature, even assuming all the radioactive waste at issue was recycled as construction material.

Whether industrial byproducts that are eventually recycled nevertheless constitute discarded solid waste depends on the circumstances. Other circuits have weighed such considerations as the manner in which the material was stored prior to recycling, see Ass’n of Battery Recyclers, Inc. v. E.P.A., 208 F.3d 1047, 1051 (D.C. Cir. 2000); how long the material sat before being put to beneficial use, see Owen, 37 F.3d at 148–49; whether the material was subject to a reclamation process, see ILCO, 996 F.2d at 1131; and how market participants value the material, see Safe Food, 350 F.3d at 1269.

Given that some of the alleged disposal occurred generations ago, the Plaintiffs will need discovery to explore these and other pertinent facts. Such information may no longer be obtainable; books and records dating to the mid-twentieth century may be as hard to come by as witnesses. But that is not a problem for resolution at the pleading stage. The Complaint states that: the

Defendants engaged in industrial activity that generated radioactive byproducts, including slag; the Defendants transported and disposed of their radioactive byproducts on the Plaintiffs' properties; and studies have detected radioactivity at those properties that is attributable, at least in part, to contaminated slag. Those allegations make it plausible that the materials at issue are "discarded" under RCRA and thus may constitute regulable "solid waste" — subject to any other definitional issues not presented here.

B. "Imminent and Substantial Endangerment"

RCRA "permits a private party to bring suit only upon a showing that the solid or hazardous waste at issue 'may present an imminent and substantial endangerment to health or the environment.'" Meghrig, 516 U.S. at 485 (quoting 42 U.S.C. § 6972(a)(1)(B)). That "standard is a broad one," providing courts the ability "to grant affirmative equitable relief to the extent necessary to eliminate *any risk* posed by toxic wastes." Simsbury-Avon Pres. Club, Inc. v. Metacon Gun Club, Inc., 575 F.3d 199, 210 (2d Cir. 2009) (quoting Dague v. City of Burlington, 935 F.2d 1343, 1355 (2d Cir. 1991), rev'd in part on other grounds, 505 U.S. 557 (1992)). Still, a plaintiff must clearly allege facts demonstrating each statutory element. "Threadbare recitals of the elements of [the] cause of

action, supported by mere conclusory statements, do not suffice.” Ashcroft v. Iqbal, 556 U.S. 662, 678 (2009) (citing Bell Atl. Corp. v. Twombly, 550 U.S. 544, 555 (2007)). At issue here are both the “imminent” and “substantial” requirements.

An endangerment is “imminent” if there is “a threat which is present *now*, although the impact of the threat may not be felt until later.” Meghrig, 516 U.S. at 486 (quoting Price v. U.S. Navy, 39 F.3d 1011, 1019 (9th Cir. 1994)). “A finding of ‘imminency’ does not require a showing that actual harm will occur immediately so long as the risk of threatened harm is present.” Dague, 935 F.2d at 1356 (2d Cir. 1991) (citing Envntl. Def. Fund v. E.P.A., 465 F.2d 528, 535 (D.C. Cir. 1972)). So, a claim of “imminent” endangerment will fail if the waste “no longer presents . . . a danger” that threatens to occur immediately. Meghrig, 516 U.S. at 485–86.

On the face of it, the Plaintiffs’ claim of imminent endangerment is not compelling. The radioactive material was allegedly deposited on the Plaintiffs’ properties as early as the 1940s; yet, as the Defendants point out, the Complaint does not “identify any actual harm to health or the environment that has already occurred.” Appellees’ Br. at 33.

But RCRA “does not require proof of actual harm.” Dague, 935 F.2d at 1356. The statute’s “combination of the word ‘may’ with the word ‘endanger,’ both of which are probabilistic,” indicates that “a reasonable prospect of future harm is adequate to engage the gears of § 6972(a)(1)(B) so long as the threat is near-term” Simsbury-Avon, 575 F.3d at 211 (alteration omitted) (quoting Me. People’s All. v. Mallinckrodt, Inc., 471 F.3d 277, 296 (1st Cir. 2006)). “An ‘imminent hazard’ may be declared at any point in a chain of events which may ultimately result in harm to the public.” Dague, 935 F.2d at 1356 (internal quotation marks omitted) (quoting Envtl. Def. Fund, 465 F.2d at 535). Latent festering may be a legitimate link in the chain.

This helps explain why “RCRA contains no statute of limitations.”³

Meghrig, 516 U.S. at 486. Left unremedied, a threat of harm due to

³ In the absence of a statutory limitations period, the Defendants urge us to apply 28 U.S.C. § 2462, which imposes a five-year limitations term for any suit “for the enforcement of any civil fine, penalty, or forfeiture” not otherwise subject to a statute of limitations. That provision is inapplicable when, as here, the plaintiffs seek only equitable relief. Although the Complaint sought damages, the district court credited the Plaintiffs’ subsequent withdrawal of that request in their opposition to the motion to dismiss. In any event, pecuniary relief is not available under RCRA’s citizen suit provision. See 42 U.S.C. § 6972(a)(1)(B); see also Meghrig, 516 U.S. at 488 (holding citizens cannot recover costs for past cleanup efforts under RCRA).

environmental contamination might persist for decades. And private litigants may sensibly await the often prolonged efforts of government at various levels. The district court thus erred in treating the “imminent” requirement as a deadline for prompt legal action. See Talarico Bros., 2021 WL 1610200, at *14 (holding plaintiffs failed “to state a RCRA claim for imminent harm” because they allege “decades-old harm only legally addressed in 2017”). The pertinent question is not whether the plaintiff has “diligently pursue[d] [its] claims,” id., but whether the plaintiff has made a “showing that a risk of threatened harm [remains] present” at the time of filing the complaint, Simsbury-Avon, 575 F.3d at 210 (internal quotation marks and citation omitted).

The Complaint survives this indulgent test, given the following allegations. The Plaintiffs’ properties are contaminated with radioactive materials containing uranium, thorium, and other potentially dangerous elements. Per the Oak Ridge Report, as of 1986, at least 100 instances of elevated gamma radiation were detected in the Niagara Falls region, and several of the Plaintiffs’ properties were impacted. More recent EPA evaluations found that elevated levels of radiation persist around the Niagara Falls Boulevard and Robert Street properties, and the agency determined that the radioactive solid

waste at those sites may present an imminent and substantial endangerment. See Am. Compl. ¶¶ 42, 44. The EPA initiated clean-up activity at discrete locations at the Niagara Falls Boulevard site, but terminated the projects due to budgetary constraints, leaving a lot of contamination unremediated. Id. ¶ 65. As to the other Plaintiffs' properties, the radioactive solid waste is the same as or very similar to that which gave rise to the EPA's findings of endangerment. Id. ¶ 45. As a result, the Plaintiffs and their visitors are being exposed to levels of radiation that increase their health risks. These allegations go beyond a purely "speculative prospect of future harm." See Simsbury-Avon, 575 F.3d at 214.

Much more will be required to support a claim that waste buried half a century ago (or more) poses an imminent threat of harm today. Nevertheless, "a well-pleaded complaint may proceed even if it strikes a savvy judge that actual proof of those facts is improbable." Twombly, 550 U.S. at 556.

Accepting the Plaintiffs' factual allegations as true, we conclude that the Complaint plausibly alleges a risk of imminent endangerment under RCRA.

A "substantial" endangerment entails a "serious" threat of injury. Simsbury-Avon, 575 F.3d at 210. This bar is not particularly high. There must be "reasonable cause for concern that someone or something may be exposed to

risk of harm . . . in the event remedial action is not taken.” Burlington N. and Santa Fe Ry. Co. v. Grant, 505 F.3d 1013, 1021 (10th Cir. 2007) (citation omitted); see also Simsbury-Avon, 575 F.3d at 211.

Since proof of actual injury is unnecessary to show endangerment under RCRA, the Complaint need not have included “specifics for the impact of the[] elevated levels [of radiation], such as medical injury claims, [or] depreciation in property values once radioactive materials were disclosed,” as the district court seemed to require. Talarico Bros., 2021 WL 1610200, at *13.

The Defendants likewise demand too much, faulting the Complaint for lacking “factual allegations sufficient to assess ‘the severity of any harm that might occur.’” Appellees’ Br. at 30 (quoting Simsbury-Avon, 575 F.3d at 211). Simsbury-Avon, the case on which the Defendants rely, was decided at summary judgment. In that posture, we affirmed dismissal on the ground that the record was “insufficient to permit a factfinder to assess the magnitude of the possible risk.” 575 F.3d at 211. The Defendants offer no authority requiring that level of specificity at the pleading stage.

Still, the Plaintiffs must plausibly allege that the radioactivity is dangerous; “the mere presence” of radioactive materials does not suffice. See Me. People’s

All., 471 F.3d at 282 (internal quotation marks and citation omitted). The Complaint repeatedly references “elevated” radiation levels, but elevated as compared to what? The 1986 Oak Ridge Report—the only study named in the Complaint—compares the detected gamma exposure rates to then-typical background levels. This is plainly insufficient to demonstrate that a serious risk of harm persists today.

This pleading deficiency might, however, be remediable. Attached to their opposition to the motion to dismiss, the Plaintiffs submitted an EPA action memorandum from 2016 for the Niagara Falls Boulevard site (the “EPA Memorandum”). See Mem. in Opp. to Joint Mot. to Dismiss, No. 17 Civ. 1041 (W.D.N.Y.) (filed Feb. 15, 2018) (the “Plaintiffs’ Opp.”), Ex. 7. The EPA Memorandum reports that, at a site encompassing the Niagara Falls Boulevard properties, the EPA detected Radium-226 in concentrations around eighty times the acceptable cancer risk value and concluded that “these radionuclides pose an immediate risk to public health, welfare, and the environment.” Id. at 12. It cautions that radium has a long half-life and that radium-contaminated soils migrate through airborne dust, surface runoff, construction activities, and foot traffic into on-site buildings, homes, and nearby residential areas. Id. at 11.

Also included with the Plaintiffs' opposition papers was a news article addressing the EPA's cleanup efforts in the Niagara Falls area, which reported radioactivity detected at levels more than seventy-five times higher than normal at a site across the road from two of the Robert Street properties. Plaintiffs' Opp., Ex. 9 at 2–3.

If on remand the Plaintiffs seek leave to amend to expressly incorporate these (and potentially other) supporting documents, their claim of substantial endangerment may be advanced “across the line from conceivable to plausible.” Twombly, 550 U.S. at 570.

C. “Contributed To”

Finally, to plead endangerment under RCRA, a complaint must plausibly allege that the defendant “contributed . . . to the past or present handling, storage, treatment, transportation, or disposal” of the subject waste. 42 U.S.C. § 6972(a)(1)(B). In the absence of a statutory definition of “contributed,” we give “the term its well-established meaning.” Green Tree Fin. Corp.-Alabama v. Randolph, 531 U.S. 79, 86 (2000) (citation omitted). As other circuits have observed, “contribute” “commonly means . . . to ‘have a share in any act or effect.’” Hinds Invs., L.P. v. Angioli, 654 F.3d 846, 850 (9th Cir. 2011) (quoting

Webster's Third New International Dictionary 496 (1993)); see also Cox v. City of Dall., 256 F.3d 281, 294 (5th Cir. 2001) (same); United States v. Aceto Agric. Chems. Corp., 872 F.2d 1373, 1384 (8th Cir. 1989) (same). This capacious definition accords with RCRA's "cradle to grave" regulation of solid waste. Chem. Waste Mgmt., Inc. v. Hunt, 504 U.S. 334, 337 n.1 (1992).

We conclude that the Complaint sets forth just enough individualized facts to plausibly demonstrate contribution by Union Carbide and Occidental, but not by Bayer.

As to Union Carbide, the Complaint alleges that: it generated radioactive solid wastes as byproducts of the production of compounds containing uranium and thorium at a Niagara Falls plant, Am. Compl. ¶ 50; elevated levels of radiation at the Plaintiffs' properties are attributable to radioactive isotopes in the Radium 226 and Thorium 232 decay chains, which are present in the radioactive solid wastes found on these properties, id. ¶¶ 36–37; and agency documentation indicates that radioactive solid wastes from Union Carbide's Niagara Falls plant are present at or near the Plaintiffs' properties on Niagara Falls Boulevard, Robert Street, and Upper Mountain Road, id. ¶ 51. In addition, one of the EPA reports attached to the Plaintiffs' opposition papers suggests that

contaminated slag from the Union Carbide facility may have been used as fill at the Niagara Falls Boulevard properties. See Plaintiffs' Opp., Ex. 6 at 1.

The allegations against Occidental are similar. According to the Complaint, Occidental generated radioactive slag when producing elemental phosphorous at its Niagara Falls plant. Am. Compl. ¶ 52. At least one government-sponsored study concluded that Occidental's phosphate slag makes up the radioactive solid waste present at sites in the Niagara Falls area, including at several of the Plaintiffs' properties. Id. ¶ 53. And the Plaintiffs' opposition papers included a 1978 letter from Occidental to the Niagara County Health Department, confirming that the company's phosphorous operations generated slag byproduct that was dispersed throughout Western New York: some was sold to local construction contractors, some was transported to a landfill, and some remained near Occidental's old facilities. See Plaintiffs' Opp., Ex. 2 at 1.

Union Carbide and Occidental are thus plausibly linked to specific activities that created the specific types of radioactive materials detected on specific Plaintiffs' properties. It is therefore reasonable to infer that those Defendants "contributed to" the handling of the solid waste giving rise to the Plaintiffs' RCRA claim. At least at this stage of the case, it is not fatal that the

Complaint lacks particularized allegations regarding when and how the radioactive waste was disposed; those are gaps that might be filled in with discovery.

The allegations against Bayer, however, are critically weaker. The Complaint attributes the radiation detected on the Plaintiffs' properties to radioactive isotopes in one or more of the Radium 226, Uranium 238, and Thorium 232 decay chains. See Am. Compl. ¶ 37. Yet neither Bayer nor its predecessor, Stauffer Chemical Company, is alleged to have used materials containing radium, uranium, or thorium, or capable of producing them. Id. ¶ 54. The Plaintiffs filed a supplemental report from 1982 regarding uranium and thorium generated from the production of phosphorous at Stauffer's facility in Las Vegas, see Plaintiffs' Opp., Ex. 14; but there is no allegation that the company engaged in similar activity in New York, see Am. Compl. ¶ 54.

There is one probative allegation implicating Bayer: Stauffer's Lewiston plant was located within 2,000 feet of the Robert Street properties and within a mile of four of the Plaintiffs' other properties. See Am. Compl. ¶ 55. But proximity alone—without any identity of chemical composition or other

allegation linking Bayer's Western New York activity to the contamination of the Plaintiffs' properties—is insufficient to make Bayer's contribution plausible.

CONCLUSION

For these reasons we **AFFIRM IN PART** that portion of the judgment dismissing the Complaint against Bayer, **VACATE IN PART** the remainder of the judgment, and **REMAND** to permit the Plaintiffs an opportunity to seek leave to amend.