Vapor Intrusion in the Workplace: Do OSHA or EPA Standards Apply?

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Increased attention to the vapor intrusion (VI) pathway in evaluating exposures of individuals to volatile compounds present in soil or groundwater near occupied buildings has caused regulators and the regulated community alike to consider the standards against which the actual or modeled levels of these substances inside commercial and industrial buildings should be compared and whether the Occupational Safety and Health Administration (OSHA) or the U.S. Environmental Protection Agency (EPA) is the appropriate agency to set such standards. OSHA promulgates regulations comprehensively governing worker exposure to toxic chemicals in the workplace, including Permissible Exposure Limits (PELs) designed to keep workers safe. EPA, on the other hand, regulates exposures of the general population to substances found in the environment, which the agency has commonly interpreted as referring to areas outside of buildings. Although EPA has for years maintained that it lacks statutory authority to regulate air quality in the indoor environment, EPA’s intensified interest in VI appears to be leading the agency to extend the scope of its regulation indoors. To complicate the situation further, cleanup levels required by EPA vary among the EPA regional offices, and a number of states have established their own acceptable levels in their guidance documents.

This article does not evaluate whether any of these specific exposure concentrations are “appropriate” or “correct.” Rather, this article examines the statutory authority of each agency to address VI and evaluates the historical allocation of regulating VI between the two agencies. This article concludes that OSHA has the statutory mandate and authority, which EPA and OSHA have historically recognized, to regulate workplace hazards, including VI. Although we have not identified any judicial decisions on this issue up to the present time, this issue will likely be presented to the courts, and we believe that the courts are likely to agree with the agencies’ prior interpretations of their own authority.

OSHA’S AUTHORITY SPECIFICALLY ADDRESSES WORKER HEALTH

There can be no question that OSHA was the agency created for the purpose of dealing with worker safety and health, and the Occupational Safety and Health Act’s (OSH Act) purposes and statutory mandates address worker health directly. The OSH Act empowers OSHA to ensure that employers provide safe work environments for their employees.7 OSHA has the authority to promulgate binding national standards to safeguard the health and well-being of employees and make workplaces safer.8 Accordingly, Congress directed OSHA to develop standards for worker exposure to chemicals so that “no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to the hazard dealt with by such standard for the period of his working life.”9 Therefore, OSHA’s mandate over worker safety and health is direct, unequivocal, and uncontroversial.

EPA LACKS AUTHORITY UNDER RCRA/CERCLA OVER WORKER HEALTH

By contrast, EPA has authority to regulate environmental risks, including the responsibility to maintain the cleanliness of air, water, and land, including hazardous waste disposal. EPA, however, has recently ventured into regulating VI risks on the basis of the Resource Conservation and Recovery Act (RCRA)3 and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).5 Although RCRA and CERCLA undoubtedly provide EPA with a wide range of powers to regulate environmental hazards generally, Congress gave no indication that it intended these powers to extend to regulation of workplaces. It indeed gave indications to the contrary.

The purpose of RCRA was to give EPA the power to deal with the growing problem of waste disposal and the adverse effects of disposal on the environment.6 The objectives of RCRA do not focus on worker protection.7 In fact, RCRA contains specific language indicating Congress’ intent that OSHA would have the lead in regulating and enforcing regulations in the workplace. Section 7001(f), 42 U.S.C. § 6971(f), requires EPA to assist OSHA by, for example, providing information regarding the type of any hazardous waste to which a person may be exposed and the methods to protect workers from such hazards.8

CERCLA imposes liability on certain categories of people for the cleanup of hazardous substances and authorizes EPA to respond to releases of hazardous substances in the environment and to require others to respond. The applicability of CERCLA, however, is limited by CERCLA’s definition of “environment” and “release.”9 Courts have found that
these two definitions indicate that Congress did not intend CERCLA to apply to the interior of a place of employment. By contrast, courts have held that where a release within the workplace has an impact on the outdoors, those environmental effects—as opposed to the effects on worker safety and health—are properly subject to CERCLA.

THE COMMON UNDERSTANDING THAT OSHA REGULATION SHOULD APPLY

In 1990, EPA and OSHA entered into a memorandum of understanding (MOU), which delineated the boundaries of the agencies’ respective jurisdictions. The MOU provides that OSHA has the “authority to promulgate mandatory safety and health standards for private sector workers.” EPA’s responsibilities, by contrast, are “the protection of public health and the environment.” Noticeably absent from the MOU is any expression of authority by EPA to regulate worker health and safety. Instead, the MOU explains the respective roles of each agency, and lists specific examples of the types of violations that OSHA is to refer to EPA. One of the examples is “accidental, unpermitted, or deliberate releases of chemicals or chemical substances beyond the workplace.” By referring to releases “beyond the workplace,” the language implies that OSHA retains authority over any releases into the workplace, regardless of where those releases originated. Moreover, the statements in the MOU are not made contingent on a requirement for a medical monitoring program at the workplace.

EPA INTERPRETS ITS OWN AUTHORITY AS COVERING ONLY THE OUTDOORS

For many years, when urged to regulate a variety of indoor air pollutants, EPA protested that it had no authority to do so. For example, in testimony before Congress in 1981, the EPA Administrator testified that “[t]here is no construct under the current law for regulation of indoor air pollutants by EPA.” EPA took the position that it lacked authority even to study radon until Congress passed specific empowering legislation. EPA regulates asbestos in buildings based on minimizing emissions to the atmosphere and not into the indoor air. Under the Clean Air Act (CAA) itself, pursuant to which EPA has actually regulated certain pollutants present in the indoor air under the National Emission Standards for Hazardous Air Pollutants (NESHAPS), a 1980 internal EPA memorandum stated that the CAA “does not authorize EPA to regulate indoor air” itself. These statements undermine any contrary assertions of jurisdiction over the indoor environment.

EPA released draft guidance for evaluating subsurface VI in 2002. Even in the precise context of VI, however, EPA expressed its understanding in the 2002 draft guidance that “OSHA and EPA have agreed that OSHA generally will take the lead role in addressing occupational exposures.” EPA clarified that OSHA’s role would pertain not only in settings using the substances at issue, but also in “other workplaces, such as administrative and other office buildings where chemicals are not routinely handled.” Accordingly, EPA states that it does not “expect this guidance be used for settings that are primarily occupational.” Moreover, it does not recommend that EPA should impose stricter groundwater or soil cleanup standards based on occupational exposure levels.

In a footnote in the draft guidance, however, EPA states: “At CERCLA sites, the cleanup levels are generally determined either by ARARs [applicable or relevant and appropriate requirements] or risk range considerations; the OSHA standards are not ARARs . . . . Therefore, there may be instances . . . where standards other than the OSHA standards are used to determine whether the exposure pathway presents a risk to human health.” EPA presumably rests its decisions to alter site remedies on this provision, without regard to the questions of statutory authority it presents.

EPA included a series of tables in the draft guidance containing, among other things, “recommended target indoor air concentrations” for a variety of substances. These target indoor air concentrations are established based on residential exposure assumptions; thus, it is not clear whether these concentrations would apply in commercial or industrial contexts. These numbers may not represent the final endpoints in EPA decision-making, but the numbers undeniably drive remedial decisions. However, as the draft guidance is just that—just a draft and just a guidance—neither it nor the included target concentrations have been subjected either to the reliability

REFERENCES

10. Brian Times, 860 F.2d 1434, 1436 (7th Cir. 1988) (“a place where work is being carried out is not the ‘environment’ for purposes of the Superfund Act”). See also Green vs. United Tool Co., 890 A.2d 1269, 1282-83 (Conn. 2006) (holding that, to the extent that the plaintiff’s action is predicated on the [worker’s] alleged exposure to toxic agents within the workplace, it does not fall within the purview of CERCLA); Rison vs. N.Y. State Div. of Environ. Conservation, 119 Cal. Rptr. 2d 503, 517 (Cal. Ct. App. 2002) (agreeing with other federal courts that “an exposure limited to a few persons inside an enclosed space is not covered by . . . CERCLA”).
11. Premium Plastics vs. LaSalle National Bank, 904 F. Supp. 809 (N.D. Ill. 1995) (denying defendants’ motion for summary judgment and noting that the onsite activities resulted in releases onto the workplace floor that contained cracks into which the chemicals could reach the underlying soil and water).
12. Memorandum of Understanding Between the U.S. Department of Labor Occupational Safety and Health Administration and the U.S. Environmental Protection Agency Office of Enforcement, Nov. 22, 1990 (MOU). Although the MOU is only an interagency agreement, courts have looked to interagency MOUs in determining interagency jurisdictional boundaries. See, for example, Chao vs. Mallard Bay Drilling, Inc., 534 U.S. 235, 241 (2002).
13. MOU at § IV(C)(3)(b).
14. In implementing the MOU, the two agencies have further confirmed their common understanding that OSHA is the agency vested with the jurisdiction over any releases into the workplace, regardless of where those releases originated. Therefore, there may be instances . . . where standards other than the OSHA standards are used to determine whether the exposure pathway presents a risk to human health.” EPA presumably rests its decisions to alter site remedies on this provision, without regard to the questions of statutory authority it presents.
15. EPA included a series of tables in the draft guidance containing, among other things, “recommended target indoor air concentrations” for a variety of substances. These target indoor air concentrations are established based on residential exposure assumptions; thus, it is not clear whether these concentrations would apply in commercial or industrial contexts. These numbers may not represent the final endpoints in EPA decision-making, but the numbers undeniably drive remedial decisions. However, as the draft guidance is just that—just a draft and just a guidance—neither it nor the included target concentrations have been subjected either to the reliability
testing effect of notice and comment rulemaking procedures or to judicial review.

Consistent with the draft guidance, EPA’s draft “Vapor Intrusion and RCRA Corrective Action (CA) Environmental Indicators (EI) Fact Sheet,” issued June 17, 2003, expresses EPA’s understanding of its limited authority. EPA’s fact sheet posed the question of how EPA evaluates VI for RCRA EI determinations in occupational and other nonresidential settings. EPA explained that OSHA and EPA have agreed that OSHA generally will take the lead role in addressing occupational exposures. Therefore, EPA does not expect the November 2002 VI guidance to be used in such settings (i.e., primarily occupational). EPA also notes that for nonresidential settings where persons are in a nonworking situation, such as schools, libraries, hospitals, hotels, and stores, “the November 2002 Vapor Intrusion Guidance may be appropriate.”

Thus, both EPA’s draft guidance and EPA’s fact sheet articulate an understanding that remains faithful to the traditional division of authority between EPA and OSHA. The fact sheet, by particularly distinguishing nonresidential settings where persons are in nonworking situations, highlights the deliberate nature of EPA’s understanding of the limitations on its authority in occupational settings.

EPA CANNOT DISPLACE OSHA REGULATION

Section 4(b)(1) of the OSH Act provides that OSHA’s authority to regulate the workplace environment may only be displaced if federal agencies (1) possess statutory power over particular working conditions, and (2) exercise that authority to prescribe or enforce standards affecting occupational safety and health.10 With regard to VI, EPA has no specific authority over worker safety and health that would allow it to displace OSHA authority, and its setting of soil and groundwater cleanup standards based on purported risks to building occupants constitutes neither the promulgation of specific regulations nor the assertion of comprehensive regulatory authority.

CONCLUSIONS

In enacting the OSH Act, Congress vested regulatory authority over the health and safety of the nation’s employees in OSHA. OSHA’s task is to regulate in such a manner as to keep the workplace as safe and free of hazards as possible. EPA, on the other hand, is charged with maintaining the environment outdoors and health and safety issues affecting the population as a whole. Further, OSHA PELs withstand the thoroughness of National Institute of Occupational Safety and Health study, the rigor of an OSHA rulemaking process, the testing of notice and comment procedures, and the neutral review of the courts. Site-by-site, ad hoc remedial decision-making by EPA or states provides none of those safeguards. EPA has consistently conceded authority over workplace regulations to OSHA, but is now effectively regulating vapor intrusion in workplaces through cleanup levels for soil or groundwater. We conclude that such action is beyond EPA’s statutory authority.

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