Until now, most waste generators have been able to safely ignore air emissions when navigating the complex regulations and guidance implementing the Resource Conservation and Recovery Act (RCRA)—the primary federal law governing the disposal of solid and hazardous waste. That may be changing. In view of recent court decisions, generators may now be wondering if (1) their air emissions are hazardous waste when they land on the ground or other surfaces, (2) these landed air emissions have land disposal requirements, (3) the landed air emissions must be included in determining large quantity generator status and (4) more generally, generators can now be held responsible for materials that become wastes only after they leave generator control.

The most recent decision addressing the status of air emissions under RCRA is *The Little Hocking Water Association, Inc. v. E.I. du Pont de Nemours & Co.* In *Little Hocking*, the Southern District of Ohio agreed with the well-settled rule that air emissions themselves are not solid waste, but then reached the decidedly unsettled conclusion that these emissions may become solid waste when they land on the ground.

Because of the complex nature of RCRA, cases like *Little Hocking* have the potential to generate unfortunate and unintended consequences such as the ones listed in the opening paragraph. These cases also leave a number of questions unanswered. For example, does the nature of the emission matter, e.g., whether it is a true gas or just particulate matter entrained in a gas? Does the nature of the adverse impact matter, e.g., whether it is an airborne impact like inhalation or a ground impact like contaminated soils? Other unintended consequences and unanswered questions will surely emerge as regulators, businesses and plaintiffs try to make sense of, comply with and possibly exploit these recent decisions.

The Role of Gases In the Definition of Solid Waste
One way a material can become a solid waste is to be disposed of. Disposal is defined, as relevant here, 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 such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air . . . .”

Consequently, as we have written previously, air emissions can convert a material into a solid waste regulated under RCRA, but the air emissions themselves are not regulated as a solid waste. See here. This is because RCRA defines “solid waste” in pertinent part as “any … discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations . . . .” For over twenty-five years, EPA has consistently maintained that its authority under RCRA did not include uncontained gases: “EPA now believes our authority to identify or list a waste as hazardous under RCRA is limited to containerized or condensed gases (i.e., section 1004(27) of RCRA excludes all other gases from the definition of solid wastes and thus cannot be considered hazardous wastes).”

**Little Hocking**

In *Little Hocking*, Plaintiff, a potable water provider, operated a wellfield approximately 1,300 feet from Defendant’s facility. Plaintiff alleged, among other things, that air emissions of perfluorooctanoic acid, or C8, from Defendant’s facility had contaminated the wellfield and caused imminent and substantial endangerment under section 7002 of RCRA, 42 U.S.C. § 6972. Defendant disputed many of Plaintiff’s allegations, but conceded that its air emissions had caused the contamination. Defendant argued, however, that all this was irrelevant. In Defendant’s view, because the air emissions were uncontained gases, they were not solid wastes regulated under RCRA, including section 7002. The *Little Hocking* court was not persuaded. Instead, it adopted the view of another Southern District of Ohio court in *Citizens Against Pollution v. Ohio Power Co.*, namely, that RCRA’s definition of disposal

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2 42 U.S.C. § 6903(3).
3 *Ctr. for Cmty. Action & Envtl. Justice v. BNSF Railway Co.*, 764 F.3d 1019, 1024 (9th Cir. 2014) (“‘disposal’ occurs where the solid waste is first placed ‘into or on any land or water’ and is thereafter ‘emitted into the air’” (emphaisis in original)).
4 *Id.* (“Reading § 6903(3) as Congress has drafted it, ‘disposal’ does not extend to emissions of solid waste directly into the air”).
8 *Id.* at *1, *3.
9 *Id.*
requires "only some evidence that the discharges touches down onto land . . . ." In *Ohio Power*, the court had held that flue gas emitted from a coal-burning facility was disposed of because some of the gas had touched the ground, thereby becoming a solid waste. Plaintiff in *Little Hocking* similarly argued—and the court agreed—that C8 had touched the ground of its wellfield and thereby became solid waste.

To reach this conclusion, the *Little Hocking* court had to reject or at least distinguish *Center for Community Action & Environmental Justice v. BNSF Railway Co.*, 764 F.3d 1019 (9th Cir. 2014), in which the Ninth Circuit had held that air emissions of particulate matter from trains and other vehicles were not solid wastes under RCRA. The *Little Hocking* court did both. It "decline[d] to follow the Ninth Circuit’s narrow reading of RCRA’s text and legislative history." It also found it significant that the adverse impact in *BNSF Railway* (inhalation) was caused by airborne emissions, while the adverse impact from C8 was caused by emissions after they had landed.

The *Little Hocking* court defended its holding with the “guiding principle” of RCRA: “when interpreting what constitutes land disposal of solid waste under RCRA, the Court should proceed on a case-by-case basis, keeping in mind as the guiding principle that RCRA is a remedial statute that is to be interpreted broadly.” Applying this principle to the facts before it, the court held that “Defendant’s aerial emissions of C8, which landed on Plaintiff’s Wellfield, and contaminated the soil and groundwater, constitutes disposal of solid waste under RCRA . . . .”

Unintended Consequences and Unanswered Questions

The *Little Hocking* and *Ohio Power* cases may have unintended consequences that further confound the already-confounded regulation of solid waste. These cases also leave unanswered questions about, among other things, whether and how they can be reconciled with *BNSF Railway*. In this closing section, we briefly summarize some of these unintended consequences and unanswered questions.

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13 *Id.* at *19.

14 *Id.* at *19 ("In *BNSF Railway*, the diesel particulate matter fell onto the land, and then was swept back up into the air, causing harm to those who inhaled it. In contrast, in the case *sub judice*, solid C8 particles are emitted into the air, fall onto the ground, remain there, and then contaminate the soil and groundwater.").

15 *Id.*
A. Unintended Consequences

1. All gaseous emissions eventually impact the ground. If RCRA regulates air emissions when they impact the ground, then all gaseous emissions create RCRA-regulated solid waste. At some point or another, all or a portion of every gaseous emission returns to earth. The amounts may be so small as to be de minimis as a practical matter, but many parts of RCRA have no automatic de minimis exemption.

2. How does one characterize solid waste from air emissions? If gaseous air emissions are solid wastes once the emissions land on earth, then RCRA requires that the wastes be characterized. Unfortunately, the landed air emissions may sometimes be hazardous waste.

Using EPA guidance as analogy, there are two relevant categories of gaseous air emissions. The most troublesome category comprises emissions where the source is a U- or P-listed commercial chemical product, e.g., emissions from the vent of a storage tank. The EPA generally characterizes materials contaminated with air emissions from U- or P-listed products as the corresponding U- or P-listed waste. Under this logic, soil (for example) that is contaminated with such air emissions could be a hazardous waste. It would be irrelevant whether the soil's actual concentrations of U- or P-listed wastes might be quite small, because there are few automatic de minimis exemptions for listed wastes.

The second category comprises all other gaseous air emissions, whether F- or K-listed waste, characteristic waste or unlisted product or byproduct. Since gaseous emissions are not themselves wastes, the emissions cannot be “derived from” listed wastes when they land. Accordingly, they are hazardous only if they display a hazardous characteristic, which may be a rare event.

3. Are the landed air emissions subject to land disposal restrictions? If the landed air emissions are hazardous wastes, they would be subject to land disposal restrictions under 40 C.F.R. part 268. In theory, the generator would have to treat them to the appropriate treatment standards whether for

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16 40 C.F.R. § 262.11.
17 40 C.F.R. § 261.33.
18 Ltr. from David Bussard to Peter W. Colby, RO 14095 (July 24, 1997) (“formulations meeting a P or U listing description captured by the filters, still constitute the listed commercial chemical product subject to regulation as hazardous waste, when disposed”); Ltr. from Matthew A. Straus to Dennis M. Burchett, RO 11248 (May 18, 1987) (“The packaging of the finished Phorate product releases Phorate to the air . . . EPA continues to regulate a listed waste even when it is contained in another material, i.e., in this case the spent carbon”).
19 See, e.g., 56 Fed. Reg. 7134, 7200 (Feb. 21, 1991) (“trapped organics in [activated carbon] columns are not hazardous wastes because the gas originally being treated is not a solid waste (it is an uncontained gas), and therefore any condensed organics do not derive from treatment of a hazardous waste”).
contaminated soils under 40 C.F.R. § 268.49, contaminated debris under 40 C.F.R. § 268.45 or wastewaters and non-wastewaters under 40 C.F.R. § 268.40. The generator also would have to complete land disposal paperwork under 40 C.F.R. § 268.7.

4. Must a generator count landed air emissions in determining whether it is large, small or conditionally exempt? RCRA regulates hazardous waste generators depending on the amounts of waste that they generate each month and store.20 If landed air emissions are hazardous wastes, the EPA might argue that they must be included in the monthly total used to determine generator status.

5. Might generators be responsible for other materials that only become wastes after they leave the generator’s control? Until now, waste generators could generally assume that they might be liable only for the wastes that they generate. Barring special circumstances, generators are not liable under RCRA for wastes generated from, e.g., commercial products sold to others. Even though the cases discussed herein did not involve commercial products, all of the courts agreed that the pollutants were not wastes when they left defendants’ facilities. Accordingly, Little Hocking and Ohio Power stand for the novel proposition that, at least sometimes, a generator may be liable for materials that become wastes only after they leave the generator’s control even where the generator has complied with all applicable requirements.

B. Unanswered Questions

1. Does RCRA govern both landed gaseous and landed non-gaseous emissions? Interestingly, neither the Little Hocking, BNSF nor Ohio Power courts addressed the issue of whether the pollutants of concern were even gases at all. As at least some of the parties recognized, this could have been decisive in each case. RCRA arguably might be relevant to the emission of airborne non-gases, and the C8 in Little Hocking, the combustion matter in BNSF and the sulfuric acid in Ohio Power all likely were non-gas particulate matter.21

2. Does RCRA govern both impacts from the air and impacts to the ground? In Little Hocking, the court emphasized that the contamination of concern was caused by C8 that had landed on the ground.22 In BNSF Railway, the contamination of concern was particulate matter inhaled from the air.

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20 See, e.g., 40 C.F.R. §§ 261.5, 264.34.

21 See, e.g., 47 Fed. Reg. 27520, 27530 (June 24, 1982) (distinguishing particulate matter from gaseous emissions, "which are not subject to regulation under RCRA").

22 Little Hocking, 2015 WL 1038082 at *19; see also Ohio Power Co., 2006 WL 6870564 at *2 & *5 ([Plaintiff] members experienced watery eyes, burning throats, headaches, and breathing problems during plume touchdowns. . . [Defendant] officials, also testified that they saw the blue plumes touch down on the ground. . . . Consequently,
including particles that had “fallen to earth and then have been re-entrained into the air by wind, air currents, and passing vehicles.” It remains to be seen whether this distinction will make a difference in future litigation.

3. Will Little Hocking’s “guiding principle” survive CTS Corp. v. Waldburger? The guiding principle for Little Hocking and Ohio Power was that remedial statutes like RCRA must be interpreted broadly. In the recent case CTS Corp. v. Waldburger, however, the U.S. Supreme Court reversed the Court of Appeals for the Fourth Circuit in part because it relied too heavily upon an environmental statute’s (CERCLA) remedial nature to justify a broad interpretation. The Little Hocking court did not address Waldburger’s implications, but Waldburger may be a powerful asset for future litigants seeking to lead courts away from the broad interpretation of Little Hocking toward the narrower one of BNSF Railway.

4. Will the EPA follow Little Hocking and Ohio Power? Little Hocking, BNSF Railway and Ohio Power all involved private party plaintiffs acting under RCRA’s section 7002 citizen suit authority. Absent from these cases was the EPA. The EPA does not often cede regulatory authority bestowed by the

Footnote continued from previous page:

evidence in the record supports a finding that the flue gas is discharged or placed on land. [Defendant]’s argument that the flue gas is not ‘discarded material’ is therefore unavailing.”).  

23 Little Hocking, 764 F.3d at 1022.

24 Little Hocking, 2015 WL 1038082 at *19 (“[W]hen interpreting what constitutes land disposal of solid waste under RCRA, the Court should proceed on a case-by-case basis, keeping in mind as the guiding principle that RCRA is a remedial statute that is to be interpreted broadly.”) (emphasis added); Ohio Power Co., 2006 WL 6870564 at *5 (“As previously noted, the RCRA is a remedial statute that is to be interpreted broadly.”).


26 134 S.Ct. 2175, 2185 (2014) (“The Court of Appeals supported its interpretation of § 9658 by invoking the proposition that remedial statutes should be interpreted in a liberal manner. The Court of Appeals was in error when it treated this as a substitute for a conclusion grounded in the statute’s text and structure. After all, almost every statute might be described as remedial in the sense that all statutes are designed to remedy some problem.”).

27 Ohio Power Co., 2006 WL 6870564 at *5. For example, the Ohio Power court’s position that RCRA’s definition of solid waste is “merely illustrative, not comprehensive” arguably violates the doctrine expressio unius est exclusio alterius (the inclusion of one is the exclusion of others), Hillman v. Maretta, 133 S. Ct. 1943, 1953 (2013) (“[W]here Congress explicitly enumerates certain exceptions to a general prohibition, additional exceptions are not to be implied, in the absence of a contrary legislative intent.”) (citation omitted), and arguably would render superfluous Congress’ use of the term “contained” in the definition of solid waste, see, e.g., Astoria Federal Savings & Loan Ass’n v. Solimino, 501 U.S. 104, 112 (1991) (“[W]e construe statutes, where possible, so as to avoid rendering superfluous any parts thereof.”).

courts but, given the unintended consequences of Little Hocking and Ohio Power, it remains an open question whether the EPA will follow them.

Conclusion

Are Little Hocking and Ohio Power anomalies, or are they the future of RCRA jurisprudence regarding air emissions? If the former, then, except in the Southern District of Ohio, RCRA’s treatment of air emissions may remain as it has been for the last 25 years. If the latter, then there are many issues yet to be settled, and there may be many opportunities for plaintiffs to allege claims for violations of RCRA under section 7002(a)(1)(a) as well as claims for imminent and substantial endangerment under section 7002(a)(b) such as the claims in Little Hocking.

If you have any questions about any of the topics discussed in this advisory, please contact your Arnold & Porter attorney or any of the following attorneys:

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