RECENT CASES

ENVIRONMENTAL LAW — PARTICULATE MATTER EMISSIONS — NINTH CIRCUIT HOLDS THAT THE EMISSION OF POLLUTANTS FROM RAIL YARDS IS NOT "DISPOSAL" OF SOLID WASTE UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT. — *Center for Community Action & Environmental Justice v. BNSF Railway Co.*, 764 F.3d 1019 (9th Cir. 2014).

In 1976, Congress passed the Resource Conservation and Recovery Act[1] (RCRA), in part to permit private citizens to sue the owners or operators of solid waste treatment, storage, or disposal facilities whose solid or hazardous waste disposal "present[s] an imminent and substantial endangerment to health or the environment."[2] This statute serves as a complement to laws focused on specific environmental media, such as the Clean Air Act[3] (CAA) and the Clean Water Act,[4] and was intended to ensure a more holistic scheme of federal environmental regulation.[5] Recently, in *Center for Community Action & Environmental Justice v. BNSF Railway Co.*,[6] the Ninth Circuit held that the emission of diesel particulate matter[7] (DPM) from a rail yard does not qualify as "disposal" of solid waste within the meaning of RCRA.[8] The Ninth Circuit's decision barring the citizen suit in this case may be supported by the court's inquiry into the nature of rail yard emissions. However, the court's interpretation of "disposal," if read narrowly, may exclude activities that should be included. Accordingly, future courts should conduct case-by-case analyses into the nature of a waste's contribution to contamination of nearby land or water.

The defendants, Burlington Northern Santa Fe Railway Companies (BNSF) and Union Pacific Railroad, operate sixteen rail yards in California.[9] Numerous trains and heavy-duty vehicles emit tons of DPM into the air surrounding these yards.[10] The plaintiffs, environ-

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[1] Pub L. No. 94-580, 90 Stat. 2795 (1976) (codified as amended at 42 U.S.C. §§ 6901–6992k (2012)).

[2] 42 U.S.C. § 6972(a)(1)(B).

[3] *Id.* §§ 7401–7671q.

[4] 33 U.S.C. §§ 1251–1387 (2012).

[5] *See* Richard J. Lazarus, Essay, *The Greening of America and the Graying of United States Environmental Law: Reflections on Environmental Law's First Three Decades in the United States*, 20 VA. ENVTL. L.J. 75, 83 (2001).

[6] 764 F.3d 1019 (9th Cir. 2014).

[7] The court described DPM as "small, solid particles found in diesel exhaust." *Id.* at 1021. Both the California Air Resources Board (CARB) and the Environmental Protection Agency (EPA) have classified DPM as a likely carcinogen that also causes respiratory illnesses and heart disease. *Id.*

[8] *Id.* at 1020–21.

[9] *Id.* at 1021.

[10] *Id.* The plaintiffs claimed that the rail yards in question collectively emitted over 160 tons of DPM in 2005 alone. First Amended Complaint for Declaratory & Injunctive Relief at 12, Ctr.

mental groups whose members live near the rail yards,[11] claimed that their members suffer severe health impacts, including increased risk of cancer, from this DPM emission.[12] On February 1, 2012, the plaintiffs filed their first amended complaint in the U.S. District Court for the Central District of California, claiming that the operators of the defendant rail yards "have contributed to and are contributing to the . . . disposal of solid or hazardous waste that may present an imminent and substantial endangerment to health or to the environment," in violation of RCRA.[13] The statute defines "disposal" as "the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that [it] may enter the environment or be emitted into the air or discharged into any waters."[14] The defendants moved to dismiss the complaint, arguing that the plaintiffs failed to state a claim because, first, airborne emissions are regulated by the CAA, not RCRA, and second, the defendants did not dispose of solid waste under RCRA because DPM was not released "into or on any land or water."[15]

The district court granted the defendants' motion to dismiss.[16] Because the plaintiffs sufficiently pleaded that DPM emission from the rail yards creates an imminent and substantial danger to health, the motion turned on the sufficiency of the allegations that the defendants were disposing of solid or hazardous waste.[17] The district court evaluated the defendants' two proposed grounds for dismissal, finding each independently meritorious.[18] First, the court agreed with the defendants that the CAA foreclosed federal regulation — including through RCRA citizen suits — of DPM emissions from "indirect source[s],"[19] defined as "facilit[ies]" such as rail yards that "attract[], or may attract,

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for Cmty. Action & Envtl. Justice v. Union Pac. R.R. Co., No. CV 11-8608 (C.D. Cal. May 29, 2012), 2012 WL 1580613 [hereinafter First Amended Complaint] (citing *Railyard Health Risk Assessments and Mitigation Measures*, CARB, http://www.arb.ca.gov/railyard/hra/hra.htm (last updated Apr. 8, 2013) [http://perma.cc/DN4J-V6MU]).

11 *BNSF*, 764 F.3d at 1021. The plaintiff environmental groups are: Center for Community Action and Environmental Justice, East Yard Communities for Environmental Justice, and Natural Resources Defense Council. *Id.* at 1021 n.1.

12 *Id.* at 1021; *see also* First Amended Complaint, *supra* note 10, at 6–7.

13 First Amended Complaint, *supra* note 10, at 16; *see also* Ctr. for Cmty. Action & Envtl. Justice v. Union Pac. Corp., No. CV 11-8608, 2012 WL 2086603, at *1 (C.D. Cal. May 29, 2012). Though the statute also permits suit for "handling, storage, treatment, [and] transportation" of sufficiently dangerous solid waste, 42 U.S.C. § 6972(a)(1)(B) (2012), the plaintiffs only alleged "disposal" of such waste. *See BNSF*, 764 F.3d at 1023 n.4.

14 42 U.S.C. § 6903(3).

15 *BNSF*, 764 F.3d at 1022 (quoting 42 U.S.C. § 6903(3)) (internal quotation marks omitted).

16 *Union Pac. Corp.*, 2012 WL 2086603, at *9.

17 *Id.* at *3 (evaluating the requirements for a citizen suit under 42 U.S.C. § 6972(a)(1)(B)).

18 *See id.* at *6.

19 42 U.S.C. § 7410(a)(5)(A)(ii) ("[N]o plan promulgated by the Administrator shall include any indirect source review program for any air quality control region, or portion thereof.").

mobile sources of pollution."[20] Second, the court found that the plaintiffs' characterization of DPM as "solid waste"[21] did not comport with the statute[22] and would lead to the negative result of applying RCRA to all diesel exhaust–emitting vehicles — which the CAA already expressly regulates.[23]

The Ninth Circuit affirmed.[24] Writing for the panel, Judge Murguia[25] held that the plaintiffs failed to state a claim because DPM emissions from rail yards do not qualify as "dispos[al]" of solid or hazardous waste.[26] Reviewing the motion to dismiss de novo, the court read RCRA's citizen-suit provision to require an allegation based on a cognizable legal theory that (1) the defendants contributed to the "disposal" of DPM, (2) DPM is a "solid waste," and (3) DPM presents an "imminent and substantial" danger to health or the environment.[27] The court held that the plaintiffs' allegation could not satisfy the first prong.[28]

First, the court found that RCRA's text and structure excluded vehicle emissions from the statutory definition of "disposal." Though RCRA defines "disposal" to include "discharging, depositing, injecting, dumping, spilling, leaking, and placing," no reference is made to "emitting."[29] The statute also limits "disposal" to conduct that causes the placement of solid waste "into or on any land or water" so that the waste "may enter the environment or be emitted into the air."[30] The court took this to mean that disposal only occurs when "waste is *first* placed 'into or on any land or water' and is *thereafter* 'emitted into the

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[20] *Union Pac. Corp.*, 2012 WL 2086603, at *4 (quoting 42 U.S.C. § 7410(a)(5)(C)) (internal quotation mark omitted); *see also id.* at *4–6. The district court further determined that if the plaintiffs sought to apply RCRA to the *locomotives* in the rail yards — what the court called a "strained construction of RCRA" — this attempt would also fail because Congress exclusively regulated locomotives through the CAA. *Id.* at *6.

[21] RCRA defines "solid waste," in pertinent part, as "any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations." 42 U.S.C. § 6903(27).

[22] *Union Pac. Corp.*, 2012 WL 2086603, at *7 (reasoning that DPM does not fall within the plain meaning of a "solid," especially since RCRA's definition of "solid" encompasses "contained gaseous material," implicitly precluding uncontained gas).

[23] *See id.* at *6–8.

[24] *BNSF*, 764 F.3d at 1030.

[25] Judge Murguia was joined by Judges Fernandez and N. Randy Smith.

[26] *BNSF*, 764 F.3d at 1030 (internal quotation marks omitted).

[27] *Id.* at 1023 (quoting 42 U.S.C. § 6972(a)(1)(B) (2012)).

[28] Because the first requirement was not fulfilled, the court did not address the other two — whether DPM is a "solid waste" and whether it presents the requisite danger to health or environment. *See id.* at 1030 n.10.

[29] *Id.* at 1024 (using the canon of *expressio unius est exclusio alterius* to infer that emission was meant to be excluded because it was not specifically included in the list). The omission of emission is especially telling because "emitting" is included in other lists within the same statute. *Id.* (citing 42 U.S.C. § 6991(8)).

[30] *Id.* (quoting 42 U.S.C. § 6903(3)) (internal quotation marks omitted).

air.'"[31] Because DPM emission enters the air before touching the ground or water, it is not a "disposal" within the meaning of RCRA.[32]

Second, the court looked to the legislative histories of both the CAA and RCRA, finding that they resolved any textual ambiguity with respect to the definition of "disposal."[33] Specifically, the court found that RCRA was crafted to solve the problem of "land disposal" and that the CAA was meant to govern air emissions.[34] Congress overhauled the CAA in 1977 to require an EPA study on emissions from trains and to establish the "indirect source review program," reserving regulation of indirect sources, like rail yards,[35] to the states.[36] The CAA's 1990 amendment restricted regulation of emissions from new locomotives to the EPA, preempting any state regulation of the same.[37] Because the court understood the CAA's exclusion of indirect sources from federal regulation and trains from state regulation as deliberate moves by Congress, it held that RCRA should not be read to apply to either.[38] Therefore, the court found the plaintiffs to be without statutory authority to bring a citizen suit seeking to enjoin rail yard DPM emissions.

The Ninth Circuit's holding that the emission of DPM from rail yards is not a "disposal" of solid waste in violation of RCRA may be adequately supported by the court's inquiry into the legislative context of rail yard emissions. However, the court's restriction of "disposal" to require discharge *initially* to land or water without first traveling through the air,[39] if applied strictly, may exempt from citizen suits some disposals of solid substances through the air in gaseous or semiliquid form even though they contribute to hazardous waste contamination of land or water. Nev-

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[31] *Id.*

[32] *See id.* Additionally, although § 6924(n) of RCRA specifically requires the EPA to regulate some air emissions from waste disposal facilities, *see* 42 U.S.C. § 6924(n), the Ninth Circuit asserted that the citizen-suit provision does not permit individuals to enforce § 6924(n), *BNSF*, 764 F.3d at 1025. However, the citizen-suit provision neither explicitly excludes nor explicitly includes § 6924(n) from its ambit. *See* 42 U.S.C. § 6972.

[33] *See BNSF*, 764 F.3d at 1026–29.

[34] *Id.* at 1029 (internal quotation marks omitted).

[35] *Id.* at 1027 ("[N]either party disputes that Defendants' railyards are 'indirect sources' . . . .").

[36] *Id.* Because indirect source emissions fall outside the EPA's authority under the CAA, the court concluded that they "fall entirely outside the ambit of federal regulation." *Id.* at 1029.

[37] *See id.* at 1028 (citing Clean Air Act Amendments of 1990, Pub. L. No. 101-549, § 222(a)–(b), 104 Stat. 2399, 2500–02 (codified at 42 U.S.C. §§ 7543, 7547)).

[38] *Id.* at 1029–30. The plaintiffs argued that the CAA's allocation of regulatory power over indirect sources and trains to states and the EPA, respectively, does not prohibit citizen suits against hazardous waste from rail yards under RCRA. Appellants' Opening Brief at 14–20, *BNSF*, 764 F.3d 1019 (No. 12-56086), 2012 WL 5915399. The plaintiffs urged the court to harmonize the CAA and RCRA because there is no irreconcilable conflict between them. *See BNSF*, 764 F.3d at 1029. The court declined, finding no overlap between the two laws that would require harmonization and determining that any gap between the regulatory regimes was the "product of a careful and reasoned decision made by Congress." *Id.* at 1030.

[39] *See BNSF*, 764 F.3d at 1024.

ertheless, it remains unclear how strictly this order-of-disposal rule will apply to borderline RCRA cases going forward[40]: cases dealing with disposal that looks more like an emission of particulate matter (PM) than a dump or leak.[41] Future courts should avoid the negative consequences of the *BNSF Railway Co.* court's bright-line order-of-disposal rule by relying on an individualized inquiry into the nature of each alleged disposal.

PM is a mixture of solid and liquid substances[42] that poses significant danger to human health[43] and that, despite being released into the air, also contaminates land and water.[44] Though also regulated under the CAA,[45] PM is distinct from other types of air pollution. PM is already in solid or liquid form at the time of discharge, as opposed to EPA-regulated gases that may become solid after reacting in the atmosphere[46] and others that never become solid.[47] While PM is distinct from other solid substances due to its small size and wide dispersal into the air, it is also distinguishable from truly gaseous emissions by its makeup.[48] And more germane to the Ninth Circuit's *BNSF Railway Co.* decision, DPM's structural similarity to mists, vapors, and emissions, when coupled with the order-of-disposal rule, may lead to the

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[40] The court's order-of-disposal rule certainly should not be taken literally in all cases. For example, if sludge drops from a tank held twenty feet in the air, all would agree that it still qualifies under RCRA though it traveled through the air before entering land or water. *See id.* at 1024 (recognizing leaking and dumping as types of disposal). Similarly, discharge should not be exempt from RCRA suits if it is "flung" by a shovel onto someone else's land merely because it traveled through the air. *See* Appellants' Reply Brief at 6, *BNSF*, 764 F.3d 1019 (No. 12-56086), 2013 WL 663903.

[41] *See, e.g.*, United States v. Power Eng'g Co., 191 F.3d 1224 (10th Cir. 1999) (involving the disposal of "a mist . . . onto [f]acility soil," *id.* at 1231 (quoting United States v. Power Eng'g Co., 10 F. Supp. 2d 1145, 1157 (D. Colo. 1998))).

[42] *See Particulate Matter: Basic Information*, U.S. EPA, http://www.epa.gov/airquality/particlepollution/basic.html (last visited Nov. 23, 2014) [http://perma.cc/A7WU-BQNF] [hereinafter *Basic Information*].

[43] *See Particulate Matter: Health*, U.S. EPA, http://www.epa.gov/airquality/particlepollution/health.html (last visited Nov. 23, 2014) [http://perma.cc/BF6R-XG5E] (explaining that inhalation of PM is linked to a variety of heart and lung problems).

[44] *See id.* (explaining PM can "settle on ground or water[,] . . . depleting the nutrients in soil . . . and affecting the diversity of ecosystems").

[45] *See* Ctr. for Cmty. Action & Envtl. Justice v. Union Pac. Corp., No. CV 11-8608, 2012 WL 2086603, at *7 (C.D. Cal. May 29, 2012) (citing 42 U.S.C. § 7412(b)(1) (2012)) ("[T]he CAA contains a list of 'hazardous air pollutants' that includes every single compound found in DPM that Plaintiffs allege constitutes solid waste.").

[46] One such example is sulfur dioxide (SO_2). *See Sulfur Dioxide: Health*, U.S. EPA, http://www.epa.gov/airquality/sulfurdioxide/health.html (last visited Nov. 23, 2014) [http://perma.cc/58GY-EQC4].

[47] One air pollutant that remains in gaseous form is carbon monoxide (CO). *See Carbon Monoxide*, U.S. EPA, http://www.epa.gov/airquality/carbonmonoxide/index.html (last visited Nov. 23, 2014) [http://perma.cc/9JHP-XSZ5].

[48] PM is scientifically solid, if small. *See Basic Information*, *supra* note 42. The confusing nature of PM may have led the Ninth Circuit wisely to choose not to affirm the district court's holding that PM is not a "solid waste," but instead to avoid that question and find no "disposal" in this case.

unnecessary disqualification from RCRA citizen suits of some borderline "aerosolized waste" releases.

In formulating its order-of-disposal rule, the Ninth Circuit was unable to explain how a facility's discharge of aerosolized wastes in the form of "mist" could still qualify as disposal. In *United States v. Power Engineering Co.*,[49] the Tenth Circuit held that the release by air scrubbers of "a mist" containing hazardous particulate matter[50] qualified as RCRA disposal.[51] This mist contaminated the ground and water nearby but, by definition, first traveled through the air as small particles indistinguishable from PM.[52] The Ninth Circuit in *BNSF Railway Co.* recognized that aerosolized waste does not lose its character as solid, but the court distinguished *Power Engineering Co.*, claiming that the mist in that case was disposed of "onto the soil" and not "through the air."[53] The time spent in the air between the mist's discharge from the scrubbers and when it "settles onto the Facility soil,"[54] however, seems incompatible with the Ninth Circuit's order-of-disposal rule despite the court's reticence to disagree with the misting case.

The order-of-disposal rule also may jeopardize citizen suits brought in response to the discharge of hydrocarbon vapors from storage tanks and pipes. An underground storage tank (UST) system includes a combination of tanks and pipes (the volume of which "is 10 percent or more" below ground) that contain petroleum or other substances.[55] Such tanks and pipes are regulated by RCRA[56] and can leak both liquid gasoline and hazardous vapors contained therein.[57] Because up to

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[49] 191 F.3d 1224 (10th Cir. 1999).

[50] The district court in *Power Engineering Co.* clarified that the air scrubbers discharged "air as well as a mist" containing lead, mercury, and arsenic — particles that are all present in DPM — as well as another liquid, hexavalent chromium. United States v. Power Eng'g Co., 10 F. Supp. 2d 1145, 1150 (D. Colo. 1998).

[51] *See Power Eng'g Co.*, 191 F.3d at 1231–32.

[52] *See id.* at 1231. Mist is defined as "water in the form of very small drops floating in the air or falling as rain." *Mist Definition*, MERRIAM-WEBSTER, http://www.merriam-webster.com/dictionary/mist (last visited Nov. 23, 2014) [http://perma.cc/5SZE-626M]. The district court also clarified that the scrubbers discharged "the condensate into the air . . . a few feet above the ground," and that the mist, or "suspended liquid," contaminated soil on the facility's premises up to thirty feet away from the scrubbers. *Power Eng'g Co.*, 10 F. Supp. 2d at 1158.

[53] *BNSF*, 764 F.3d at 1025 (internal quotation marks omitted).

[54] *Power Eng'g Co.*, 10 F. Supp. 2d at 1158.

[55] 40 C.F.R. § 280.12 (2013) (relying on 42 U.S.C. § 6991(10) (2012) for its definition).

[56] *See* 40 C.F.R. pt. 280; Bernard Schafer, *Distinguishing Your Underground Storage Tanks (USTs) from Your Aboveground Storage Tanks (ASTs)*, ARMY LAW., Dec. 1998, at 33, 33–34 (referring to the Solid Waste Disposal Act — another name for RCRA).

[57] Vapor releases from such systems can contain hydrocarbons like methane, and abandoned gasoline wells and old pipes (examples of USTs) often discharge these hazardous compounds into the air, land, and water across the country. *See* Peter Moskowitz, *The Hidden Leaks of Pennsylvania's Abandoned Oil and Gas Wells*, THE GUARDIAN (Sept. 18, 2014, 11:09 AM), http://www.theguardian.com/environment/2014/sep/18/pennsylvania-abandoned-fracking-wells-methane-leaks-hidden [http://perma.cc/LW6M-WSB3] (estimating that there are possibly more than a mil-

ninety percent of a UST may be above ground, the EPA's regulation of USTs (in the "Solid Wastes" subchapter of the CFR) anticipates both "subsurface" and "[a]boveground release" of solid waste,[58] including in the form of vapor.[59] Included in a list of "solid wastes" under RCRA is "[p]etroleum-contaminated media and debris,"[60] which can be caused by vapor.[61] And the EPA's reference to the "leak," rather than "emission," of hydrocarbon vapors[62] brings the release of such vapors within RCRA's definition of "disposal."[63] The Ninth Circuit's order-of-disposal rule, however, would preclude RCRA citizen suits for release of hazardous vapors above ground, even though these discharges may later mix with subsurface release to contaminate land or water.

A rule that conclusively precludes aerosolized mists and hydrocarbon vapors from citizen suits under RCRA would constitute a harmful removal of an important method of enforcement of environmental standards. While federal and state regulations already purport to govern solid and hazardous waste facilities and USTs under RCRA, "Congress intended citizen suits to supplement government action, to make up the balance of necessary enforcement . . . when under-funded or over-worked agencies [cannot] ensure that all laws are complied with."[64] Citizen enforcement against improper disposals is "more necessary than ever" as government enforcement is "increasingly less reliable."[65] The harm of categorically disqualifying some methods of land pollution from citizen suit under RCRA, then, is a dearth of enforce-

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lion abandoned oil and gas wells across the country, many of which emit hazardous substances into the air, soil, and water).

[58] *See* 40 C.F.R. § 280.12. The EPA's UST regulations anticipate "release" of *solid* waste from partially above-ground tanks or pipes, which then travels "to the surface of the land or to surface water." *Id.* One can infer that any *above-ground* release must travel through the air before contaminating the ground or water.

[59] *See* Parker v. Scrap Metal Processors, Inc., 386 F.3d 993, 1001 (11th Cir. 2004) (mentioning USTs containing "explosive levels of petroleum vapors").

[60] 40 C.F.R. § 261.4(b)(10). These contaminated media must be "subject to the corrective action regulations under part 280 of this chapter." *Id.*

[61] *Id.* § 280.72(b) (clarifying that discovery of either "contaminated soils" or petroleum "product as a liquid or vapor" creates the requirement of corrective action). Case law also indicates that releases from USTs are "solid wastes" by virtue of being discarded. *See* Zands v. Nelson, 779 F. Supp. 1254, 1261–62 (S.D. Cal. 1991) (noting that RCRA defines solid waste "very broadly" as "any discarded material," and concluding that even though gasoline is not a solid waste while in USTs, it becomes a solid waste under RCRA once it contaminates the land because it is "no longer a useful product" (internal quotation marks omitted)). Likewise, hydrocarbon vapors that come from petroleum and contaminate the ground should be regarded as *discarded*, and thus solid, waste.

[62] 40 CFR § 264.1057.

[63] *See* 42 U.S.C. § 6903(3) (2012) (including "leaking" within the definition of "disposal").

[64] Will Reisinger et al., *Environmental Enforcement and the Limits of Cooperative Federalism: Will Courts Allow Citizen Suits to Pick Up the Slack?*, 20 DUKE ENVTL. L. & POL'Y F. 1, 2 (2010).

[65] *Id.* at 3.

ment of that statute and resultant unpunished pollution violations.[66] Thus, disqualification of a method of pollution from RCRA's definition of disposal should only occur after an individualized inquiry into how the nature of the pollution relates to RCRA as a whole.

Rather than strictly follow the order-of-disposal rule, future courts should recognize that the Ninth Circuit implicitly performed a case-specific analysis into the nature of the pollution and should follow suit.[67] *BNSF Railway Co.* relied in great depth on the statutory history of the CAA and RCRA to determine whether rail yard emissions are covered by RCRA.[68] The court also might have distinguished DPM's tendency to travel great distances on wind currents[69] from that of denser aerosolized waste to contaminate land or water closer to its source.[70] The court was correct to implicitly recognize limitations on its order-of-disposal theory, but was imprecise about how to draw the line between, for example, *Power Engineering Co.* and the instant case.[71] Future courts should rely on case-by-case analyses of potential disposals to avoid the negative consequences of an inflexible rule.

Strict application of an order-of-disposal rule would add an unnecessary restriction on some citizen suits against solid waste discharge in the Ninth Circuit. This result would cut against RCRA's purpose to serve as a remedial statute,[72] acting as a "supplement to media-based laws."[73] Though rail yard emissions may not qualify as disposal due to the nature of their emission sites and fallout area, courts should conduct case-by-case analyses to determine if solid waste is disposed, and initial release into the air should not disqualify all such disposals.

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[66] Indeed, some courts have reasoned that RCRA subchapter IX's regulation of UST leaks only added to the backdrop of citizens' already extensive ability to sue for UST leakage. *See, e.g.*, Dydio v. Hesston Corp., 887 F. Supp. 1037, 1048 (N.D. Ill. 1995) (holding subchapter IX to operate concurrently with citizen suits, not as an "exclusive remedy"); *Zands*, 779 F. Supp. at 1262–63.

[67] Case-by-case inquiries could evaluate, inter alia, the density of aerosolized waste, breadth of fallout area, concentration of contamination, site of emission, and relevant legislative history.

[68] *See BNSF*, 764 F.3d at 1026–29.

[69] *See Basic Information*, *supra* note 42.

[70] This denser waste and smaller contamination area — only thirty feet from the pollution source in *United States v. Power Eng'g Co.*, 10 F. Supp. 2d 1145, 1151 (D. Colo. 1998) — could render the misty material more akin to a discharge or leak than an emission.

[71] An individualized inquiry better explains why cases involving mists and vapors released near the ground and contaminating a small area still qualify as disposal, but cases of emissions that only occasionally contaminate the ground and are spread to wider areas do not. For example, the *BNSF Railway Co.* court disagreed with *Citizens Against Pollution v. Ohio Power Co.*, No. C2-04-CV-371, 2006 WL 6870564 (S.D. Ohio July 13, 2006), which held that flue gas that occasionally touched the ground qualified as a disposal of solid waste, *id.* at *4–5. *See BNSF*, 764 F.3d at 1025 n.5.

[72] *See, e.g.*, Davis v. Sun Oil Co., 148 F.3d 606, 609 (6th Cir. 1998) ("RCRA is a remedial measure that courts have tended to construe . . . in a liberal, though not unbridled, manner.").

[73] Lazarus, *supra* note 5, at 83 ("The theoretical justification for [RCRA] was the need to supplement the media-based laws [such as the CAA], which risked simply chasing toxic pollutants from one media to the next, with some laws that looked at the larger, overall picture.").