

Villanova University Charles Widger School of Law

From the Selected Works of Todd S Aagaard

2011

Regulatory Overlap, Overlapping Legal Fields, and Statutory Discontinuities

Todd S Aagaard, *Villanova University School of Law*



Available at: https://works.bepress.com/todd_aagaard/7/

REGULATORY OVERLAP, OVERLAPPING LEGAL
FIELDS, AND STATUTORY DISCONTINUITIES

Todd S. Aagaard*

ABSTRACT

Lawmakers and scholars alike criticize regulatory overlap on the ground that giving administrative agencies overlapping jurisdiction leads to duplicative or conflicting regulation which is inefficient and unduly burdensome. This Article challenges this orthodox account of regulatory overlap through examination of six case studies in which the Environmental Protection Agency and the Occupational Safety and Health Administration have managed their jurisdictional overlap so as to create regulatory synergy rather than dysfunction. Although this Article is not the first to argue that regulatory overlap may improve the effectiveness of regulatory programs, the case studies examined here highlight two important aspects of regulatory overlap that existing scholarship has overlooked. First, policy problems that cut across legal fields invite an allocation of authority that vests agencies with overlapping regulatory jurisdictions. Second, regulatory overlap allows agencies to smooth over discontinuities at the interstices of statutes, thereby adding coherence to the law.

I. INTRODUCTION	238
II. THE EPA-OSHA REGULATORY OVERLAP	242
A. Statutory Structure	242
1. OSHA	242
2. EPA	244

* Associate Professor of Law, Villanova University School of Law. In appreciation for their helpful comments on drafts of this Article, I thank Adam Finkel, Jason Marisam, Michael Risch, and participants in faculty workshops at the University of Maryland School of Law and the University of Cincinnati College of Law. Numerous EPA and OSHA employees generously answered my questions about the case studies reviewed in this Article, for which I am grateful. Finally, I thank Erin Keltz and James Christon for their able research assistance.

3. *Characterizing the EPA-OSHA Overlap* 248

B. *Case Studies* 249

1. *Chemical Accidents* 250

2. *Asbestos* 254

3. *Dermal Test Rule* 256

4. *4,4'-Methylenedianiline* 258

5. *New Chemical Review* 262

6. *Vapor Intrusion* 267

III. *EVALUATING REGULATORY OVERLAP* 273

A. *Why Regulatory Overlap Arises* 273

1. *Agency Expansion* 273

2. *Byproduct of Delegation* 277

3. *Intentional Redundancy* 278

4. *Overlapping Legal Fields* 281

B. *Is Regulatory Overlap Beneficial?* 286

1. *Disadvantages* 286

2. *Counterarguments* 289

3. *Advantages* 292

4. *Smoothing Statutory Discontinuities* 297

C. *What Factors Favor Effective Coordination* 300

IV. *CONCLUSION* 302

I. INTRODUCTION

At a time when fiscal belt-tightening dominates policy agendas throughout government, almost everyone seems to agree that giving administrative agencies overlapping regulatory jurisdiction¹ is bad. Regulatory overlap leads to duplicative regulation, which is wasteful, inefficient, and unduly burdensome. Congress accordingly has stated “that it is the policy of the United States . . . to eliminate overlapping and duplication of effort”² and has instructed the Government Accountability Office (GAO) “to identify programs, agencies, offices, and initiatives with duplicative goals and activities” and to make “recommendations for consolidation and elimination to reduce duplication.”³ The GAO’s recently released responsive report identifies thirty-four areas in which fed-

¹ Regulatory jurisdictional overlap occurs when “independent public agencies enjoy regulatory authority over the same individuals or institutions, with regard to the same or related issues.” Robert B. Ahdieh, *Dialectical Regulation*, 38 CONN. L. REV. 863, 864 (2006).

² 5 U.S.C. § 901(a) (2006).

³ Statutory Pay-as-You-Go Act of 2010, Pub. L. No. 111–139, § 21 (Feb. 12, 2010); see also 5 S. COMM. ON GOVERNMENTAL AFFAIRS, STUDY ON FEDERAL REGULATION PREPARED PURSUANT TO S. RES. 71 TO AUTHORIZE A STUDY OF THE PURPOSE AND CURRENT

eral programs are overlapping or fragmented across multiple agencies and concludes that “[r]educing or eliminating duplication, overlap, or fragmentation could potentially save billions of tax dollars annually and help agencies provide more efficient and effective services.”⁴ President Obama’s Executive Order on improving regulation similarly exhorts agencies “to promote . . . coordination, simplification, and harmonization” to reduce “redundant, inconsistent, or overlapping” regulatory requirements.⁵ Academics, commentators, and interest groups often offer similar opprobrium for regulatory overlap.⁶

A few public administration scholars and legal scholars, however, have challenged this orthodoxy, noting ways in which overlapping jurisdiction in some circumstances may actually improve the effectiveness of regulatory programs. But much of this work has been theoretical and institutionalist in its analysis, abstracted from the subject matter of the regulation and drawing on analogies from other fields such as engineering and communications, which view duplication as a means of increasing reliability. Moreover, even these advocates for the benefits of regulatory overlap have acknowledged its limitations and drawbacks. They have settled on a counternarrative that identifies certain potential benefits of regulatory overlap, while struggling to identify the circumstances and conditions in which the benefits of overlap outweigh its drawbacks.⁷

EFFECTIVENESS OF CERTAIN FEDERAL AGENCIES, 95th Cong., 1st Sess. 122 (1977) (opining that, when duplication occurs, “taxpayers suffer”).

⁴ U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-11-318SP, OPPORTUNITIES TO REDUCE POTENTIAL DUPLICATION IN GOVERNMENT PROGRAMS, SAVE TAX DOLLARS, AND ENHANCE REVENUE 1-2 (2011).

⁵ Improving Regulation and Regulatory Review, Exec. Order No. 13,563, 76 Fed. Reg. 3821, 3822 (Jan. 18, 2011).

⁶ See, e.g., Ahdieh, *supra* note 1, at 864 (noting that “the conventional account finds little wisdom—and much to fear—in [regulatory] overlap”); *id.* at 879-80 (“Predictability, accountability, and legitimacy, among a litany of other pious virtues, are trotted out to demand that lines of jurisdiction be drawn so as to eliminate the prospect of overlap and dependence.”); William J. Brodsky, *A Real Regulatory Redundancy*, WALL ST. J., Oct. 19, 2007, at A19 (contending that regulatory overlap between the Securities and Exchange Commission and the Commodity Futures Trading Commission “hampers the competitiveness of U.S. financial markets, impedes innovation and creates serious public-policy concerns”); *OSHA and EPA: Redundancy at the Employer’s Expense*, OCCUPATIONAL HAZARDS, Apr. 1, 1996, available at 1996 WLNR 6218006 (“The Occupational Safety and Health Administration and the EPA are wasting their resources and doubling the time and cost for companies to respond to the two agencies due to their overlapping enforcement of accidental chemical emission regulations.”); see also sources cited *infra* notes 228-229.

⁷ Perhaps surprisingly given the often intense criticism of regulatory overlap, the law is quite clear that overlapping regulatory jurisdictions are both allowed and readily recog-

This Article both advances and deviates from that counternarrative. It examines a set of six case studies in which the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) manage overlapping statutory authorities. Both the EPA and OSHA regulate certain risks in the workplace arising from exposures to hazardous and toxic substances. The EPA regulates such risks pursuant to its authority under various environmental statutes, and OSHA regulates pursuant to its authority under the Occupational Safety and Health Act. The case studies examined in this Article suggest that the EPA and OSHA, although far from perfect either individually or in combination, sometimes manage their statutory overlap so as to create regulatory synergy rather than dysfunction. The EPA-OSHA case studies thus provide some support for the counternarrative positing that regulatory overlap can be beneficial.

nized by courts. Longstanding principles of statutory interpretation hold that, where overlapping statutes govern the same subject matter, both statutes apply unless compliance with both would be impossible. *See Powell v. U.S. Cartridge Co.*, 339 U.S. 497, 519 (1950); *see also Conn. Nat'l. Bank v. Germain*, 503 U.S. 249, 253 (1992) ("Redundancies across statutes are not unusual events in drafting, and so long there is no 'positive repugnancy' between two laws, a court must give effect to both.") (internal citation omitted); *United States v. Borden Co.*, 308 U.S. 188, 198 (1939) ("When there are two acts upon the same subject, the rule is to give effect to both if possible."). When different agencies administer the overlapping statutes, application of this precept results in overlapping regulatory jurisdiction. Thus, for example, in *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Supreme Court rejected the EPA's argument that it "cannot regulate carbon dioxide emissions from motor vehicles [under the Clean Air Act] because doing so would require it to tighten mileage standards, a job (according to EPA) that Congress has assigned to DOT." *Id.* at 531-32. The Court held that, although the EPA's role under the Clean Air Act and the Department of Transportation's role under the Energy Policy and Conservation Act, 42 U.S.C. §§ 6201-6385, "may overlap," this did not undermine EPA's authority under the Clean Air Act because "there is no reason to think the two agencies cannot both administer their obligations and yet avoid inconsistency." 549 U.S. at 532. But where, on the other hand, statutes reflect Congress's intention that particular regulatory jurisdictions should not overlap, courts have effectuated that intent as well. *See Atchison, Topeka & Santa Fe Ry. Co. v. United States*, 295 U.S. 193, 201 (1935) ("The statutes cited clearly disclose intention that jurisdiction of the Secretary shall not overlap that of the Commission. The boundary is the place where transportation ends."). *Atchinson* involved the relative boundaries of the Secretary of Agriculture's jurisdiction over stockyards under the Packers and Stockyards Act of 1921, 7 U.S.C. §§ 181-215 (2006), and the Interstate Commerce Commission's jurisdiction over transportation under the Interstate Commerce Act of 1887, ch. 104, 24 Stat. 379 (codified in scattered sections of 49 U.S.C.). (The Packers and Stockyards Act specifically provided that it would not affect the jurisdiction of the Interstate Commerce Commission or confer upon the Secretary of Agriculture concurrent jurisdiction over any matter within the jurisdiction of the Commission, *see* 7 U.S.C. § 226 (2006), thus precluding any overlapping regulatory jurisdiction between the two agencies.) In sum, courts follow the lead of the statutes; there is no presumption or freestanding principle either favoring or disfavoring regulatory overlap.

The case studies also, however, deviate from the existing counternarrative by suggesting two previously unidentified aspects of regulatory overlap, both of which pertain to the relationship between the substantive law being administered and the allocation of regulatory responsibilities across government agencies. The first aspect pertains to how the law creates regulatory overlap; the second pertains to how regulatory overlap creates law. Together, they help to explain both why regulatory overlap arises and how regulatory overlap can significantly improve lawmaking.

First, the EPA-OSHA case studies illustrate how regulatory overlap follows almost ineluctably from overlapping legal categories. Because workplace exposures to hazardous and toxic substances are both an environmental problem and an employment problem, benefits flow from giving authority over the problem to the agencies that administer those fields, even if the result is some duplication. Regulatory overlap thus reflects overlapping legal fields.

Second, regulatory overlap at the interstices of statutory jurisdiction creates opportunities for lawmaking that can add coherence to the law. In particular, the edges of statutory jurisdiction often are plagued by statutory discontinuities that undermine the law's rationality by prescribing different outcomes for functionally identical or similar situations. Regulatory overlap allows agencies to smooth over these statutory discontinuities, increasing the law's coherence and enabling it to come closer to the ideal of the seamless web.

The Article proceeds in two parts. Part I examines the EPA and OSHA's regulatory overlap. It explains how the EPA's and OSHA's statutes create overlapping jurisdiction, describes the characteristics of the EPA-OSHA overlap, and then reviews six case studies of situations in which the EPA and OSHA have managed their overlap. Part II uses the EPA-OSHA case studies to explore two important and related questions about regulatory overlap: why regulatory overlap arises, and whether it is beneficial. It tests existing scholarship against the case studies and concludes that scholars have missed an important aspect of regulatory overlap—the relationship between regulatory overlap and substantive law—which helps to explain both why regulatory overlap exists despite its stigma and how regulatory overlap benefits lawmaking. Part II concludes with a preliminary exploration of factors that may facilitate agencies' efforts to effectively coordinate their regulatory overlap.

II. THE EPA-OSHA REGULATORY OVERLAP

This Part examines the EPA and OSHA's overlapping regulatory jurisdictions. It first explains the statutory structure that creates the overlapping jurisdictions, and then reviews a series of six case studies in which the EPA and OSHA have managed their overlap.

A. Statutory Structure

The statutes that create the EPA's and OSHA's respective jurisdictions create significant regulatory overlap between the two agencies with respect to occupational risks that arise from workplace exposure to contamination. OSHA regulates pursuant to its authority under the Occupational Safety and Health Act, whereas the EPA regulates occupational risks pursuant to various environmental statutes.

1. OSHA

Congress enacted the Occupational Safety and Health Act of 1970 (OSH Act)⁸ "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources."⁹ The OSH Act authorizes OSHA to promulgate "occupational safety and health standards,"¹⁰ which the statute defines as "standard[s] which require[] conditions, or the adoption or use of one or more practices, means, methods, operations, or processes, reasonably necessary or appropriate to provide safe or healthful employment and places of employment."¹¹ The OSH Act further mandates that OSHA, when promulgating a standard that regulates "toxic materials or harmful physical agents . . . shall set the standard which most adequately assures, to the extent feasible, on the basis of the best available evidence, 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."¹²

In *Industrial Union Department v. American Petroleum Institute*, also known as the Benzene Case, the Supreme Court interpreted §3(8) of the OSH Act to require the Secretary of Labor to make a threshold finding that a standard that regulates a "toxic material or

⁸ Occupational Safety and Health Act (OSH Act) of 1970, 29 U.S.C. §§ 651-678 (2006).

⁹ OSH Act § 2(b), 29 U.S.C. § 651(b) (2006).

¹⁰ OSH Act § 6, 29 U.S.C. § 655 (2006).

¹¹ OSH Act § 3, 29 U.S.C. § 652 (2006).

¹² OSH Act § 6(b)(5), 29 U.S.C. § 655(b)(5) (2006).

harmful physical agent” is “reasonably necessary and appropriate to remedy a significant risk of material health impairment.”¹³ To meet this requirement OSHA must show that the regulated substance poses a significant risk at “existing exposure levels in the workplace.”¹⁴ Once OSHA has determined that a significant risk exists, it must enact the most protective standard necessary to reduce the risk to an acceptable level, but the standard must also be technologically and economically feasible.¹⁵ A standard is technologically feasible if there is “a reasonable possibility that the typical firm will be able to develop and install engineering and work practice controls that can [satisfy the standard] in most of its operations.”¹⁶ A standard is economically feasible if it does not “threaten the existence or competitive structure of an industry, even if it does portend disaster for some marginal firms.”¹⁷

Under a provision of the OSH Act directing OSHA to adopt start-up standards without a formal rulemaking process and “as soon as practicable,”¹⁸ OSHA initially promulgated about 425 permissible exposure limits (PELs) for air contaminants.¹⁹ The start-up standards were exempted from promulgation through the formal rulemaking process because they were drawn directly from existing federal standards and from standards set by “nationally recognized standards-producing organization[s].”²⁰ In promulgat-

¹³ *Indus. Union Dep’t. v. Am. Petroleum Inst.*, 448 U.S. 607, 612, 639-40 (1980) (quoting 29 U.S.C. § 655(b)(5)); *see also* *Am. Textile Mfrs. Inst. v. Donovan*, 452 U.S. 490, 514-18 (1981) (noting that when Congress enacted OSH Act § 6(b)(5), it included the terms “material impairment” and “to the extent feasible” to avoid the implication that it intended to require “absolute health and safety” and to avoid standards that regulated “frivolous harms”).

¹⁴ *AFL-CIO v. OSHA*, 965 F.2d 962, 980 (11th Cir. 1992).

¹⁵ *Donovan*, 452 U.S. at 508-09.

¹⁶ *United Steelworkers of Am. v. Marshall*, 647 F.2d 1189, 1272 (D.C. Cir. 1980).

¹⁷ *AFL-CIO v. OSHA*, 965 F.2d 962, 980-81 (11th Cir. 1992) (noting that the feasibility requirement does not mean that employers must be able to continue to use the regulated substance and meet the standard; OSHA also may establish feasibility by showing that the regulated substance can be replaced with a less toxic substitute); *cf.* 29 C.F.R. § 1910.111(k) (2011) (describing OSHA’s policy to prevent any occupational exposure to “Category I Potential Carcinogens” for which a less hazardous substitute exists, in order to “encourage substitution”); *Identification, Classification and Regulation of Potential Occupational Carcinogens*, 45 Fed. Reg. 5001, 5257 (Jan. 22, 1980) (“OSHA has concluded that substitution is the most effective control for occupational carcinogens and that it should be encouraged where it is feasible . . .”). If OSHA relies on the availability of a substitute substance to establish technological feasibility, the use of the substitute must be economically feasible. 45 Fed. Reg. at 5258.

¹⁸ OSH Act § 6(a), 29 U.S.C. § 655(a) (2006).

¹⁹ 29 C.F.R. § 1910.1000 (2010).

²⁰ OSH Act § 2(9), 29 U.S.C. § 652(9) (2006). Many of the start-up PELs were based on recommendations for voluntary threshold limit values (TLVs) by the American Confer-

ing subsequent regulations, however, OSHA must follow the requirements for a formal administrative rulemaking, including publication of a proposed rule, notice and public comment on the proposed rule, opportunity for a hearing, and then issuance of a final rule.²¹ As a result of the much stricter requirements for subsequent standards, the vast majority of PELs have not changed since the start-up standards.²²

Congress anticipated when it enacted the OSH Act that OSHA's authority might overlap with other federal agencies. "To avoid overlapping regulation,"²³ Congress enacted a provision that precludes the application of the OSH Act "to working conditions of employees with respect to which other Federal agencies . . . exercise statutory authority to prescribe or enforce standards or regulations affecting occupational safety or health."²⁴ OSHA's jurisdiction is only displaced, however, to the extent that the other agency has actually regulated the specific working conditions or asserted comprehensive regulatory authority over working conditions at workplace.²⁵

2. EPA

Like the EPA's jurisdiction generally, the EPA's statutory authority to regulate occupational risks is scattered over multiple statutes. This differs from OSHA, which primarily administers a single statute, the OSH Act, directed at occupational risks. The EPA, by contrast, administers many statutes,²⁶ none of which focus on occupational risks.

ence of Governmental Industrial Hygienists (ACGIH). Air Contaminants Proposed Rule, 53 Fed. Reg. 20,960, 20,966 (proposed June 7, 1988).

²¹ OSH Act § 6(b)(2)-(4), 29 U.S.C. § 655(b)(2)-(4) (2006).

²² A notable attempt by OSHA to update over 400 PELs with one rulemaking was invalidated by the U.S. Court of Appeals for the Eleventh Circuit, which held that the substantial evidence standard required OSHA to support its findings of significant risk and feasibility for *each* new PEL. *AFL-CIO v. OSHA*, 965 F.2d 962 (11th Cir. 1992).

²³ *Chao v. Mallard Bay Drilling, Inc.*, 534 U.S. 235, 241 (2002); *see also* *Marshall v. Northwest Orient Airlines, Inc.*, 574 F.2d 119, 122 (2d Cir. 1978) ("In essence, this provision is designed to eliminate any duplication in the efforts of federal agencies to secure the well-being of employees.").

²⁴ OSH Act § 4(b)(1), 29 U.S.C. § 653(b)(1) (2006).

²⁵ *Chao*, 534 U.S. at 241-43.

²⁶ *See, e.g.*, Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. §§ 136-136y (2006); Toxic Substances Control Act (TSCA), 15 U.S.C. §§ 2601-2695d (2006); Clean Water Act (CWA), 33 U.S.C. §§ 1251-1387 (2006); Marine Protection, Research, and Sanctuaries Act (MPRSA), 33 U.S.C. §§ 1401-1445 (2006); Oil Pollution Act (OPA), 33 U.S.C. §§ 2701-2762 (2006); Noise Control Act (NCA), 42 U.S.C. §§ 4901-4918 (2006); Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901-6992k

The Clean Air Act gives the EPA authority to regulate pollution in “ambient air,” which the EPA has interpreted to exclude indoor air.²⁷ Most occupational inhalation exposures of concern occur indoors, which limits the Clean Air Act’s applicability to workplaces. The EPA has, however, used work practice standards²⁸ to regulate air contamination from asbestos,²⁹ most of which occurs indoors rather than outside, on the ground that the manner in which asbestos is handled indoors can be a major source of asbestos releases into the ambient environment.³⁰ The Clean Air Act also gives the EPA authority, shared with OSHA, over chemical accidents.³¹

The Toxic Substances Control Act (TSCA) broadly authorizes the EPA to regulate chemical substances that “present an unreasonable risk of injury to health or the environment.”³² Injuries to health from chemical exposure include exposures in the workplace. Indeed, proponents of TSCA when it was pending in Congress noted that workers would be among the greatest beneficiaries of

(2006); Clean Air Act (CAA), 42 U.S.C. §§ 7401-7671q (2006); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675 (2006); Emergency Planning and Community Right-to-Know Act (EPCRTKA), 42 U.S.C. §§ 11001-11050 (2006); Pollution Prevention Act (PPA), 42 U.S.C. §§ 13101-13109 (2006).

²⁷ U.S. ENVTL. PROT. AGENCY, OFFICE OF AIR AND RADIATION, NO. 600/8-87-031, EPA INDOOR AIR QUALITY IMPLEMENTATION PLAN 3 (1987) (noting that the Clean Air Act “gave EPA authority to control a wide variety of air emissions sources and air pollutants that contributed to the degradation of ambient air,” which the EPA has interpreted “to apply to outdoor air only,” and that “[t]he quality of indoor air was not addressed in the law”); Arnold W. Reitze, Jr., & Sheryl-Lynn Carof, *The Legal Control of Air Pollution*, 25 B.C. ENVTL. AFF. L. REV. 247, 254 (1998) (“The CAA provides very little protection for those exposed to indoor air pollution.”); cf. 40 C.F.R. § 50.1(e) (2011) (“[A]mbient air means that portion of the atmosphere, external to buildings, to which the general public has access.”).

²⁸ The Supreme Court rejected the EPA’s initial attempt to regulate asbestos emissions with work practice standards under the Clean Air Act, holding that the Clean Air Act’s hazardous air pollutant provision required emissions standards rather than work practice standards. See *Adamo Wrecking Co. v. United States*, 434 U.S. 275 (1978). Congress subsequently amended the Clean Air Act to authorize the EPA to regulate hazardous air pollutant emissions with “a design, equipment, work practice, or operational standard” where emission standards are not feasible. CAA § 112(h), 42 U.S.C. § 7412(h) (2006).

²⁹ 40 C.F.R. §§ 61.140-.157 (2011); see also Asbestos Abatement Projects, 50 Fed. Reg. 28,530, 28,534 (July 12, 1985) (noting that, although the EPA has used the Clean Air Act to regulate uses of asbestos that result in occupational exposures to indoor air contamination, “[t]he CAA does not apply directly to the protection of workers exposed to indoor air”).

³⁰ Asbestos: Proposed Mining and Import Restrictions and Proposed Manufacturing, Importation, and Processing Prohibitions, 51 Fed. Reg. 3738, 3739 (Jan. 29, 1986).

³¹ See *infra* notes 41-43 and accompanying text; Part II.B.1.

³² 15 U.S.C. § 2605(b)(2)(B) (2006).

the bill.³³ Regulations under TSCA can range in severity from recordkeeping requirements³⁴ to outright bans on some chemicals.³⁵

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA) give the EPA authority to remediate, or order the remediation of, contaminated sites.³⁶ To the extent that such sites are used, or could be used, as workplaces, the EPA's cleanup authority provides a basis for regulating occupational exposures.³⁷

Finally, a few other statutes, such as the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA),³⁸ give the EPA limited authority to reach certain types of occupational risks—for example, in the case of FIFRA, pesticide exposures.³⁹ The EPA's FIFRA worker protection standard contains safety requirements

³³ See, e.g., 122 CONG. REC. 8284 (1976) (statement of Sen. Hartke) ("It is indeed unfortunate that most adverse effects associated with chemical substances first appear in the work place. It is tragic that those who rely upon the industry for jobs have essentially become guinea pigs for discovering the adverse effects of chemical substances."); 122 CONG. REC. 32,857 (1976) (statement of Sen. Tunney) ("Had this statute been in existence when chemicals now known to cause major health effects began production or as their uses mounted, we could well have avoided much of the pain and anguish that accompanies occupational disease and public health and environmental threats generally."); 122 CONG. REC. 32,858 (1976) (statement of Sen. Durkin) ("It is the chemical workers and their families who suffer the highest rates of cancer, diseases, and disabilities if a toxic substance is introduced into the environment.").

³⁴ TSCA § 6(a)(4), 15 U.S.C. § 2605(a)(4) (2006).

³⁵ TSCA § 6(a)(1), 15 U.S.C. § 2605(a)(1) (2006).

³⁶ See RCRA § 7003(a), 42 U.S.C. § 6973(a) (2006) (authorizing the EPA to sue persons who have contributed to "past or present handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment"); CERCLA § 106(a), 42 U.S.C. § 9606(a) (2006) (authorizing the EPA to issue orders or bring suit to abate "an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from a facility").

³⁷ See Hazard Ranking System, 55 Fed. Reg. 51,532, 51,562 (Dec. 14, 1990) ("The legislative history of [CERCLA] section 101(22) specifically anticipated that authority under CERCLA might, in appropriate cases, be used to respond to releases within a workplace."). One of CERCLA's key thresholds, the definition of a release under CERCLA § 101(22), 42 U.S.C. § 9601(22) (2006), excludes "any release which results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons." Thus, the exclusion applies only to claims covered by worker compensation laws and does not generally exclude workplace contamination from CERCLA's ambit. See 55 Fed. Reg. at 51,562.

³⁸ 7 U.S.C. §§ 136-136y (2006).

³⁹ Reitze & Carof, *supra* note 27, at 255-58.

that protect agricultural workers from the effects of exposure to pesticides.⁴⁰

Some of the statutes the EPA administers expressly contemplate an EPA-OSHA overlap. The Clean Air Act Amendments of 1990, for example, directed OSHA and the EPA each to take specific action with regard to the hazard posed by chemical release accidents.⁴¹ The EPA is charged with issuing requirements for release prevention, detection, and correction, and in doing so is to utilize the expertise of the Departments of Transportation and Labor.⁴² The Amendments also required OSHA, pursuant to its authority under the OSH Act and in coordination with the EPA, to issue “a chemical process safety standard designed to protect employees from hazards associated with accidental releases of highly hazardous chemicals in the workplace.”⁴³

Congress also understood that TSCA would overlap substantially with other statutes, and enacted interagency coordination provisions to guide the EPA and other agencies in managing their overlap.⁴⁴ But Congress specifically provided that TSCA regulations would not trigger application of the OSH Act’s provision preempting OSHA regulation where other federal agencies regulated, thereby creating greater possibilities for regulatory overlap between the EPA’s authority under TSCA and OSHA’s authority than what the OSH Act allows generally.⁴⁵

Although the EPA’s statutory authority is fragmented across numerous statutes, its authority under those statutes can extend quite deep. As noted, for example, TSCA gives the EPA authority to ban some chemicals outright.⁴⁶ And courts have expansively interpreted the EPA’s authority to require remediation at CERCLA and RCRA Corrective Action sites.⁴⁷

⁴⁰ 40 C.F.R. §§ 170.1-170.260 (2010).

⁴¹ CAA § 112(r), 42 U.S.C. § 7412(r) (2006).

⁴² CAA § 112(r)(7), 42 U.S.C. § 7412(r)(7) (2006).

⁴³ Clean Air Act Amendments of 1990, Pub. L. No. 101-549, tit. III, § 304(a), 104 Stat. 2399, 2576 (1990) (codified at 29 U.S.C. § 655 (2006)).

⁴⁴ See *infra* Part I.B.3, 4.

⁴⁵ TSCA § 9(c), 15 U.S.C. § 2608(c) (2006) (“In exercising any authority under this chapter, the Administrator shall not, for purposes of section 653(b)(1) of Title 29, be deemed to be exercising statutory authority to prescribe or enforce standards or regulations affecting occupational safety and health.”).

⁴⁶ TSCA § 6(a)(1), 15 U.S.C. § 2605(a)(1) (2006).

⁴⁷ See, e.g., *United States v. Price*, 688 F.2d 204, 213-14 (3d Cir. 1982) (“The unequivocal statutory language and this legislative history make it clear that Congress, by enacting section 7003, intended to confer upon the courts the authority to grant affirmative equitable relief to the extent necessary to eliminate any risks posed by toxic wastes.”); *United States v. Vertac Chem. Corp.*, 489 F. Supp. 870, 881 (E.D. Ark. 1980) (granting an injunction to

3. Characterizing the EPA-OSHA Overlap

The initial definition of regulatory overlap in the Introduction⁴⁸ posited it in apparently unitary terms, as if in a particular situation overlapping regulatory jurisdiction merely either exists or does not. Reality, however, is more complicated. Regulatory overlap arises in a variety of circumstances, and these variations undoubtedly affect how it functions. Before examining the individual EPA-OSHA case studies, therefore, it may be helpful to assess the characteristics of the EPA-OSHA overlap.

First, although the Introduction defined regulatory overlap as a condition in which agencies regulate “with regard to the same or related issues”⁴⁹—which might suggest that issues are simply either related or unrelated—the relatedness of issues falls along a continuum. At one extreme, issues may seem almost independent. For example, the Securities and Exchange Commission may regulate a corporation’s financial disclosures, and the EPA may regulate its wastewater discharges.⁵⁰ In the middle of the spectrum, issues may seem related but only loosely. For example, a new factory may require a permit from the Army Corps of Engineers to fill a wetland for construction of the factory and an operating permit from the EPA to emit air pollutants. Finally, the issues closely relate. For example, the EPA regulates pesticide use, and the Food and Drug Administration regulates pesticide residues in food. The more closely related the issues, therefore, the more salient the overlap. Of the three examples, one would expect the EPA-FDA overlap to require the most coordination to avoid conflicting or inconsistent regulatory directives.

On a spectrum of relatedness, the issues on which the EPA and OSHA share overlapping regulatory jurisdiction are closely related. Both agencies are regulating the same conduct: potentially hazardous substances in workplaces.

Second, in addition to the relatedness of the overlapping jurisdictions, instances of regulatory overlap differ in terms of the rela-

abate a discharge of dioxin-containing wastes on the basis that “[t]he public exposure to dioxin creates some health risk”).

⁴⁸ See *supra* note 1.

⁴⁹ Ahdieh, *supra* note 1, at 864.

⁵⁰ Financial regulation and environmental regulation are not wholly independent. To the extent that environmental regulation affects a corporation’s business, such regulation may be relevant to the corporation’s financial disclosures. See, e.g., Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. 6290 (Feb. 8, 2010) (providing guidance to public companies regarding the Securities and Exchange Commission’s disclosure requirements as they apply to climate change matters).

tionship of the government institutions involved. Vertical regulatory overlap arises among institutions at different levels of government, such as concurrent federal and state regulation; horizontal regulatory overlap arises among institutions at the same level of government.⁵¹ Especially where vertical overlap occurs within a structure of hierarchical authority, such as federal-state interactions under the Supremacy Clause, one may expect vertical overlap to operate differently than horizontal overlap.

The EPA-OSHA overlap is a case of horizontal regulatory overlap, but of a special kind. The EPA-OSHA overlap is intragovernmental; it arises within the same government, with each agency subject to the common control of the President and Congress. In light of this common control, we might expect somewhat greater coordination among the overlapping agencies.

B. Case Studies

The case studies in this section review examples of situations in which the EPA and OSHA have managed their jurisdictional overlap under the statutory intersections identified in the previous section. Although the review regards each of the case studies favorably, the studies exhibit significant differences as well as commonalities in the regulatory overlap.⁵²

⁵¹ Cf. Allan Erbsen, *Horizontal Federalism*, 93 MINN. L. REV. 493, 501 (2008) (defining and distinguishing “vertical federalism,” involving federal-state interactions, and “horizontal federalism,” involving state-state interactions). For another similar use of, and distinction between, horizontal and vertical overlap of regulatory institutions, see, for example, Damien Geradin & Robert O’Donoghue, *The Concurrent Application of Competition Law and Regulation: The Case of Margin Squeeze Abuses in the Telecommunications Sector*, 1 J. COMPETITION L. & ECON. 355, 410 (2005) (“In terms of potential jurisdictional conflicts, a useful distinction can be made between ‘vertical overlaps’, i.e., overlaps between proceedings taking place at the EC level and proceedings taking place at the national level, and ‘horizontal overlaps’, i.e., overlaps between proceedings taking place at the national level.”).

⁵² In addition to the case studies, the EPA and OSHA have taken steps to coordinate their activities by executing memoranda of understanding, participating in an interagency coordination committee, and coordinating some enforcement efforts. See, e.g., Memorandum of Understanding Between the Office of Pesticides and Toxic Substances, U.S. Environmental Protection Agency, and the Occupational Safety and Health Administration, U.S. Department of Labor (Jan. 16, 1981), available at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=MOU&p_id=227 [hereinafter 1981 MOU]; Greg Hellman, *Toxic Substances: Federal Safety Agencies to Revive Interagency Committee to Discuss Hazards*, OCCUPATIONAL SAFETY & HEALTH DAILY (Bureau of National Affairs), Apr. 1, 2010 (describing the ONE committee, named with the first letter of each participating agency: OSHA, the National Institute of Occupational Safety and Health (NIOSH), and the EPA); David Barstow & Lowell Bergman, *With Little Fanfare, a New Effort to Prosecute Employers that Flout Safety Laws*, N.Y. TIMES, May 2, 2005, at A17 (describing a joint effort by the EPA, OSHA, and the Justice Department to coordinate enforcement

At the outset, a significant caveat is in order. Although this Article favorably evaluates each of the six case studies, this does not necessarily indicate that federal agencies in general manage their overlapping regulatory jurisdictions effectively, or even that the EPA and OSHA overall manage their regulatory overlap well. These case studies represent just some of the many situations in which the EPA and OSHA, let alone federal agencies generally, share regulatory jurisdiction. In addition, these case studies all involve rulemaking or policy documents rather than implementation practices. Although coordination at the rulemaking stage is vital to overall regulatory compatibility, even the most compatible rules may lead to dysfunction if coordination falls apart at the implementation stage. That being said, the conclusions this Article draws from the case studies do not depend on their representativeness of regulatory overlap generally; their value is, rather, the potential for regulatory synergy that they suggest.

1. Chemical Accidents

The EPA and OSHA share regulatory authority over chemical accidents. In contrast to many other instances of regulatory overlap, Congress gave clear instructions as to how it wanted the agencies to proceed in regulating chemical accidents: it wanted overlapping regulation—not just jurisdiction—because it saw functional advantages to the involvement of both agencies. But Congress also wanted to avoid dysfunctional inconsistencies and duplication.

When Congress enacted the Clean Air Act Amendments of 1990,⁵³ it added a specific provision, Clean Air Act § 112(r), addressing the hazard posed by chemical release accidents. In support of the provision, the Senate Environment and Public Works Committee Report observed that “[c]hemical accidents with serious effects have become commonplace in the United States,” and that existing OSHA regulations were “not effective in reducing the

efforts, known as the Worker Endangerment Initiative). The MOUs, ONE Committee, and Worker Endangerment Initiative, although they state broad aspirations of cooperation and coordination, are relatively weak indicia of how the agencies handle their jurisdictional overlap. They merely establish a framework for cooperation and coordination, which materialize only to the extent the agencies actually use them to coordinate activities. Moreover, by focusing on procedures, and in particular primarily procedures for information sharing, they do not directly affect the substance of either agency’s regulatory decisionmaking.

⁵³ Clean Air Act Amendments of 1990, Pub. L. No. 101-549, 104 Stat. 2399 (codified as amended at 42 U.S.C. §§ 7401-7626 (2006)).

risk of potentially catastrophic events.”⁵⁴ OSHA’s own analysis noted that its standards were developed to protect worker safety and health against long-term exposures to toxic chemicals, not rare catastrophic events.⁵⁵ The EPA, meanwhile, had begun a program to address accidental releases of toxic chemicals by, among other things, helping state and local governments develop emergency planning.⁵⁶ Congress had codified the EPA’s emergency planning authority in the recently enacted Emergency Planning and Community Right-to-Know Act (EPCRTKA).⁵⁷ The Clean Air Act Amendments bill reported out of the Senate Committee would have authorized the EPA to “promulgate release prevention, detection, and correction requirements” with the goal of preventing accidental chemical releases.⁵⁸ In doing so, the bill instructed the EPA to coordinate its requirements with OSHA’s requirements.⁵⁹ The purpose of this admonition was to prevent the two agencies from imposing requirements that were “unduly burdensome or duplicative.”⁶⁰ The Senate committee report made clear, however, that it did not contemplate the EPA would take a back seat to OSHA, and that effective action against chemical accidents required overlapping EPA and OSHA regulation.⁶¹

During committee hearings, the chemical manufacturing industry had taken the position that OSHA was a more appropriate regulator to address accidental chemical releases than the EPA.⁶² The Senate committee report disagreed with this position, noting that OSHA had not acted effectively to address the threat of catastrophic chemical accidents.⁶³ By contrast, the EPA already had begun taking action to address chemical accidents pursuant to its authority under CERCLA and EPCTKA, and in the process

⁵⁴ S. Rep. No. 101-228, at 116 (1989).

⁵⁵ *Id.* at 135-36.

⁵⁶ *Id.* at 136-37.

⁵⁷ Emergency Planning and Community Right-to-Know Act (EPCRTKA), enacted as Title III of the Superfund Amendments and Reauthorization Act (SARA), Pub. L. No. 99-499, 100 Stat. 1613 (1986) (codified as amended at 42 U.S.C. §§ 11001-11050 (2006)).

⁵⁸ S. 1630, 101st Cong. § 304 (1989).

⁵⁹ *Id.*

⁶⁰ S. Rep. No. 101-228, at 244 (1989).

⁶¹ *Id.* (“This requirement for coordination in no way diminishes the Administrator’s authority to act and does not imply that requirements under this section must be set aside or delayed where OSHA is acting with respect to the same hazard. Quite often protection technologies which are appropriate for workers on-site (protection clothing, respirators, etc.) and which may be required by OSHA would not be effective to prevent death or injury among the general public residing or working near a facility.”).

⁶² *Id.* at 244.

⁶³ *Id.*

“developed considerable expertise in the area of accident prevention.”⁶⁴ Thus, the committee opined, “the bill does not create entirely novel authorities for the EPA; nor does it move the Agency into a field fully and effectively occupied by OSHA standards.”⁶⁵

The House Committee on Education and Labor complained that the bill appeared to “undermine [OSHA’s] jurisdiction” over chemical accidents, and urged a bill that explicitly “recognizes the jurisdictional responsibilities of the several agencies involved.”⁶⁶ OSHA expressed a related concern that the Senate bill would be construed to displace OSHA’s jurisdiction over chemical accidents because the OSH Act preempts OSHA’s authority where another agency has occupational safety and health regulations in place.⁶⁷ Late in the legislative process, Representative John Dingell introduced an amendment that, among a great many other things, added a new provision to the House bill that gave OSHA an explicit role in regulating against chemical accidents. Dingell’s amendment directed OSHA, pursuant to its authority under the OSH Act and in coordination with the EPA, to issue a chemical process safety standard designed to protect workers from accidental chemical releases.⁶⁸ The final bill as enacted contained Dingell’s language with regard to OSHA’s role.⁶⁹

Thus, the Clean Air Act Amendments of 1990, as enacted, directed OSHA and the EPA each to take specific action with regard to chemical accidents, and to coordinate with each other in taking such action.⁷⁰ The EPA is charged with issuing requirements for release prevention, detection, and correction, and in doing so is to utilize the expertise of the Departments of Transportation and Labor.⁷¹ The Amendments also instructed OSHA, pursuant to its authority under the OSH Act and in coordination with the EPA, to issue “a chemical process safety standard designed to

⁶⁴ *Id.* at 245.

⁶⁵ *Id.*

⁶⁶ S. Rep. No. 101-228, at 335 (1989).

⁶⁷ *Id.* at 336 (describing OSH Act § 4(b)(1), 29 U.S.C. § 653(b)(1) (2006)).

⁶⁸ H.R. Rep. No. 101-494, pt. 2, at 18-19 (1990).

⁶⁹ Pub. L. No. 101-549, tit. 3, § 304(a), 104 Stat. 2399, 2576 (1990) (codified at 29 U.S.C. § 655 note (2006)).

⁷⁰ CAA § 112(r), 42 U.S.C. § 7412(r) (2006).

⁷¹ CAA § 112(r)(7), 42 U.S.C. § 7412(r)(7) (2006).

protect employees from hazards associated with accidental releases of highly hazardous chemicals in the workplace.”⁷²

At some level the regulatory overlap reflects a political compromise among agencies with competing congressional benefactors: the Senate Environment and Public Works Committee proposed to give the lead regulatory role to the EPA, but the House Education and Labor Committee urged giving OSHA a continuing role.⁷³ But underlying these competing political positions were valid functional concerns, and the resulting regulatory overlap reflects Congress’s perception that both the EPA and OSHA could contribute to the effectiveness of regulation to prevent and plan for chemical accidents. Moreover, Congress did not give the agencies wholly duplicative missions, but rather directed each agency to those aspects of the issue that fit best with its expertise and existing jurisdiction.

Both the EPA and OSHA subsequently issued regulations to satisfy their mandate under Clean Air Act § 112(r). OSHA promulgated a process safety standard for highly hazardous chemicals in 1992.⁷⁴ The EPA issued its final rule in 1996.⁷⁵ During their rulemaking processes, the EPA and OSHA met regularly to coordinate their regulatory efforts so as to make the two programs consistent.⁷⁶ To the extent the EPA’s regulations and OSHA’s regulations differ, it is because their missions and their specific statutory mandates under Clean Air Act § 112(r) differ.⁷⁷ OSHA’s regulations focus on on-site consequences to workers, whereas the EPA’s focus on off-site consequences to public health and the environment.⁷⁸ The EPA’s regulations contain provisions regarding hazard assessment and emergency response that OSHA’s do not.⁷⁹ The EPA omitted those elements and specific language in OSHA’s

⁷² Pub. L. No. 101-549, tit. 3, § 304(a), 104 Stat. 2399, 2576 (1990) (codified at 29 U.S.C. § 655 note (2006)).

⁷³ See J.R. DeShazo & Jody Freeman, *The Congressional Competition to Control Delegated Power*, 81 TEX. L. REV. 1443, 1444 (2003) (explaining and analyzing how congressional committees “to further their own interests, vie for control over agencies”).

⁷⁴ Process Safety Management of Highly Hazardous Chemicals, 57 Fed. Reg. 6356 (Feb. 24, 1992) (codified as amendments to 29 C.F.R. pt. 1910 (2011)).

⁷⁵ Accidental Release Prevention Requirements: Risk Management Programs Under Clean Air Action Section 112(r)(7), 61 Fed. Reg. 31,668 (June 20, 1996) (codified as amendments to 40 C.F.R. pt. 68 (2011)).

⁷⁶ Risk Management Programs for Chemical Accidental Release Prevention, 58 Fed. Reg. 54,190, 54,192 (proposed Oct. 20, 1993) (to be codified at 40 C.F.R. pt. 68).

⁷⁷ *Id.* at 54,192, 54,203-05.

⁷⁸ *Id.* at 54,192, 54,203.

⁷⁹ *Id.* at 54,203.

standard that are specific to worker safety and health issues.⁸⁰ But the agencies regard these differences as relatively minor, and the similarities of the programs are such that facilities in compliance with OSHA's requirements generally also are in compliance with the EPA's requirements as well.⁸¹ Moreover, the EPA and OSHA have committed to coordinating their implementation of their respective regulations so that they are based on consistent interpretations and avoid unnecessary overlap.⁸² The result, according to the agencies, is "one comprehensive process safety management system satisfying both OSHA and the EPA that works to prevent accidents affecting workers, the public, and the environment."⁸³

2. Asbestos

The EPA and OSHA also both regulate workplace exposures to asbestos, the EPA under its TSCA authority and OSHA under the OSH Act. Here the agencies have managed their overlap to avoid duplication but to allow the EPA to patch a gap in OSHA's regulatory authority.

OSHA regulations set forth comprehensive requirements for protecting against the health effects of occupational exposures to asbestos.⁸⁴ But because OSHA lacks statutory authority to regulate state and local government employers,⁸⁵ the OSHA asbestos regulations do not apply to state and local government employ-

⁸⁰ Accidental Release Prevention Requirements, 61 Fed. Reg. at 31,687; Risk Management Programs Under Clean Air Action Section 112(r)(7), 58 Fed. Reg. at 54,192.

⁸¹ Accidental Release Prevention Requirements, 61 Fed. Reg. at 31,687; Risk Management Programs Under Clean Air Action Section 112(r)(7), 58 Fed. Reg. at 54,192. *But see, e.g.,* Jonathan Borak & Bernard Silverstein, *Emergency Response Plans: The Benefits of Integration*, EHS TODAY, Sept. 1, 1999 (contending that differences between the two programs "may create significant confusion").

⁸² Accidental Release Prevention Requirements: Risk Management Programs Under Clean Air Action Section 112(r)(7), 61 Fed. Reg. at 31,688 (June 20, 1996); DEP'T OF LABOR & ENVTL PROTECTION AGENCY, STRATEGY FOR COORDINATED EPA/OSHA IMPLEMENTATION OF THE CHEMICAL ACCIDENT PREVENTION REQUIREMENTS OF THE CLEAN AIR ACT AMENDMENTS OF 1990 (1996), <http://www.epa.gov/oem/docs/chem/oshaepa.pdf>.

⁸³ 61 Fed. Reg. at 31,687.

⁸⁴ 29 C.F.R. §§ 1910, 1101 (2010).

⁸⁵ OSH Act § 3(5), 29 U.S.C. § 652(5) (2006) (defining "employer" to exclude "any State or political subdivision of a State"); *see also* Asbestos Abatement Projects, 50 Fed. Reg. 28,530, 28,531 (July 12, 1985) ("Currently, State and local employees in 27 States are not protected by the OSHA Asbestos Standard."). Other labor and employment statutes include the same exclusion. *See, e.g.,* National Labor Relations Act, 29 U.S.C. § 152(2) (2006); Labor-Management Reporting and Disclosure Act, 29 U.S.C. § 402(e) (2006). But some do not. *See, e.g.,* Fair Labor Standards Act, 29 U.S.C. § 203(d) (2006); Family and Medical Leave Act, 29 U.S.C. § 2611(4) (2006).

ees.⁸⁶ Accordingly, since 1985, the EPA has imposed requirements under TSCA⁸⁷ to protect state and local government workers engaged in asbestos abatement activities.⁸⁸ Pursuant to TSCA, the EPA based its regulations on a determination that “the issuance of a rule to protect public employees from asbestos released to the air during asbestos abatement work is necessary to reduce the unreasonable risk associated with that activity.”⁸⁹ Originally the EPA modeled its regulations on OSHA’s asbestos regulations, with a few specific intended differences.⁹⁰ When OSHA amended its regulations in 1986,⁹¹ the EPA followed with similar revisions, while keeping the original differences.⁹² The EPA subsequently fell behind OSHA’s revisions: OSHA amended its asbestos standard in 1988-1990,⁹³ to which the EPA responded with proposed corresponding revisions in 1994,⁹⁴ but in the meantime OSHA revised its standard again.⁹⁵ Accordingly, in 2000, the EPA decided to harmonize its asbestos worker protection regulations with the OSHA

⁸⁶ Asbestos Worker Protection, 65 Fed. Reg. 24,806, 24,807 (proposed Apr. 27, 2000) (to be codified at 20 C.F.R. 763). A state may, with OSHA’s approval, assume responsibility for occupational safety and health standards within the state by developing a plan under state law that is at least as effective as OSHA’s federal standards. 29 U.S.C. § 667 (2006). States that exercise this option must cover state and local government employers. *Id.* § 667(c)(6).

⁸⁷ TSCA § 6(a), 15 U.S.C. § 2605(a) (2006).

⁸⁸ Asbestos Abatement Project, 50 Fed. Reg. 28,530 (July 12, 1985) (codified as amended at 40 C.F.R. pt. 763). EPA’s National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 C.F.R. pts. 61, 63, under the Clean Air Act, 42 U.S.C. §§ 7401-7671q (2006), also regulate asbestos abatement activities, but the asbestos NESHAP “was designed to limit the release of asbestos to the ambient air and only incidentally protects abatement workers inside a building.” Asbestos Abatement Project, 50 Fed. Reg. 28,535.

⁸⁹ *Id.* at 28,530; *see also id.* at 28,535 (“EPA finds that unregulated removal, enclosure, or encapsulation of friable asbestos material presents an unreasonable risk to human health and proposes to require that certain measures be taken to reduce the risk faced by asbestos abatement workers and persons using and visiting buildings during and after abatement activities.”).

⁹⁰ *Id.* at 28,530 (“The rule is similar to the current OSHA Asbestos Standard.”); *id.* at 28,531 (explaining the differences between the EPA’s original rule and the OSHA standard and the EPA’s rationale for those differences).

⁹¹ Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite, 51 Fed. Reg. 22,612 (June 20, 1986).

⁹² *See* Asbestos Abatement Projects; Worker Protection, 52 Fed. Reg. 5618, 5618 (Feb. 25, 1987) (“In general, this rule applies the major provisions of OSHA’s new Asbestos Standard for construction work to asbestos abatement projects. This rule, however, differs from OSHA’s because it retains certain features of EPA’s previous final rule.”).

⁹³ Occupational Exposure to Asbestos, Tremolite, Anthophyllite and Actinolite, 53 Fed. Reg. 35,610 (Sept. 14, 1988); Occupational Exposure to Asbestos, Tremolite, Anthophyllite and Actinolite, 54 Fed. Reg. 52,024 (Dec. 20, 1989); Occupational Exposure to Asbestos, 55 Fed. Reg. 3724 (Feb. 5, 1990).

⁹⁴ Asbestos Worker Protection, 59 Fed. Reg. 54,746 (Nov. 1, 1994).

⁹⁵ Occupational Exposure to Asbestos, 59 Fed. Reg. 40,964 (Aug. 10, 1994).

asbestos standard by cross-referencing the OSHA regulations instead of replicating them.⁹⁶ In other words, the EPA's regulations now simply require state and local employers to comply with OSHA's asbestos standard. The EPA's amendment had the effect of making any amendments to the OSHA regulations directly and immediately applicable to state and local government employees covered by the EPA regulations, without requiring any additional EPA action.⁹⁷

The EPA's regulation of asbestos abatement actions conducted by state and local governments fills a substantive regulatory gap that exists by reason of the OSH Act's exclusion of state and local government employers from OSHA's jurisdiction. The EPA only was able to fill OSHA's regulatory gap because of the two agencies' overlapping jurisdictions. Moreover, the EPA's decision to fill this gap by incorporating OSHA's asbestos standard into the EPA's own regulations fills the gap in a manner that maximizes the law's coherence and consistency.

3. *Dermal Test Rule*

Where the EPA's and OSHA's regulatory authorities overlap less, the two agencies sometimes have been able to coordinate their regulatory activities to take advantages of each agency's respective expertise and authority. With the EPA's OSHA Dermal Test Rule, for example, the EPA issued a rule pursuant to its authority under TSCA that required the chemical industry to produce test data relevant to OSHA's regulatory authority.

The OSH Act directs OSHA, when promulgating a standard that regulates "toxic materials or harmful physical agents," to select "the standard which most adequately assures, to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity

⁹⁶ Asbestos Worker Protection, 65 Fed. Reg. 69,210, 69,210 (Nov. 15, 2000) ("This final rule cross-references the OSHA Asbestos Standards for Construction and for General Industry, so that amendments to these OSHA standards are directly and equally effective for employees covered by the WPR."). The 2000 rule also expanded the coverage of the EPA regulations to apply to state and local governmental employees engaged in the types of work subject to the OSHA asbestos standard; previously, the EPA regulations had applied only to asbestos abatement projects. *Id.*

⁹⁷ Asbestos Worker Protection, 65 Fed. Reg. 24,806, 24,808 ("Cross-referencing the OSHA Asbestos Standards in the WPR would mean that amendments to the OSHA General Industry or Construction Standard would have the effect of changing the requirements under the WPR as well. As such, State and local government employees would benefit from new OSHA provisions protecting workers against the risks of asbestos at the same time as private sector employees.").

even if such employee has regular exposure to the hazard dealt with by such standard for the period of his working life.”⁹⁸ The OSH Act does not, however, give OSHA authority to require employers to test toxic substances to determine the hazard they pose to workers. TSCA § 4, on the other hand, gives the EPA authority to require manufacturers and processors of chemicals to develop data relevant to assessing the risk the chemicals pose to health and the environment.⁹⁹ TSCA established an Interagency Testing Committee (ITC) charged with making recommendations to the EPA of materials that should receive priority consideration for testing.¹⁰⁰

OSHA and the EPA have used the ITC and the EPA’s TSCA § 4(a) authority to require testing for chemicals that OSHA has determined may pose a hazard to workers. In September 1991, OSHA nominated 658 chemicals to the ITC for potential testing, indicating to the ITC that OSHA needed quantitative measures of dermal absorption for the chemicals to evaluate their potential hazard to workers. The EPA and the ITC reviewed OSHA’s list of 658 chemicals and narrowed the list to 34 chemicals.¹⁰¹ For these 34

⁹⁸ 29 U.S.C. § 655(b)(5) (2006).

⁹⁹ TSCA § 4(a), 15 U.S.C. § 2603(a) (2006).

¹⁰⁰ TSCA § 4(e), 15 U.S.C. § 2603(e) (2006). The committee includes representatives of the EPA, OSHA, the Council on Environmental Quality, NIOSH, the National Institute of Environmental Health Sciences, the National Cancer Institute, the National Science Foundation, and the Department of Commerce. *Id.*

¹⁰¹ The ITC first eliminated 145 chemicals because they were not regulated under TSCA or subject to testing requirements under TSCA § 4. *See* Proposed Test Rule for In Vitro Dermal Absorption Rate Testing of Certain Chemicals of Interest to Occupational Safety and Health Administration, 64 Fed. Reg. 31,074, 31,077 (June 9, 1999); Thirty-First Report of the TSCA Interagency Testing Committee to the Administrator, 58 Fed. Reg. 26,898, 26,902 (May 5, 1993). The ITC then reviewed databases of toxicity information and designated 83 chemicals for additional consideration: 24 chemicals lacked any dermal information in the databases. *See* Thirty-First Report of the TSCA Interagency Testing Committee to the Administrator, 58 Fed. Reg. 26,898, 26,900 (May 5, 1993); thirty-four chemicals had inadequate dermal toxicity or dermal absorption data. *See* Thirty-Second Report of the TSCA Interagency Testing Committee to the Administrator, 58 Fed. Reg. 38,490, 38,491-93 (July 16, 1993); and 25 chemicals had high production volume and limited, albeit slightly larger, information bases. *See* Thirty-Fifth Report of the TSCA Interagency Testing Committee to the Administrator, 59 Fed. Reg. 67,596, 67,598 (Dec. 29, 1994). The EPA used its authority under TSCA § 8 to require chemical manufacturers, processors, and distributors of these eighty-three chemicals to submit existing available information about their chemicals. *See* Preliminary Assessment Information and Health and Safety Data Reporting, 58 Fed. Reg. 68,311 (Dec. 27, 1993); Preliminary Assessment Information and Health and Safety Data Reporting, 59 Fed. Reg. 5956 (Feb. 9, 1994); Preliminary Assessment Information and Health and Safety Data Reporting, 60 Fed. Reg. 34,879 (July 5, 1995). The ITC reviewed the submitted information—which described production, use and exposure-related information, and unpublished health and safety data—and determined that the submitted information was sufficient for three of the eighty-three chemicals.

chemicals, the EPA required manufacturers and processors of the chemicals to conduct in vitro dermal absorption rate testing.¹⁰² OSHA will use the information that the EPA gathered to evaluate the need for additional regulatory action to protect workers from risks from dermal exposure to the chemicals.¹⁰³

Congress's decision in TSCA to create the ITC contemplated that the EPA would use its authority under TSCA to order additional chemical testing that would benefit the regulatory programs of agencies other than the EPA—thus, the inclusion of other agencies in the ITC. Congress therefore understood that other agencies would avail themselves, for their own purposes, of the EPA's authority to require testing. Because of TSCA's broad reach within the field of chemical regulation—TSCA, unlike many other statutes the EPA administers, is not media-specific—the EPA's TSCA authority overlaps with many other agencies' regulatory jurisdictions, not the least OSHA's. Here, Congress created a statutory blueprint for constructive interagency coordination that could allow the EPA to fill regulatory gaps in other agencies' jurisdictions. The OSHA Dermal Test Rule did precisely that.

4. 4,4'-Methylenedianiline

As the previous section noted, Congress recognized that because TSCA regulates toxic chemicals comprehensively, the statute would overlap substantially with extant regulatory schemes implementing other statutes. Indeed, one of Congress's goals in enacting

See Thirty-Fourth Report of the TSCA Interagency Testing Committee to the Administrator; Receipt of Report and Request for Comments, 59 Fed. Reg. 35,720, 35,725 (July 13, 1994); Thirty-Sixth Report of the TSCA Interagency Testing Committee to the Administrator, 60 Fed. Reg. 42,982, 42,987 (Aug. 17, 1995). One chemical manufacturer subsequently submitted a study that the EPA deemed adequate to determine a dermal absorption rate. See Proposed Test Rule for In Vitro Dermal Absorption Rate Testing of Certain Chemicals of Interest to Occupational Safety and Health Administration, 64 Fed. Reg. at 31,077; In Vitro Dermal Absorption Rate Testing of Certain Chemicals of Interest to the Occupational Safety and Health Administration, 69 Fed. Reg. 22,402, 22,403 (Apr. 26, 2004). The EPA selected forty-seven of the remaining seventy-nine chemicals for testing because they seemed to have relatively higher production volumes, and therefore potentially posed greater risks to workers. Proposed Test Rule for In Vitro Dermal Absorption Rate Testing of Certain Chemicals of Interest to Occupational Safety and Health Administration, 64 Fed. Reg. at 31,077. After additional production volume data, exposure data, and dermal absorption rate data became available, the EPA narrowed its list to 34 chemicals. In Vitro Dermal Absorption Rate Testing of Certain Chemicals of Interest to the Occupational Safety and Health Administration, 69 Fed. Reg. at 22,403, 22,427-30.

¹⁰² In Vitro Dermal Absorption Rate Testing of Certain Chemicals of Interest to the Occupational Safety and Health Administration, 69 Fed. Reg. at 22,402.

¹⁰³ *Id.* at 22,408.

TSCA was to fill gaps left by existing statutes that regulated chemical substances less comprehensively—for example, media-specific statutes such as the Clean Water Act.¹⁰⁴ To mitigate against any conflict that might result from TSCA's overlap with other statutes, Congress enacted provisions in TSCA § 9 for the EPA to consider potential overlap and alternatives to regulation under TSCA in its regulatory process. The EPA has used TSCA § 9 to coordinate regulation of occupational risks with OSHA.

TSCA § 9(a) directs the EPA to refer matters that “may be prevented or reduced to a sufficient extent by action taken under a Federal law not administered by [the EPA]” to the agency administering the other federal law.¹⁰⁵ The EPA may make a § 9(a) referral if it determines that it has a “reasonable basis to conclude” that the substance or activity in question “presents or will present an unreasonable risk.”¹⁰⁶ The receiving agency must respond to the referral within ninety days.¹⁰⁷

The EPA used the TSCA § 9 referral process to coordinate with OSHA for the regulation of occupational risks posed by the chemical substance 4,4'-Methylenedianiline, also known as 4,4'-MDA. The referral resulted in the promulgation of a new PEL for 4,4'-MDA.¹⁰⁸

¹⁰⁴ See S. Rep. No. 94-698, at 12 (1976); John S. Applegate, *Synthesizing TSCA and REACH: Practical Principles for Chemical Regulation Reform*, 35 *ECOTOXICOLOGY & L.Q.* 721, 726 (2008).

¹⁰⁵ TSCA § 9(a)(1), 15 U.S.C. § 2608(a)(1) (2006). If the other agency either determines that the substance or activity of concern does not pose an unreasonable risk or takes regulatory action against the substance or activity, then the EPA may not regulate against the risk. TSCA § 6(a)(2), 15 U.S.C. § 2608(a)(2) (2006).

¹⁰⁶ TSCA § 6(a)(1), 15 U.S.C. § 2608(a)(1) (2006). Sometimes, rather than make such a determination, EPA has referred a substance to another agency under TSCA § 9(d), 15 U.S.C. § 2608(d), which directs the EPA to “consult and coordinate with [other federal agencies] for the purpose of achieving the maximum enforcement of this chapter while imposing the least burdens of duplicative requirements on those subject to the chapter and for other purposes.” See, e.g., Toluenediamines; Termination of Investigation Concerned with Occupational Exposure, 51 Fed. Reg. 25,070, 25,072 (finding that “the potential risks [posed by toluenediamines] are, as a matter of policy, more appropriately addressed by OSHA” and “transferring [the EPA’s] public record on this matter to OSHA under the principles of section 9(d) of TSCA, rather than submitting a report to OSHA under section 9(a)”).

¹⁰⁷ TSCA § 6(a)(1), 15 U.S.C. § 2608(a)(1) (2006).

¹⁰⁸ The EPA and OSHA similarly coordinated through the TSCA § 9 referral process to regulate the chemical 1,3-butadiene (“BD”), an intermediate product used to produce synthetic rubbers, plastics, and resins, resulting in a revised PEL. See 1,3-Butadiene; Initiation of Accelerated Review, 49 Fed. Reg. 845 (Jan. 5, 1984) (finding pursuant to TSCA § 4(f) that BD potentially presented a significant cancer risk to humans and announcing that EPA was initiating a regulatory review); 1,3-Butadiene; Initiation of Regulatory Action, 49 Fed. Reg. 20,524 (May 15, 1984) (announcing that EPA was initiating regulatory action to

4,4'-MDA is an intermediate product in the production of polyurethane plastics.¹⁰⁹ After bioassays indicated that 4,4'-MDA probably causes cancer, the EPA made a determination under TSCA § 4(f) that 4,4'-MDA potentially presents a significant risk of serious harm to workers from cancer.¹¹⁰ At the time, OSHA had no workplace exposure limits for 4,4'-MDA. Having made the significant risk finding, the EPA and OSHA undertook a joint investigation of risks, exposures, and potential regulatory action to protect against occupational exposures to 4,4'-MDA.¹¹¹ In announcing their joint investigation and soliciting public comment, the EPA and OSHA specifically requested comment on whether regulation of 4,4'-MDA was more appropriate under TSCA or the OSH Act.¹¹² In response to the solicitation, industry submitted comments arguing for regulation under the OSH Act, on the ground that OSHA should take the lead in addressing workplace hazards.¹¹³ The Natural Resources Defense Council advocated regulation under TSCA on the ground that it could induce employers to develop methods that avoid exposing their employees, thereby taking the burden of protection off the worker.¹¹⁴

The EPA, acting under TSCA § 9(a), found that it had a "reasonable basis to conclude that the unregulated manufacture and use of 4,4'-MDA present an unreasonable risk of injury to human health" and that "the risk may be prevented or reduced to a suffi-

protect against occupational exposure to BD and requesting comment on whether EPA action under its TSCA authority or OSHA action under the OSH Act was more appropriate); 1,3-Butadiene; Decision to Report to the Occupational Safety and Health Administration, 50 Fed. Reg. 41,393, 41,393 (Oct. 10, 1985) (referring BD to OSHA for regulation); Health and Safety Standards; Occupational Exposure to 1,3-Butadiene, 51 Fed. Reg. 12526 (Apr. 11, 1986) (finding that BD warranted regulation under the OSH Act); Occupational Exposure to 1,3-Butadiene, 51 Fed. Reg. 35,003, 35,007-09 (Oct. 1, 1986) (providing advanced notice of a proposed rulemaking); Occupational Exposure to 1,3-Butadiene, 55 Fed. Reg. 32736, 32736 (Aug. 10, 1990) (proposing a revised standard for BD exposure); Occupational Exposure to 1,3-Butadiene, 61 Fed. Reg. 56,746 (Nov. 4, 1996) (finalizing the standard).

¹⁰⁹ 4,4'-Methylenedianiline; Initiation of Regulatory Action, 48 Fed. Reg. 42,898, 42,898 (Sept. 20, 1983).

¹¹⁰ 4,4'-Methylenedianiline; Initiation of Review, 48 Fed. Reg. 19,078 (Apr. 27, 1983); see also *supra* Part I.B.1.b (describing the section 4(f) determination).

¹¹¹ 4,4'-Methylenedianiline; Initiation of Regulatory Action, 48 Fed. Reg. at 42,898 (advance notice of proposed rulemaking issued by EPA); Occupational Exposure to 4,4'-Methylenedianiline (4,4'-MDA), 48 Fed. Reg. 42,836 (Sept. 20, 1983) (announcing that OSHA was joining with EPA in the regulatory investigation of 4,4'-MDA).

¹¹² 4,4'-Methylenedianiline; Initiation of Review, 48 Fed. Reg. at 42,900.

¹¹³ 4,4'-Methylenedianiline; Decision to Report to the Occupational Safety and Health Administration, 50 Fed. Reg. 27,674, 27,675 (July 5, 1985).

¹¹⁴ *Id.*

cient extent by actions taken under the Occupational Safety and Health Act.”¹¹⁵ As TSCA § 9(a) dictates, the EPA then referred the matter to OSHA for OSHA to determine, first, whether action taken under the OSH Act could adequately reduce the risk that the EPA had described, and second, whether it agreed with the EPA that 4,4’-MDA presented an unreasonable risk.¹¹⁶ The EPA’s own preliminary analysis of the data that its investigation had gathered concluded that 4,4’-MDA was a “probable human carcinogen” causing an estimated 100 to 1000 cancer cases over a forty-year work period.¹¹⁷ The EPA’s analysis also led it to conclude that measures to reduce workplace exposures significantly were technologically and economically feasible—a necessary requirement if OSHA was to take action.¹¹⁸

OSHA responded, as TSCA § 9(a) requires, by making the requested determinations.¹¹⁹ OSHA agreed with the EPA in all relevant respects: that 4,4’-MDA exposure at the current PEL posed an unreasonable risk, that OSHA could reduce this risk through regulatory action under the OSH Act, and that a risk reduction was technologically and economically feasible.¹²⁰

OSHA published its proposed rule for a 4,4’-MDA standard in 1989.¹²¹ The proposed rule resulted from negotiations involving an advisory committee of representatives from industry, labor, health and safety groups, and government agencies, including OSHA.¹²² The advisory committee recommended that OSHA adopt a PEL of ten parts per billion and additional requirements such as medical

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ *Id.* at 27,677.

¹¹⁸ *Id.* at 27,675.

¹¹⁹ Health and Safety Standards; Occupational Exposure to 4,4’-Methylenedianiline, 51 Fed. Reg. 6748 (Feb. 26, 1986).

¹²⁰ *Id.* at 6749-50. Four months after OSHA issued its response, the EPA formally terminated its regulatory investigation and transmitted its public record to OSHA for assistance in OSHA’s regulatory process. 4,4-Methylene Bis (2-Chloroaniline); Termination of Regulatory Investigation and Transfer of Information to the Occupational Safety and Health Administration, 51 Fed. Reg. 22,836 (June 23, 1986). The EPA supported this decision by pointing out that exposure to 4,4’-MDA outside of the workplace was “unlikely” and that OSHA was better suited than the EPA to address the occupational risks. *Id.* at 22,837 (“This action is being taken because EPA believes that the potential risks . . . are, as a matter of policy, more appropriately addressed by OSHA. In addition, because of its expertise in workplace risk assessment, OSHA is better able to evaluate the adequacy of EPA’s public record to support the need for regulation.”).

¹²¹ Occupational Exposure to 4,4’-Methylenedianiline (MDA), 54 Fed. Reg. 20,672 (May 12, 1989).

¹²² Methylenedianiline Negotiated Rulemaking Advisory Committee, 51 Fed. Reg. 24,452 (July 3, 1986).

surveillance, work practices, and hygiene facilities to further reduce the risks from exposure to 4,4'-MDA.¹²³ The proposed rule adopted these recommendations.¹²⁴

In 1992, OSHA promulgated the final rule for 4,4'-MDA, maintaining the PEL, short-term exposure limit, and action level set forth in the proposed rule.¹²⁵ OSHA's analysis supporting the final rule estimated that the PEL would reduce occupational risks from exposure to 4,4'-MDA from a pre-regulatory level of between 6 and 30 lifetime cancer deaths per 1000 workers to a level of less than 0.8 cancer deaths per 1000 workers.¹²⁶

5. *New Chemical Review*

The EPA sometimes uses TSCA to regulate a new chemical or a new use of an existing chemical on the basis of the potential occupational risk that the chemical poses. When the EPA regulates a new chemical under TSCA to address occupational risks, the EPA's authority overlaps with OSHA's authority. Unlike the interagency testing process under TSCA § 4 or the interagency referral process under TSCA § 9, TSCA does not acknowledge this overlap, and makes no explicit provision for how the EPA is to manage it.

TSCA requires that anyone intending to manufacture a new chemical substance or to manufacture or process an existing chemical substance for a "significant new use" must notify the EPA of its intent to do so at least ninety days in advance.¹²⁷ Once the EPA receives a premanufacture notice, the agency determines whether

¹²³ Occupational Exposure to 4,4' Methylenedianiline (MDA), 54 Fed. Reg. at 20,672.

¹²⁴ *Id.*

¹²⁵ Occupational Exposure to 4,4'-Methylenedianiline (MDA), 57 Fed. Reg. 35,630 (Aug. 10, 1992).

¹²⁶ *Id.* at 35,640.

¹²⁷ TSCA § 5(a), 15 U.S.C. § 2604(a)(1)(B) (2006). The EPA receives about 1500 such premanufacture notices each year. See Becky Cool, *EPA's New Chemical Program Under Section 5 of TSCA*, NAT'L NANOTECHNOLOGY INFRASTRUCTURE NETWORK (Oct. 2, 2003), http://sei.nnin.org/doc/resource/nanotech_presentn.pdf; see also OFFICE OF POLLUTION PREVENTION AND TOXICS, U.S. ENVTL. PROT. AGENCY, PUB. NO. 744-R-97-003, CHEMISTRY ASSISTANCE MANUAL FOR PREMANUFACTURE NOTIFICATION SUBMITTERS 6 (1997) (stating that, as of 1997, the EPA was receiving about 2500 PMNs each year); *Summary of Accomplishments: New Chemicals Program Activities Through September 30, 2009*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/opptintr/newchemicals/pubs/accomplishments.htm> (last visited Mar. 2, 2011) ("Since the TSCA Inventory was established in 1979, the EPA has reviewed more than 36,000 new chemical submissions (called Premanufacture Notices or PMNs).").

the new substance or the new use may pose an unreasonable risk potentially meriting regulation under TSCA.¹²⁸

In many cases the fact that a chemical substance is new means that little information is available about the hazards it may pose. If the EPA determines that it lacks sufficient information to conclude that a new chemical, or new use of an existing chemical, will not pose an unreasonable risk, but concludes that the new chemical or new use either may present an unreasonable risk or may be produced or used in such a way that “substantial” environmental releases or “significant or substantial” human exposures could reasonably occur, then the EPA may issue an administrative order pursuant to TSCA § 5(e) “to prohibit or limit the manufacture, processing, distribution in commerce, use, or disposal of such substance or to prohibit or limit any combination of such activities.”¹²⁹ Prohibitions and limitations that § 5(e) orders have imposed include “protective equipment, use limitations, process restrictions, labeling requirements, and limits on environmental release.”¹³⁰

An order the EPA issues pursuant to § 5(e) applies only to the manufacturer or processor named in the order. Accordingly, to apply the requirements of the § 5(e) order to other persons or businesses that may decide to manufacture, import, or process the substance at issue, the EPA promulgates a “significant new use rule” (SNUR), published in the Federal Register.¹³¹ These SNURs

¹²⁸ See *New Chemical Exposure Limits (“NCELs”)*, U.S. ENVTL. PROT. AGENCY, <http://www.epa.gov/oppt/newchemicals/pubs/ncelmain.htm> (last visited Mar. 2, 2011). Because only limited toxicity data is usually available at the premanufacturing stage, the EPA’s PMN review primarily relies on structure-activity relationships to make its determination of potential risk. See *Significant New Uses of Certain Chemical Substances*, 55 Fed. Reg. 17,376 (Apr. 24, 1990).

¹²⁹ TSCA § 5(e)(1)(A), 15 U.S.C. § 2604(e)(1)(A) (2006).

¹³⁰ *Significant New Uses of Certain Chemical Substances*, 55 Fed. Reg. at 17,376. TSCA § 5(e) orders are almost always negotiated, although in very rare occasions the EPA may unilaterally issue a § 5(e) order to which the company subject to the order has not agreed. See E-mail from Roy Seidenstein, EPA, to author (Mar. 30, 1998) (on file with author). Under the terms of TSCA § 5(e), for thirty days after the EPA issues the order, the company has the right to file an objection to prevent the order from becoming effective. TSCA § 5(e)(1)(C), 15 U.S.C. § 2604(e)(1)(C) (2006). If the company objects to a § 5(e) order, the EPA must then seek an injunction from a federal district court to enforce the terms of the order over the company’s objection. TSCA § 5(e)(2), 15 U.S.C. § 2604(e)(2) (2006). A company that signs a consent order, however, waives its right to object to the order. OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES, U.S. ENVTL. PROTECTION AGENCY, *RESPONSE TO EXTERNAL COMMENTS ON NEW CHEMICAL EXPOSURE LIMITS IN TOXIC SUBSTANCES CONTROL ACT § 5(E) ORDERS*, ATTACHMENT III, at 62 (1995) [hereinafter *NCELs RESPONSE TO COMMENTS*].

¹³¹ *Significant New Uses of Certain Chemical Substances*, 55 Fed. Reg. at 17,376 (Apr. 24, 1990). The EPA also issues many SNURs that are unrelated to § 5(e) orders.

define as a significant new use any manufacturing, importing, or processing of the substance that does not comply with the control measures or other restrictions set forth in the § 5(e) order.¹³² The effect of the SNUR is that manufacturers, importers, and processors of a substances governed by a SNUR must either observe the SNUR restrictions or submit a significant new use notice to the EPA at least ninety days before initiating activities.¹³³ In 1989, the EPA promulgated a set of regulations setting forth standardized requirements for SNURs.¹³⁴ Subsequent SNURs thus have specified which of these requirements, if departed from, would constitute a significant new use requiring notification to the EPA.¹³⁵

When the EPA takes action under TSCA § 5 to regulate new chemicals on the basis of potential occupational risks, it often invokes the standardized significant new use requirements. Two different sets of requirements are aimed at protecting against occupational risks: one regulation specifies standardized requirements for “[p]rotection in the workplace,”¹³⁶ and another sets forth the standardized “[h]azard communication program” requirements.¹³⁷

The workplace protection regulation requires personal protective equipment for employees who are “reasonably likely” to be exposed to the substance in question.¹³⁸ The personal protective equipment required depends on the route of exposure—dermal, inhalation, or both. The regulation lists various types of personal protective equipment: gloves, clothing, and goggles for dermal protection, and different types of respirators for inhalation protection.¹³⁹ The substance-specific regulations specify which of these types are required for workers reasonably likely to be exposed to

¹³² *Id.*; see, e.g., 40 C.F.R. § 721.63(a) (2010) (“Whenever a substance is identified in [a SNUR] as being subject to this section, a significant new use of the substance is any manner or method of manufacturing, importing, or processing associated with any use of the substance without establishing a program [that follows the specified requirements of this section].”).

¹³³ *Id.*

¹³⁴ Significant New Use Rules; General Provisions for New Chemical Follow-Up, 54 Fed. Reg. 31298 (July 27, 1989).

¹³⁵ See, e.g., Significant New Uses of Certain Chemical Substances, 55 Fed. Reg. 17,376, (Apr. 24, 1990). In some cases, however, the EPA has found it necessary to set forth substance-specific requirements, either in place of or in addition to the standardized requirements. See, e.g., 40 C.F.R. §§ 721.4250, 721.5310 (2010).

¹³⁶ 40 C.F.R. § 721.63 (2010).

¹³⁷ Significant New Uses of Chemical Substances: Hazard Communication Program, 40 C.F.R. § 721.72 (2010).

¹³⁸ See 40 C.F.R. § 721.63(a)(1), (4) (2010).

¹³⁹ See *id.* at § 721.63(a)(2), (5).

that particular substance.¹⁴⁰ The EPA selects the required types of protection based on the agency's estimates of the toxicity of the chemical and worker exposures, based on the standards that OSHA uses to assign required protective equipment under its regulations.¹⁴¹ As an alternative to the respirators required in § 721.63(a)(5), the EPA allows employers to use New Chemical Exposure Limits (NCELs). An employer utilizing this regulatory alternative chooses to monitor employee exposure and ensure that workers are not exposed to the substance at levels exceeding the NCEL in lieu of using respirators.¹⁴²

NCELs and OSHA's Permissible Exposure Limits (PELs) use the same means (inhalation exposure limits) for the same objective (to protect workers against occupational risks), thus creating a danger of conflict, inconsistency, or wasteful and burdensome duplication. Despite their similarities, however, the NCEL and PEL programs do not overlap as to actual regulation of a particular substance. OSHA is unlikely to consider setting a PEL for a substance for which the EPA is setting an NCEL, and vice versa, because the two standards arise in different situations. The EPA promulgates NCELs for "uncommercialized new chemicals" and on the basis of relatively little toxicity data.¹⁴³ OSHA will not promulgate a PEL for a substance until the substance is used in sufficient amounts to pose a significant occupational risk and until sufficient toxicity data is available to support promulgation of a standard under the OSH Act.¹⁴⁴ Moreover, if OSHA were to establish a PEL for a substance for which an NCEL existed, then the PEL automatically would displace the NCEL; TSCA § 5(e) orders containing an NCEL also include an "Automatic Sunset" provision that provides that the NCEL is "automatically nullified if OSHA promulgates a

¹⁴⁰ See, e.g., 40 C.F.R. § 721.536(a)(2)(i) (2010) (requiring the use of either of two types of air-purifying respirators with high efficiency particulate filters for workers exposed to halogenated phenyl alkane).

¹⁴¹ Email from Roy Seidenstein, EPA, to author (July 21, 2010) (on file with author).

¹⁴² See *infra* Part II.B (describing the NCEL program in detail).

¹⁴³ NCELs RESPONSE TO COMMENTS, *supra* note 130, at 11. When confronted with notice by a manufacturer that it intends to produce a new chemical substance, the EPA has just ninety days and very little data about the chemical. Throughout the history of the premanufacturing review process, therefore, the EPA has relied on structure activity analysis, a process whereby the substance in question is analogized to other substances with a similar molecular structure for which more data is available, on the premise that substances with similar molecular structure exhibit similar toxicity characteristics. The EPA sets the requirements in the § 5(e) consent order and significant new use rule based on the data for the analogues and potential metabolites of the new substance. *Id.* at 11.

¹⁴⁴ NCELs RESPONSE TO COMMENTS, *supra* note 130, at 11.

PEL for the same substance,” providing that the PEL is not challenged in court.¹⁴⁵ The EPA also has worked to make its NCEL program more consistent with OSHA’s PEL program, and therefore less burdensome on the regulated community.¹⁴⁶

The EPA’s other occupational protection requirements under TSCA § 5(e), the hazard communication requirements, operate similarly to the workplace protection requirements. The hazard communication regulation mandates the development of a written hazard communication program, the labeling of all containers of the particular chemical substance that are in the workplace, and the provision of material safety data sheets describing the substance, its associated hazards, and methods for controlling and treating exposure to the substance.¹⁴⁷ The regulation mimics—in many places word-for-word—OSHA’s hazard communication standard,¹⁴⁸ and explicitly provides that an existing hazard communication program developed under the OSHA standard may satisfy the requirements of the EPA’s standard.¹⁴⁹ Unlike the OSHA standard, however, which applies generally to all “hazardous chemicals,” the SNUR regulatory scheme requires specific hazard communication measures that must be taken for particular substances. Like the workplace protection requirements, the substance-specific

¹⁴⁵ OFFICE OF POLLUTION PREVENTION AND TOXICS, U.S. ENVTL. PROTECTION AGENCY, NEW CHEMICAL EXPOSURE LIMITS PROVISIONS FOR TOXIC SUBSTANCES CONTROL ACT § 5(E) ORDERS 3 (May 1995) [hereinafter NCEL CONSENT ORDER PROVISIONS]; NCELS RESPONSE TO COMMENTS, *supra* note 130, at 11. In reality, OSHA has issued so few new PELs in recent years that the situation has not arisen. See Seidenstein, *supra* note 141.

¹⁴⁶ First, the EPA adopted OSHA’s performance-based standard for accuracy, which requires that the analytical method used by the employer must be within plus or minus 25% of the true value with 95% confidence. NCELS CONSENT ORDER PROVISIONS, *supra* note 144, at 7. Second, the new NCEL criteria adopted OSHA and NIOSH’s lower quantification limit of 1/2 the NCEL and upper quantification limit of twice the NCEL. *Id.* The EPA previously had required a lower quantification limit of 1/10 the NCEL and an upper quantification limit of 2000 times the NCEL. NCELS RESPONSE TO COMMENTS, *supra* note 129, at 4. Third, the revised NCEL criteria accept analytical method verification and exposure monitoring from either a laboratory conforming to TSCA Good Laboratory Practice Standards, a laboratory accredited by the American Industrial Hygiene Association, or a laboratory “approved in advance in writing by the EPA.” NCELS CONSENT ORDER PROVISIONS, *supra* note 145, at 4-5. The NCEL program still contains more detailed requirements for accuracy and precision than does the PEL program, because for most new chemical substances regulated under the NCEL program there is not yet an established analytical method. NCELS RESPONSE TO COMMENTS, *supra* note 130, at 11-12.

¹⁴⁷ 40 C.F.R. § 721.72 (2010).

¹⁴⁸ 29 C.F.R. § 1910.1200 (2010); see also NCELS RESPONSE TO COMMENTS, *supra* note 130, at 47 (noting that “the EPA has essentially adopted the provisions of OSHA’s Hazard Communication Standard”).

¹⁴⁹ 40 C.F.R. § 721.72(a) (2010).

significant new use requirements refer to particular requirements in the hazard communication regulation that apply to the substance in question.¹⁵⁰

6. Vapor Intrusion

Vapor intrusion is the migration of volatile chemicals from the subsurface into overlying buildings.¹⁵¹ It occurs as a result of environmental contamination, when chemicals volatilize from contaminated soil and groundwater beneath buildings and other structures.¹⁵² The EPA regulates the cleanup of environmental contamination pursuant to RCRA and CERCLA. Because some buildings in which vapor intrusion is a problem are workplaces, vapor intrusion can lead to chemical exposures in the workplace, potentially implicating OSHA's regulatory authority as well.

In November 2002, EPA issued a draft guidance document proposing a process for determining whether, in a particular situation, vapor intrusion poses an unacceptable risk to human health.¹⁵³ The draft guidance is not a regulation and does not purport to bind

¹⁵⁰ See, e.g., 40 C.F.R. § 721.2950(a)(1)(i)(B) (2010) (requiring, among other things, human health hazard statements in workplaces containing carboxylic acid glycidyl ester warning that the substance may cause skin irritation, respiratory infection, reproductive effects, and cancer). TSCA does not require the EPA to follow a formal rulemaking process in adopting the orders or SNURs. TSCA does, however, allow for pre-enforcement judicial review of § 5(e) orders. If a manufacture or processor subject to a § 5(e) order or SNUR objects to any aspects of the consent order or SNUR, then the objector can file a notice of objection that prevents the order from taking effect. TSCA § 5(e)(1)(C), 15 U.S.C. § 2604(e)(1)(C) (2006). The consequences of filing such a notice differ between § 5(e) orders and SNURs. If a manufacturer or processor files an objection to a § 5(e) order, the EPA must seek an injunction enforcing the restrictions set forth in the order from a federal district court. TSCA § 5(e)(1)(C)&(2)(A)(ii), 15 U.S.C. § 2604(e)(1)(C)&(2)(A)(ii) (2006). The court will grant the injunction only if it agrees with the EPA's determination that the regulated activities either may present an unreasonable risk or may lead to substantial environmental releases or human exposures. TSCA § 5(e)(2)(B), 15 U.S.C. § 2604(e)(2)(B) (2006). If a manufacturer, processor, or importer files an objection to a SNUR, then the EPA withdraws the final SNUR and proposes a SNUR with a 30-day comment period. Significant New Uses of Certain Chemical Substances, 55 Fed. Reg. 17376, 17379 (Apr. 24, 1990). Although the EPA does not say so, presumably it would promulgate a final SNUR after the expiration of the 30-day comment period.

¹⁵¹ U.S. EPA, No. 530-D-02-004, OSWER DRAFT GUIDANCE FOR EVALUATING THE VAPOR INTRUSION TO INDOOR AIR PATHWAY FROM GROUNDWATER AND SOILS (SUBSURFACE VAPOR INTRUSION GUIDANCE) 1 (2002).

¹⁵² *Id.*

¹⁵³ *Id.*; see also Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway From Groundwater and Soils (Subsurface Vapor Intrusion Guidance), 67 Fed. Reg. 71,169 (Nov. 29, 2002) (noting the issuance of the draft guidance).

the agency.¹⁵⁴ Nevertheless, the EPA suggests the draft guidance for use at RCRA Corrective Action sites, CERCLA sites, and brownfield sites.¹⁵⁵

Vapor intrusion problems can arise in a variety of enclosed settings, including homes, commercial and industrial buildings, schools, libraries, hospitals, hotels, offices, community and government buildings, and stores.¹⁵⁶ Thus, issuing guidance regarding vapor intrusion inevitably raised the issue of the extent and nature of the EPA's regulatory jurisdiction over vapor intrusion problems in occupational settings. Although the EPA intended the draft guidance to apply primarily to vapor intrusion issues in residential settings, it also noted that the guidance could be "adjusted" for application in non-residential settings."¹⁵⁷ This would seem to include occupational settings, but the draft guidance offered conflicting indications of its applicability to workplaces. On the one hand, the EPA stated that "OSHA and EPA have agreed that OSHA generally will take the lead role in addressing occupational exposures" and that "EPA does not expect this guidance be used for settings that are primarily occupational."¹⁵⁸ On the other hand, the EPA noted, to the extent that OSHA regulation is premised on the assumption that workers will be familiar with relevant OSHA regulations, this assumption may not apply well to vapor intrusion, which can involve "constituents that are no longer or were never used in a particular workplace, may originate from elsewhere, or be modified by bio-degradation or other subsurface transformation processes."¹⁵⁹ Indeed, vapor intrusion can occur in administrative and other office settings where personnel do not routinely handle chemicals. In such situations, where employees are unaware of the potential chemical exposure, OSHA regulation based on exposure limits may not suffice.

¹⁵⁴ U.S. EPA, *supra* note 151, at 2; *see also* Final Bulletin for Agency Good Guidance Practices, 72 Fed. Reg. 3432, 3434 (Jan. 25, 2007) ("The term 'guidance document' means an agency statement of general applicability and future effect, other than a regulatory action . . . that sets forth a policy on a statutory, regulatory or technical issue or an interpretation of a statutory or regulatory issue. . . . Nothing in this Bulletin is intended to indicate that a guidance document can impose a legally binding requirement.").

¹⁵⁵ U.S. EPA, *supra* note 151, at 2.

¹⁵⁶ *Id.* at 2-3.

¹⁵⁷ *Id.*

¹⁵⁸ *Id.* at 2.

¹⁵⁹ *Id.* at 3; *see also* Inside Washington Publishers, *Draft Vapor Guide Allows First-Time EPA Oversight of Some Workplaces*, INSIDE EPA (Apr. 27, 2007), available at 2007 WLNR 7878562.

The EPA solicited comments on the draft guidance document¹⁶⁰ and received forty-five comments, of which fifteen addressed the EPA's and OSHA's potentially overlapping jurisdiction over vapor intrusion problems in the workplace.¹⁶¹ The comments stated a range of positions on whether the EPA should regulate vapor intrusion in the workplace.

Some commenters, primarily representing the regulated industries, opined that the EPA should defer entirely to OSHA with respect to regulation of indoor air quality in the workplace.¹⁶² These commenters contended that OSHA regulation of occupational risks is adequate, and additional EPA regulation was therefore unnecessary and duplicative.¹⁶³

¹⁶⁰ U.S. EPA, *supra* note 151, at 2.

¹⁶¹ See generally REGULATIONS.GOV, *available at* <http://www.regulations.gov> (Docket ID: RCRA-2002-0033). Commenters primarily included other EPA offices, other federal agencies, state agencies, and representatives of regulated industries.

¹⁶² See Comment from Andy Lawrence, Director, Office of Env'tl. Policy & Guidance, U.S. Dep't of Energy 3 (Feb. 27, 2003), *available at* <http://www.regulations.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0022) ("The guidance should be more definitive in excluding the need to assess vapor intrusions in buildings where the occupants are covered by provisions of OSHA."); Comment from John Quarles, Counsel, Morgan, Lewis & Bockius, LLP 4 (Feb. 26, 2003), *available at* <http://www.regulations.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0008) (opining that, as between whether the EPA or OSHA should regulate vapor intrusion in occupational settings, "the proper answer . . . is to use the OSHA [permissible exposure limits], and . . . a contrary answer by EPA would . . . raise[] severe problems of confusion and contradiction as to the overlap between the EPA and OSHA standards"). The American Chemistry Council submitted a comment supporting the draft guidance's recognition "that [OSHA] has the lead role in addressing occupational exposures and that OSHA standards should apply at occupational settings," without stating directly that the EPA should defer entirely to OSHA regulation in this area. Comment from Kerry Kelly, Team Leader, Waste Issues, and Bob Elam, Director, Regulatory/Technical Affairs, Am. Chemistry Council 2 (Feb. 27, 2003), *available at* <http://www.regulations.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0027). The Navy submitted a comment recommending that the guidance clarify that it does not apply to occupational settings. See Comment from Amy Walker, Chief of Naval Operations, Dep't of the Navy 1 (Mar. 14, 2003), *available at* <http://www.regulations.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0041). It appears from the comment, however, that the Navy believed that this would merely clarify the EPA's intent as to the scope of the guidance, and that the Navy was not necessarily expressing opposition to EPA regulation of workplace indoor air quality.

¹⁶³ Comment from Andy Lawrence, *supra* note 162, at 3; Comment from John Quarles, *supra* note 162, at 4. Elsewhere, the regulated industry has argued additionally that following EPA standards that are more stringent than OSHA standards could lead to disputes over clean-up levels and could increase real estate developers' and other property owners' reluctance to remediate sites. Inside Washington Publishers, *Draft Vapor Guide Allows First-Time EPA Oversight of Some Workplaces*, INSIDE EPA (Apr. 27, 2007), *available at* 2007 WLNR 7878562 (noting that the version was "not publicly available"). Some representatives of regulated industry have gone further, taking the position that OSHA has exclusive authority to regulate workplace air quality. Inside Washington Publishers, *Oil*

Other commenters—two EPA regional offices and two state regulatory agencies—averred that the EPA should take the lead in protecting against workplace exposures from vapor intrusion in occupational settings.¹⁶⁴ These commenters focused on the potential benefits of a site-specific, risk-based evaluation of vapor intrusion in occupational settings, arguing that excluding workers from the scope of the EPA's risk evaluations could undermine the EPA's public health mission.¹⁶⁵

Industry Seeks To Block EPA Regulation of Toxic Workplace Vapors, INSIDE EPA (Apr. 30, 2004), available at 2004 WLNR 78308 (reporting the American Petroleum Institute's position that OSHA has exclusive regulatory authority over workplace health risks); Baerbel E. Schiller, *Indoor Air Quality at Industrial Facilities with RCRA Corrective Action: Do EPA or OSHA Standards Apply?*, ABA SECTION OF ENVIRONMENT, ENERGY, AND RESOURCES SUPERFUND AND HAZARDOUS WASTE COMMITTEE NEWSLETTER (Mar. 2003) (arguing that RCRA's instruction to the EPA to "assist the Secretary of Labor and the Director of the National Institute for Occupational Safety and Health in carrying out their duties under the Occupational Safety and Health Act of 1970" precludes the EPA from regulating worker health under RCRA and instead limits the EPA to supporting OSHA regulation). The regulated industry faces a strong incentive to favor OSHA regulation of chemical exposures, which is considerably less stringent than the EPA's. See Inside Washington Publishers, *EPA, Staff at Odds over OSHA'S Role Applying Vapor Intrusion Guide*, INSIDE EPA (Aug. 22, 2003), available at 2003 WLNR 94857 ("OSHA's baseline for determining that vapors represent a health risk is a million times less stringent than the EPA standards."); Inside Washington Publishers, *OSHA's Legal Findings Could Help EPA Target Toxic Workplace Vapors*, INSIDE EPA (Oct. 1, 2004), available at 2004 WLNR 71142 [hereinafter *OSHA's Legal Findings*] ("OSHA's standards are often a thousand-fold weaker than EPA chemical exposure limits, leading some agency officials to warn that significant numbers of workers are potentially at risk from environmental contamination. Industry has long opposed EPA efforts to regulate workplace exposures because the agency's more conservative health estimates would them vulnerable to a wave of litigation and cleanup orders over what they claim are grossly overestimated health risk projections.").

¹⁶⁴ See Comment from Michael Gearheard, Director, Office of Env'tl. Cleanup, and Richard Albright, Director, Office of Waste and Chemicals Mgmt., Region 10, U.S. EPA 1-2 (Feb. 26, 2003), available at <http://www.regulations.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0042) ("An OSWER policy excluding occupational settings would depart markedly from past and current practices at Superfund and RCRA sites. . . . Risk-based screening for impacts from the subsurface on indoor air are appropriate whether or not the building is used for occupational purposes."); Comment from Stephanie Beak, Division of Hazardous Waste Management, Ohio Env'tl. Prot. Agency 2-3 (Feb. 28, 2003), available at <http://www.regulation.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0026); Comment from Andrew Fan, Region III, U.S. EPA 5 (June 23, 2003), available at <http://www.regulations.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0043); Comment from Catherine LeCours, Mont. Dep't of Env'tl. Quality (Feb. 28, 2003) available at <http://www.regulations.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0023).

¹⁶⁵ Comment from Andrew Fan, *supra* note 164, at 5; Comment from Michael Gearheard, *supra* note 164, at 1-2. These commenters cited the EPA's own discussion in its draft guidance of reasons why OSHA regulation of vapor intrusion exposures might not sufficiently protect workers. Comment from Stephanie Beak, *supra* note 164, at 2-3. Some

A third group of commenters—two state environmental regulatory agencies and scientists from the EPA’s Office of Air and Radiation—took middle-ground positions, arguing that the EPA needed to take the lead on contaminated sites because OSHA standards do not apply well to workplace exposures to chemicals that are not used in the workplace.¹⁶⁶

The disagreement among the commenters on the EPA’s draft guidance reflected a lack of clarity within the agency itself, as the EPA was undecided and unclear on the extent of its regulatory

cited additional reasons, such as OSHA permissible exposure limits are not based on site-specific risk evaluations. Comment from Andrew Fan, *supra* note 164, at 5; OSHA’s regulatory authority does not extend to all work sites, and the regulatory burden of enforcing exposure limits at facilities forced to manage exposures “that did not result from their operations.” Comment from Catherine LeCours, *supra* note 164. Commenters favoring this position did not appear hostile to OSHA regulation, but rather saw EPA regulation of occupational exposures arising from vapor intrusion as a useful supplement to OSHA regulation. See, e.g., Comment from Andrew Fan, *supra* note 164, at 5.

¹⁶⁶ See Comment from Hun Seak Park and Edward Jones, Wash. State Dep’t of Ecology 8-9 (Feb. 26, 2003), available at <http://www.regulations.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0046); Comment from Stephen A. Hill, Toxics Cleanup Division Chief, Cal. Reg’l Water Quality Control Bd. 3-4 (Feb. 19, 2003), available at <http://www.regulations.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0025); Comment from Scientific Analysis Team, Indoor Environments Division, Office of Radiation and Indoor Air, Office of Air and Radiation, U.S. EPA 1 (June 23, 2003), available at <http://www.regulations.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0045). The Washington State Department of Ecology differentiated between OSHA standards, which “define a level of harm that the government is willing to allow in the workplace, where worker exposure is viewed as voluntary,” and the EPA’s RCRA and CERCLA standards, which are “cleanup programs” the primary purpose of which “is to evaluate environmental contamination, decide if that contamination must be remediated, and if so, remediate it to levels that are reasonably innocuous.” Comment from Hun Seak Park, *supra*, at 8, 9. Unlike OSHA regulation, this state regulator opined, the EPA’s programs carried a presumption that “contamination should always be remediated, or adequately controlled, unless it can convincingly be demonstrated that risks/hazards associated with that contamination are so low as to be acceptable.” *Id.* at 9. Accordingly, Washington recommended that OSHA standards be limited to “workplace exposures where chemicals are used as part of business activities.” *Id.* at 8. The California Regional Water Quality Control Board advocated the same conclusion based on similar points, arguing in addition—and here echoing the point the EPA had made in the draft guidance—that OSHA regulations “are intended for use in industrial settings where employees are aware of potential health hazards associated with the specific chemicals they are using and are trained to take proper precautions.” Comment from Stephen A. Hill, *supra*, at 3. A Scientific Analysis Team in the EPA’s Office of Air and Radiation relied on similar points—office workers expect a clean and healthy work environment, whereas industrial workers may not; OSHA standards assume that workers are healthy adult males, an assumption that does not apply as well outside of industrial settings; and OSHA standards are based on feasibility as well as health—to advocate that the EPA should defer to OSHA with respect to regulation of indoor air quality of industrial settings, but should take an active role in regulating indoor air quality in non-industrial workplaces. Comment from Scientific Analysis Team, *supra*, at 1.

authority over chemical exposures in the workplace resulting from vapor intrusion. As noted, the EPA's 2002 draft guidance gave conflicting indications, stating on the one hand that the EPA agreed that OSHA generally should take the lead in addressing occupational exposures and that the EPA did not expect the guidance to apply to occupational settings, but then also noting reasons why OSHA regulation of vapor intrusion might be inadequate to protect workers.¹⁶⁷ An EPA official, when asked in 2003 to clarify the scope of the guidance, stated that OSHA regulations would govern all occupational exposures from vapor intrusion.¹⁶⁸ In 2004, after the EPA received the comments on its draft guidance arguing both in favor and against regulating occupational exposures from vapor intrusion, the EPA sought OSHA's opinion on the extent of its regulatory authority.¹⁶⁹ OSHA concluded that it lacks authority over contamination that does not originate from the workplace.¹⁷⁰ Subsequent, unreleased revisions of the draft guidance circulated in 2007 apparently reflected OSHA's position and, attempting to fill the gap, stated that the EPA could regulate occupational exposures to chemicals not in use at the worksite.¹⁷¹

Although the EPA has not officially adopted the position stated in the unreleased 2007 revisions to the guidance,¹⁷² it has taken regulatory actions consistent with that position. For example, in a CERCLA removal action at the Bally Groundwater Contamination Superfund Site in Berks County, Pennsylvania, the EPA relied on its Superfund risk standards, not OSHA standards, to require the potentially responsible party to mitigate indoor air concentrations of contaminants in commercial buildings affected by vapor

¹⁶⁷ U.S. EPA, *supra* note 151, at 2.

¹⁶⁸ Comment from Diane Groth, Chairperson, Indoor Air Committee, N.J. Dep't of Env'tl. Prot. 2 (Feb. 20, 2003) (citing a statement by Ray Cody, EPA, at a seminar in Dallas), *available at* <http://www.regulations.gov> (Docket ID: RCRA-2002-0033, Document ID: EPA-HQ-RCRA-2002-0033-0006).

¹⁶⁹ OSHA's *Legal Findings*, *supra* note 163.

¹⁷⁰ *Id.*

¹⁷¹ Inside Washington Publishers, *EPA, Staff at Odds over OSHA'S Role Applying Vapor Intrusion Guide*, INSIDE EPA (Aug. 22, 2003), *available at* 2003 WLNR 94857 (noting that the version was "not publicly available").

¹⁷² The EPA Inspector General has asked the EPA to finalize its guidance, which the agency has agreed to do by November 2012. See U.S. ENVTL. PROT. AGENCY, OFFICE OF INSPECTOR GENERAL, LACK OF FINAL GUIDANCE ON VAPOR INTRUSION IMPEDES EFFORTS TO ADDRESS INDOOR AIR RISKS (Dec. 14, 2009), *available at* <http://www.epa.gov/oig/reports/2010/20091214-10-P-0042.pdf>. Presumably the final guidance will clarify, among other things, whether it applies to vapor intrusion in occupational settings.

intrusion emanating from contaminated groundwater from the Site, based on concern of the risks to workers in the buildings.¹⁷³

III. EVALUATING REGULATORY OVERLAP

This Part uses the EPA-OSHA case studies to explore two fundamentally important and related questions about regulatory overlap: why regulatory overlap arises, and whether it is beneficial. It reviews existing scholarship on each question and concludes that the dominant account of regulatory overlap is flawed both conceptually and, as compared to the EPA-OSHA case studies at least, empirically. The EPA-OSHA case studies highlight an important aspect of regulatory overlap that existing scholarship has largely missed: the relationship between regulatory overlap and the substance of the law.

A. *Why Regulatory Overlap Arises*

Given the widespread expressions of aversion to regulatory overlap,¹⁷⁴ the prevalence of overlapping regulatory jurisdictions poses somewhat of a puzzle. Scholars have offered several explanations for why regulatory overlap arises. The EPA-OSHA case studies provide opportunities for testing these explanations against real-world examples of regulatory overlap. One can generalize from the case studies only tentatively, because the case studies are neither the full range nor a representative sample of the full range of regulatory overlap among federal agencies. Nevertheless, the EPA-OSHA case studies call into question some of the leading explanations for why regulatory overlap arises, and illustrate a new alternative explanation.

1. *Agency Expansion*

Perhaps the most common account of regulatory overlap posits that overlapping jurisdictions arise because agencies expand their authorities to maximize their power and budgets, thereby overlapping the jurisdiction of other agencies. This view of agency behav-

¹⁷³ Administrative Settlement and Order on Consent for Removal Response Action and Agreement Pursuant to CERCLA Section 122(h)(1) at 3-4, In re Bally Ground Water Contamination Superfund Site, Bally Berks County, PA (U.S. EPA Region III 2008) (No. CERC-03-2008-0092DC), available at <http://loggerhead.epa.gov/arweb/public/pdf/2114381.pdf>; Inside Washington Publishers, *EPA Faces Industry Resistance to Strict Vapor Intrusion Standards*, INSIDE EPA (Sept. 12, 2008), available at 2008 WLNR 17221727.

¹⁷⁴ See *supra* notes 1-6 and accompanying text.

ior is associated most closely with public choice theory,¹⁷⁵ and in particular with the work of William Niskanen.¹⁷⁶ Niskanen posits that agency officials care about “salary, perquisites of the office, public reputation, power, patronage, output of the bureau, ease of making changes, and ease of managing the bureau,” all of which depend in some respect on the size of the agency’s budget.¹⁷⁷ Niskanen regards this as holding true regardless whether the agency official is motivated by selfish concerns (e.g., salary and perks) or by a desire to promote the public interest (e.g., agency’s output, ability to affect the agency).¹⁷⁸ Lower-level agency employees share the official’s interest in a larger budget, which trickles down to them in the form of greater career opportunities.¹⁷⁹ Moreover, Congress benefits from an agency’s urge to increase its budget, because the agency’s attempts to persuade Congress to enact a budget increase give Congress opportunities to monitor and evaluate the agency.¹⁸⁰ Thus, the overall result in Niskanen’s view is a system in which regulatory agencies look for opportunities to expand their jurisdictions so as to increase their budgets. As they increase their jurisdictions, they inevitably create overlaps with other agencies.

There are strong reasons, however, to doubt that agencies are looking to expand their jurisdictions wherever possible. As to personal motives, little or no evidence supports the assertion that agency budgets are a primary or important motivation for agency officials.¹⁸¹ Contrary to Niskanen’s hypothesis, there seems to be little link between the size of an agency’s budget and any personal benefit to agency officials or employees.¹⁸² Moreover, personal benefits are unlikely the primary motivator for agency officials and

¹⁷⁵ See DANIEL A. FARBER & PHILIP P. FRICKEY, *LAW AND PUBLIC CHOICE: A CRITICAL INTRODUCTION* 1 (1991) (“Public choice is . . . the application of the economist’s methods to the political scientist’s subject.”); MAXWELL L. STEARNS & TODD J. ZYWICKI, *PUBLIC CHOICE CONCEPTS AND APPLICATIONS IN LAW* 1 (2009) (“Public choice applies the methodology of economics to the subject matter of political science.”).

¹⁷⁶ STEARNS & ZYWICKI, *supra* note 175, at 342 (discussing WILLIAM A. NISKANEN, JR., *BUREAUCRACY AND REPRESENTATIVE GOVERNMENT* (1971)).

¹⁷⁷ NISKANEN, *supra* note 176, at 38.

¹⁷⁸ *Id.* at 38-39.

¹⁷⁹ *Id.* at 40.

¹⁸⁰ *Id.*

¹⁸¹ David B. Spence & Frank Cross, *A Public Choice Case for the Administrative State*, 89 GEO. L.J. 97, 117 (2000).

¹⁸² See JAMES Q. WILSON, *BUREAUCRACY* 118 (1989) (“One wonders why Niskanen thinks bureaucrats are so desirous of maximizing their budgets if they can enjoy so few of the fruits.”); Daryl J. Levinson, *Empire-Building Government in Constitutional Law*, 118 HARV. L. REV. 915, 932 (2005) (“Even if most bureaucrats were primarily interested in

employees. Employees' belief in their agency's mission or, in the case of political appointees, commitments to the president and his party, likely play a greater role.¹⁸³ These commitments are at least as likely to lead bureaucrats to prefer to focus their agencies' resources on core areas of concern as they are to desire expansion of their agencies' jurisdictions.¹⁸⁴

As to institutional rather than individual behavior, there also is a lack of evidence that agencies inevitably seek to maximize their authority.¹⁸⁵ Agency budgets and programs tend to focus on continuing existing programs rather than creating new ones.¹⁸⁶ Agencies may want to suppress or avoid competing with other agencies to prevent potential losses of budget or authority.¹⁸⁷

In addition to resting on potentially inaccurate assumptions about the motivations of agency officials, the agency expansion thesis also depends on the often-erroneous premise that regulatory agencies have a realistic prospect of expanding significantly. However possible budget expansion may have appeared at other times in history, in times of budget austerity like the present—a period with no foreseeable end—the idea that many agencies face opportunities for significant budget expansion for their regulatory activities seems far-fetched. Indeed, most agencies struggle with insufficient resources for their existing regulatory programs.

The EPA-OSHA case studies support these criticisms of the agency expansion hypothesis. Both the EPA and OSHA are widely regarded as chronically and severely underfunded with respect to their statutory mandates, making it doubtful that either

lining their own pockets, the relationship between a larger agency budget and higher salaries or cushier working conditions is empirically tenuous.”).

¹⁸³ STEVEN CROLEY, REGULATION AND PUBLIC INTERESTS 93-94 (2008); Spence & Cross, *supra* note 181, at 117.

¹⁸⁴ Levinson, *supra* note 182, at 933 (positing that this would motivate agencies to seek depth rather than breadth in their authority).

¹⁸⁵ See William W. Buzbee, *Remembering Repose: Voluntary Contamination Cleanup Approvals, Incentives, and the Costs Of Interminable Liability*, 80 MINN. L. REV. 35, 82-84 (1995) (noting that the EPA's reluctance to expand its regulatory domain to include a voluntary cleanup approval program is inconsistent with the hypothesis that agencies are motivated primarily to expand their budget and authority); Mary K. Olson, *Managing Delegation in the FDA: Reducing Delay in New-Drug Review*, 29 J. HEALTH POL., POL'Y & L. 397, 401 (2004) (noting “there is little evidence that the [FDA] has been motivated by a desire to maximize its budget,” but with the caveat that “there is little empirical research that has specifically examined this question”).

¹⁸⁶ See JONATHAN B. BENDOR, PARALLEL SYSTEMS: REDUNDANCY IN GOVERNMENT 42 (1985); see also Levinson, *supra* note 182, at 933.

¹⁸⁷ BENDOR, *supra* note 186, at 43.

agency would be seeking to expand its jurisdiction.¹⁸⁸ Neither agency has exhibited much appetite for expanding its jurisdiction into the other agency's domain. Indeed, whether because of their limited resources, political sensitivities to accusations of overreaching, or comity toward fellow agencies, the EPA and OSHA generally have gone out of their way to avoid asserting overlapping regulatory jurisdiction. The EPA only stepped into regulating vapor intrusion in workplaces, for example, after OSHA made clear that it would not take action.¹⁸⁹ Where the EPA has taken regulatory action against occupational risks, it has tended to adopt and incorporate OSHA standards and processes, rather than competing with OSHA.¹⁹⁰ And the EPA has readily referred chemical substances to OSHA for regulation where the OSH Act provided sufficient authority to address a hazard.¹⁹¹ The possible exception to this observation is the area of chemical accidents, in which the EPA competed somewhat with OSHA for jurisdiction, acquiring emergency planning expertise under EPCRTKA that subsequently encouraged Congress to give the EPA a greater role in regulating chemical accidents under the Clean Air Act Amendments of 1990.¹⁹² Overall, however, the EPA-OSHA case studies undermine the proposition that regulatory overlap arises from agency expansion.

¹⁸⁸ Lynn K. Rhinehart, *Would Workers Be Better Protected If They Were Declared an Endangered Species? A Comparison of Criminal Enforcement Under the Federal Workplace Safety and Environmental Protection Laws*, 31 AM. CRIM. L. REV. 351, 382 (1994) ("OSHA is an underfunded and understaffed agency struggling to fulfill its statutory mission. Similarly, the EPA, despite its \$7 billion budget, is unable to undertake all the activities needed to protect the environment."); Sidney A. Shapiro & Thomas O. McGarity, *Reorienting OSHA: Regulatory Alternatives and Legislative Reform*, 6 YALE J. ON REG. 1, 6 n.32, 43-44 (1989) (characterizing OSHA as historically underfunded in relation to its mandates); Mark Seidenfeld, *A Big Picture Approach to Presidential Influence on Agency Policy-Making*, 80 IOWA L. REV. 1, 8 n.42 (1994) (contending that "chronic under-funding of the EPA has contributed to that agency's inability to implement much of what is already required by environmental statutes"); Wendy Wagner, *Using Competition-Based Regulation to Bridge the Toxics Data Gap*, 83 IND. L.J. 629, 634 n.26 (2008) (observing that "underfunding of the EPA is considered a chronic problem across virtually all programs"). The EPA did see a significant budget increase from 2009 to 2010, but almost all of that increase occurred in infrastructure financing that was part of a fiscal stimulus package, a non-regulatory activity. EPA, FY2010 BUDGET IN BRIEF, EPA-205-S-09-001, 8 (2009).

¹⁸⁹ See *supra* Part I.B.6.

¹⁹⁰ See *supra* Parts I.B.1, 2, 5.

¹⁹¹ See *supra* Part I.B.4.

¹⁹² See *supra* Part I.B.1.

2. *Byproduct of Delegation*

Regulatory overlap may arise because agencies have broad and ambiguously delineated jurisdictions.¹⁹³ The nature of legislative delegation to administrative agencies is such that the boundaries of agencies' jurisdictions often are unavoidably ambiguous. When Congress legislates, as it usually does, in a context of uncertain or incomplete information or of political conflict, it has an incentive to delegate broadly to agencies and then attempt to control the agencies through ex post oversight.¹⁹⁴ Broad delegations also give agencies flexibility to respond to changing regulatory environments.¹⁹⁵ Agencies may be created with a specific problem in mind, but problems change over time.¹⁹⁶ New issues arise that are plausibly associated with several different agencies' existing jurisdictions.¹⁹⁷ Multiple agencies may be able to claim that addressing a particular issue or performing a particular function enables them to address other core issues or perform other core functions more effectively.¹⁹⁸

As a result of these broad and ambiguous delegations, several different agencies may have plausible claims that an issue arises within their jurisdiction.¹⁹⁹ Even where agencies reach agreements that delineate their respective, mutually exclusive jurisdictions, such agreements cannot anticipate every scenario that may arise, and so sometimes fail to prevent overlap.²⁰⁰

Vapor intrusion is a good example of regulatory overlap that arose from broad and ambiguous delegations.²⁰¹ Although neither the EPA nor OSHA had clear statutory instruction to address vapor intrusion in workplaces, both agencies had a plausible claim that their existing authorities included regulating vapor intrusion—the EPA because environmental contamination covered under RCRA and CERCLA causes vapor intrusion, and OSHA because

¹⁹³ BENDOR, *supra* note 186, at 40-41; Jason Marisam, *Duplicative Delegations*, 63 ADMIN. L. REV. (forthcoming 2011) (manuscript at 10-11, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1702395).

¹⁹⁴ See Mathew D. McCubbins, *The Legislative Design of Regulatory Structure*, 29 AM. J. POL. SCI. 721, 736-37 (1985) (finding that Congress prefers that agencies take on the information costs up front and they put in ex post effort in dealing with errors).

¹⁹⁵ Marisam, *supra* note 193, at 11.

¹⁹⁶ *Id.* at 11-12.

¹⁹⁷ BENDOR, *supra* note 186, at 40-41; see also *id.* at 236 (“[R]edundancy typically results from the convergence of agencies originally established for different tasks.”).

¹⁹⁸ See *id.* at 41.

¹⁹⁹ See *id.* at 40.

²⁰⁰ *Id.* at 42.

²⁰¹ See *supra* Part I.B.6.

vapor intrusion poses a workplace hazard. Ironically, however, as has been noted above, the ambiguity of authority led both agencies to shy away from regulation.

Contrary to the delegation byproduct hypothesis, however, most of the EPA-OSHA case studies involve knowingly created, rather than inadvertent, redundancy. Under both the Clean Air Act Amendments of 1990 and TSCA, Congress specifically foresaw the possibility that its delegations would create regulatory overlap and planned for that possibility in the statute.

3. *Intentional Redundancy*

Congress may intentionally create overlapping regulatory jurisdictions. Despite the existence of substantial scholarship positing the potential benefits of regulatory overlap,²⁰² most scholars who have examined regulatory overlap in practice have asserted that Congress rarely intentionally creates regulatory overlap.²⁰³ In making this contention, these scholars have tended to focus on the lack of evidence that Congress has intentionally created regulatory overlap for the specific purposes of increasing reliability or inducing interagency competition.²⁰⁴ They presumably focus on these two purposes because these purposes are often mentioned in the theoretical literature as potential benefits of regulatory overlap.²⁰⁵ Insofar as their assertion is limited to the purposes of reliability or competition, the scholars may be correct, although it is notoriously difficult to read the tea leaves of legislative history to discern Congress's motivation for enacting legislation, and this difficulty is compounded when attempting to divine Congress's intention with respect to the relationship among statutes enacted in different legislative moments for different purposes. But the EPA-OSHA case studies make clear that Congress does intentionally create regulatory overlap among agencies. Moreover, it is at least a plausible inference from the legislative history that Congress did so in part

²⁰² See *infra* Part II.B.3.

²⁰³ See BENDOR, *supra* note 186, at 41 (arguing that "the intentional creation of redundancy [in regulatory jurisdiction] is quantitatively of small importance"); DAVID E. LEWIS, PRESIDENTS AND THE POLITICS OF AGENCY DESIGN: POLITICAL INSULATION IN THE UNITED STATES GOVERNMENT BUREAUCRACY, 1946-1947 7 (2003) (arguing that "most of the duplication, fragmentation, and overlap in the administrative state is not purposefully chosen to take auxiliary precautions or improve effectiveness via competition"); Marisam, *supra* note 193, at 9 (citing Bendor and Lewis to argue that "there is no evidence that Congress intends to trigger agency competition or build redundancies via duplicative delegations with any frequency").

²⁰⁴ See LEWIS, *supra* note 203, at 7; Marisam, *supra* note 193, at 9.

²⁰⁵ See *infra* Part II.B.3.

for the purposes of increasing reliability, inducing interagency competition, or both.

In the Clean Air Act Amendments of 1990, Congress specifically assigned EPA and OSHA similar, but not wholly duplicative, regulatory authority over chemical accidents.²⁰⁶ Congress perceived OSHA's existing regulatory program as inadequate, and recognized EPA's emerging expertise with chemical accidents through its EPCRTKA programs. But Congress also chose to preserve, and in fact enhance, OSHA's role in addressing chemical accidents. Thus, Congress made the deliberate judgment that the involvement of both agencies, despite and to some extent because of the jurisdictional overlap that would result, would lead to more effective regulation. Moreover, it is easy to believe that Congress intended the coordinated duplication that it mandated between the two agencies to mutually improve their regulatory efforts, although Congress did not explicitly cite the benefits of regulatory competition in its legislative history.

In TSCA, too, Congress explicitly recognized that the regulatory authority it was delegating to the EPA would overlap with other agencies' authorities. The legislative history of TSCA is replete with references to occupational risks from toxic substances,²⁰⁷ demonstrating that Congress must have understood that the EPA's authority under TSCA would overlap with OSHA's regulatory jurisdiction. As with the overlap Congress created in the Clean Air Act Amendments, the EPA's authority under TSCA did not merely duplicate other agencies' existing authorities over toxic substances. Congress believed that the holistic approach to toxic substance regulation under TSCA would fill significant gaps left by existing legislation.²⁰⁸ Moreover, Congress created specific interagency coordination mechanisms to avoid unnecessary duplication.²⁰⁹

The three explanations of regulatory overlap reviewed in the preceding sections—agency expansion, byproduct of delegation, and intentional overlap—are not necessarily incompatible or mutually exclusive. The agency expansion hypothesis, for example, explains overlap primarily in terms of the agency's motivation, whereas the byproduct of delegation and intentional overlap

²⁰⁶ See *supra* Part I.B.1.

²⁰⁷ See *supra* note 33 and accompanying text.

²⁰⁸ See *supra* note 101-03 and accompanying text.

²⁰⁹ See *supra* notes 100, 105-107 and accompanying text (discussing TSCA § 4(e), 15 U.S.C. § 2603(e), TSCA § 9(a), and 15 U.S.C. § 2608(a)).

hypotheses explain it primarily from the perspective of Congress. Both therefore could be correct. Congress could create overlap either unintentionally as a byproduct of delegation or intentionally, and agencies could assert their authority within an area of overlap as a means of expanding their regulatory jurisdictions. Moreover, there probably is some truth in each of the explanations, both because a single instance of overlap may arise for more than one reason, but also because regulatory overlap arises in a diversity of circumstances, and different hypotheses explain different instances of overlap. The EPA-OSHA case studies support this point. Both the agency expansion hypothesis and the intentional overlap hypothesis, for example, explain the EPA's and OSHA's overlapping authorities over chemical accidents. And each of the three hypotheses finds some support, albeit not equal support, among the EPA-OSHA case studies.

There is, however, something fundamental missing from these three hypotheses; an omission that seems to derive from their shared institutionalist perspective. Scholarship addressing questions of institutional design and regulatory organization tends to adopt an analytical approach that applies generically, without regard to the content of the law in question. Nothing about public choice theory's account of the characteristics of bureaucratic action and behavior, for example, is particular to the substance of any particular regulatory action.²¹⁰ Existing work addressing the causes and advantages of regulatory overlap follows this pattern. In some respects, this is an advantage. Broad, trans-substantive theory and analysis can be enormously powerful, and, to the extent agencies and other institutions act generically, tailoring the analysis to a particular institution or substantive area only obscures broader patterns. But the generic orientation of the existing scholarship has missed an important aspect of regulatory overlap: the relationship between the substance of the law and the assignment of regulatory responsibility, and in particular how the allocation of regulatory authority among agencies both reflects and affects the organization of the law. The following section addresses this missing link.

²¹⁰ Cf. STEARNS & ZYWICKI, *supra* note 175, at 340-67 (employing public choice theory to predict and explain agency behavior).

4. *Overlapping Legal Fields*

As the law develops, it acquires—or has imposed on it by jurists, lawyers, academics, and commentators—a conceptual architecture. The law could not function as an undifferentiated mass of mandates, but rather must have some organization to be useful. We organize and classify the law to understand it, and the common category into which we classify the law is the legal field and its sub-fields, on the premise that situations within a particular legal field share important characteristics that differentiate them from situations in other areas of law.²¹¹

Agencies, as the institutions to which Congress has delegated the responsibility of implementing its legislative commands, reflect our conceptual organization of the law. Accordingly, the jurisdictions of regulatory institutions tend to correspond to recognized legal fields. Thus, for example, Congress has for the most part assigned responsibility for administering education law within the federal government to the Department of Education, agriculture law to the Department of Agriculture, and—most relevant to this article—environmental law to the EPA and labor and employment law to the Department of Labor.²¹² Moreover, legal subfields tend to correspond to subcomponents within these broad institutions—for example, the Food and Drug Administration, within the Department of Health and Human Services, has primary authority over food and drug law. Given that agency jurisdictions tend to correspond to legal fields and sub-fields, it makes sense that, where agencies have overlapping regulatory jurisdictions, this manifests

²¹¹ See Todd S. Aagaard, *Environmental Law as a Legal Field: An Inquiry in Legal Taxonomy*, 95 CORNELL L. REV. 221, 226-29 (2010).

²¹² Both of these latter characterizations somewhat oversimplify. Several federal agencies other than EPA wield significant regulatory authority within the field of environmental law. See, e.g., Clean Water Act § 404, 33 U.S.C. § 1344 (2006) (assigning primary responsibility to the Department of Defense for regulation of discharges of dredged or fill material into navigable waters); Oil and Pollution Act § 1003, 33 U.S.C. § 2703 (2006) (assigning certain regulatory responsibilities to the Coast Guard). This is especially true if environmental law is construed to include natural resources law, which is primarily not within the EPA's jurisdiction. The Fish and Wildlife Service, within the Department of the Interior, and the National Marine Fisheries Service, within the Department of Commerce, for example, share primary regulatory authority under the Endangered Species Act of 1973. See, e.g., Endangered Species Act § 3, 16 U.S.C. § 1532(15) (2006). Several federal agencies outside of the Department of Labor regulate aspects of labor and employment law. See, e.g., 42 U.S.C. § 2000e-4 (2006) (creating the Equal Employment Opportunity Commission, an independent agency with responsibility to enforce certain employment-related civil rights statutes); 45 U.S.C. § 154 (2006) (creating the National Mediation Board, an independent agency charged with facilitating resolution of labor disputes within the airline and interstate railroad industries).

overlapping legal fields. To the extent that legal fields overlap, it would be odd if the jurisdictions of the agencies charged with administering those fields did not overlap.

The connection between the organization of the government and the organization of the law thus illuminates a parallel between the questions whether agencies should have overlapping regulatory jurisdiction and whether legal fields should overlap. Some theorists, including Peter Birks, have contended that a proper taxonomy of legal categories does not allow overlap between categories at the same level of generality,²¹³ such as legal fields. Emily Sherwin has expressed “doubt[]” about Birks’s position.²¹⁴ I have argued that, at least for public law, Birks’s position seems demonstrably wrong.²¹⁵ A legal field recognizes a meaningful characteristic pattern among situations that arise in the law. But such situations often present a variety of legally relevant characteristics that give rise to multiple incompletely overlapping patterns in the law. These various patterns each may form the basis for their own legal field, and a particular situation thus may be understood most thoroughly and completely by reference to all of the salient patterns that include the situation. To exclude from a legal field a situation that exhibits the pattern defining the field would be to render the field incomplete. Accordingly, overlapping legal fields are inevitable.

The EPA-OSHA regulatory overlap aptly illustrates the point, because the risk to workers exposed to toxic substances provides a good example of a problem that arises in two fields: environmental law and labor and employment law.²¹⁶ Occupational exposures to toxic substances fall within the boundaries of environmental law because they are essentially a localized form of pollution. Occupa-

²¹³ See, e.g., Peter Birks, *Unjust Enrichment and Wrongful Enrichment*, 79 TEX. L. REV. 1767, 1781 (2001) (“The test of the validity of a taxonomy is precisely the question of whether any item within its purview can appear in more than one category purportedly pitched at the same level of generality.”); see also Jay M. Feinman, *The Jurisprudence of Classification*, 41 STAN. L. REV. 661, 664 (1989) (“Every categorization implies a choice between categories, a decision that the case belongs in one place rather than another.”).

²¹⁴ Emily Sherwin, *Legal Positivism and the Taxonomy of Private Law*, in *STRUCTURE AND JUSTIFICATION IN PRIVATE LAW: ESSAYS FOR PETER BIRKS* 103, 123 (Charles Rickett & Ross Grantham eds., 2008).

²¹⁵ See Aagaard, *supra* note 211, at 250 (offering examples of legal issues that arise within the categories of both environmental law and bankruptcy law and both labor law and securities law).

²¹⁶ One could also frame the legal fields more narrowly—for example, toxic substances law, a subfield of environmental law, or occupational safety and health law, a subfield of labor and employment law.

tional exposures to toxic substances fall within the boundaries of labor and employment law because they involve conditions of employment that are relevant to the employer-employee relationship.

One could redefine the boundaries of either environmental law or labor and employment law so as to exclude occupational exposures to toxic substances from either field and thereby avoid overlap between the two fields. Indeed, industries regulated by OSHA and the EPA sometimes argue that OSHA—part of the Department of Labor, representing labor and employment law—should have exclusive authority over risks that arise from exposures within places of employment, and the EPA, representing environmental law, should regulate risks that arise from exposures outside of the workplace.²¹⁷

Although superficially tidy, however, such an approach would lose important benefits gained by treating the problem of occupational exposures to toxic substances as arising in both environmental law and labor and employment law. First, the regulation of occupational exposure to toxic substances benefits from the insights of both fields, and to ignore either field would be to ignore something fundamental about the problem, thereby missing significant insights into how to address it. For example, in considering whether and how occupational exposures to toxic substances should be regulated, we should consider how we regulate toxic substance pollution generally. This inquiry may be descriptive—for example, cataloging different regulatory mechanisms that have been used to protect the public health from risks posed by toxic substances, for the purpose of identifying options for regulating occupational exposures to toxic substances. Or, the inquiry may be normative—for example, determining the extent to which we have made a societal commitment to reducing risks from exposures to toxic substances generally, on the premise that our regulation of occupational exposures should be consonant with that commitment. We also have to consider, however, that occupational exposures occur within the context of the employment relationship. Understanding the employment relationship may help to answer legally relevant questions such as whether the employer or employee is in the best position to take responsibility for informing

²¹⁷ See, e.g., Inside Washington Publishers, *Reinvigorated OSHA Could Prompt Increased Cooperation with EPA*, INSIDE EPA 35 (Sept. 4, 2009), available at 2009 WLNR 17253632 (“EPA generally lacks authority to regulate within facilities, while OSHA is less focused on environmental contamination beyond the fenceline of industrial facilities.”).

employees of the hazards encountered in the workplace, or whether employees are being compensated for incurring risks in the workplace.

Moreover, agencies' jurisdictions correspond to their respective fields, each of which is associated with a particular mix of disciplinary skills and knowledge about the subject matter. Each agency acquires expertise relevant to its field through the experience of regulating in that field and for the purpose of regulating effectively in that field. The EPA hires staff with the skills necessary for environmental regulation and acquires personal and institutional familiarity with environmental issues. OSHA does the same with respect to occupational safety and health issues. To exclude a potentially relevant agency from regulating a problem, where the problem cuts across fields, therefore may exclude a realm of relevant expertise.²¹⁸ To the extent this difficulty could be overcome by giving agencies mutually exclusive jurisdictions but adding expertise outside their respective fields—for example, if OSHA builds expertise and resources in environmental regulation—this would duplicate regulatory programs, precisely the downside we would be attempting to avoid by eliminating agency overlap.

Second, each field requires the inclusion of occupational risks from toxic substance exposure to remain conceptually integral. Omitting occupational risks from environmental law would ignore a significant pathway for human exposure to toxic substances. Some of the most important benefits from innovations in equipment and processes that reduce emissions of toxic substances are the reductions in risks to workers. The purpose of the Toxic Substances Control Act (TSCA)²¹⁹ is to regulate chemical substances and mixtures so that they “do not present an unreasonable risk of injury to health or the environment.”²²⁰ Workplace exposure to toxic substances is a significant exposure pathway, and omitting workplace exposures from consideration would be to ignore a potentially significant portion of the aggregate risks posed by toxic substances. Omitting workplace toxic substances exposures from labor and employment law, on the other hand, would ignore a significant aspect of the employment relationship for those workers

²¹⁸ Cf. *Pension Benefit Guar. Corp. v. LTV Corp.*, 496 U.S. 633, 646 (1990) (“[B]ecause the PBGC can claim no expertise in the labor and bankruptcy areas, it may be ill equipped to undertake the difficult task of discerning and applying the ‘policies and goals’ of those fields.”).

²¹⁹ 15 U.S.C. §§ 2601-2695d (2006).

²²⁰ TSCA § 2(b)(3), 15 U.S.C. § 2601(b)(3) (2006).

exposed. The employee's right to a safe workplace is a fundamental component of the employer-employee legal relationship,²²¹ and exposure to hazardous substances is an important component of safety in the workplace.

Third, the boundaries of occupational hazards are not easily circumscribed in a way that allows them to be cabined into a single field. Workplace hazards may, for example, pose risks to persons other than just workers. Schools, hospitals, and stores are populated by workers and by non-workers such as students, patients, and customers. Toxic substances also may be carried out of the workplace. Workplace accidents involving toxic substances can injure both workers and people in the surrounding area,²²² and some family members of workers exposed to asbestos have developed mesothelioma, apparently because the workers brought home asbestos fibers on their clothing.²²³ Workplace exposures also may be just one of several exposure pathways for a particular individual; a worker may be exposed to a toxic substance both at work and at home.

Thus, as the problem of occupational exposures to toxic substances illustrates, issues arise in the law that fall within multiple legal fields. Because the organization of our government understandably reflects the organization of our laws, the existence of a policy problem that cuts across legal fields should create an expectation that at least two regulatory agencies will have, and should have, jurisdiction over the problem. This is not to say that regulatory organization follows naturally from the law, just as the law does not naturally organize itself conceptually. In each case, how we organize is a social construct over which we exercise choice. But to ignore the link between the substance of what is being regulated and the choice of regulatory institution is to miss something fundamental about the institutional choice.²²⁴

²²¹ See OSH Act § 2, 15 U.S.C. § 651(b) (2006) ("The Congress declares it to be its purpose and policy . . . to assure so far as possible every working man and woman in the Nation safe and healthful working conditions . . .").

²²² See, e.g., Denise Malan, *Refinery Audits Concern Union*, CORPUS CHRISTI CALLER-TIMES, Dec. 11, 2009, at A1, available at 2009 WLNR 26256800 (noting concerns over possible refinery accidents that can release vapor clouds that endanger refinery workers and surrounding communities).

²²³ Agency for Toxic Substances and Disease Registry, *Asbestos: Health Effects*, http://www.atsdr.cdc.gov/asbestos/asbestos/health_effects/index.html (last visited June 24, 2010) ("Cases of mesotheliomas have been reported after household exposure of family members of asbestos workers . . .").

²²⁴ The idea that the substance of the law matters to institutional choice is not entirely absent from organizational and institutional theory, although it seems not to have infil-

B. Is Regulatory Overlap Beneficial?

Existing scholarship addressing regulatory overlap has focused on identifying the benefits and costs of regulatory overlap. In essence, this scholarship seeks to answer the question of whether giving agencies overlapping jurisdictions makes the agencies' policies better or worse. This Part briefly reviews and summarizes the arguments that have been made on each side of this question, drawing on the EPA-OSHA case studies to evaluate each argument. It then contends that existing arguments have missed an important benefit that regulatory overlap can provide in allowing agencies to increase the coherence of the law by smoothing statutory discontinuities.

1. Disadvantages

Longstanding conventional wisdom holds that regulatory overlap entails waste and therefore should be eliminated whenever found.²²⁵ A standard prescription in efforts toward regulatory reform, for example, is to rid the government of duplicative agency programs.²²⁶ Criticisms of regulatory overlap can be classified into four main categories: duplication, conflict, coordination, and complexity.

trated the work that specifically addresses regulatory overlap. Within institutional design, team theory highlights the relevance of complementarities of function in deciding whether functions should be coordinated or administered independently. See David A. Weisbach & Jacob Nussim, *The Integration of Tax and Spending Programs*, 113 YALE L.J. 955, 988-97 (2004). Where functions are complementary, there are likely to be benefits from coordinating those functions, such as by delegating them to a single agency or component. *Id.* As Weisbach and Nussim note, assessing functional complementarity with any specificity can be very difficult. *Id.* at 997. One of Weisbach and Nussim's contributions is to identify potential complementarities across functions that are not generally grouped conceptually—in their case, tax programs and welfare programs. Such innovative groupings are not, however, the dominant pattern in institutional design of the federal government. Agency jurisdictions overwhelmingly correspond to recognized legal fields and sub-fields, consistent with the intuition that complementarities among government programs tend to track our conceptual organization of the law. An exciting implication of Weisbach and Nussim's work is that complementarity across seemingly diverse functions perhaps should lead us to reconsider not only the organization of our government institutions, but also our conceptual organization of the law. See *id.* at 1028. Thus, the institutional organization of regulatory authority may affect, and not just reflect, the conceptual organization of substantive law.

²²⁵ See, e.g., sources cited *supra* note 6.

²²⁶ See, e.g., 5 U.S.C. § 901(a) (2006); Statutory Pay-As-You-Go Act of 2010, Pub. L. No. 111-139, § 21, 124 Stat. 8; U.S. Chamber of Commerce, U.S. Chamber Center for Capital Markets Competitiveness Regulatory Reform Principles 3 (Nov. 2008), available at http://otrans.3cdn.net/a45dc7e6eff942fe2e_6bm6iy4dl.pdf (calling for “[e]limination of [r]egulatory [d]uplication” in financial regulation).

Duplication

The traditional criticism of regulatory overlap asserts that it leads to duplication that wastes government resources.²²⁷ In 1922, for example, Francis W. Coker argued for consolidating agency programs on the ground that “[n]o serious exception can be taken” to “the principle of economy: save money and effort by eliminating duplication and overlapping of activity; save both in overhead expense and in clerical, inspectional, and other subordinate work, by bringing together into one large department agencies performing closely similar and closely interrelated functions.”²²⁸ Similar ideas persist today.²²⁹ Even if regulatory overlap has some benefits and therefore does not entirely waste government resources, it still costs more to administer overlapping programs than to run a single consolidated program.²³⁰

Conflict

In addition to targeting overlap on the ground that it creates waste, analysts and scholars have noted other problems. Giving multiple agencies jurisdiction to regulate in the same area creates opportunities for conflicting regulations.²³¹ Regulations that do not directly conflict—i.e., it is possible to comply with both sets of regulations—still may regulate inconsistently or work at cross-purposes.²³² Regulations that conflict or work inconsistently create

²²⁷ See, e.g., Calvin L. Streeter, *Redundancy in Organizational Systems*, 66 SOC. SERV. REV. 97, 103 (1992) (“Arguments against redundancy are generally based on the belief that duplication is a waste of precious resources and that, as good stewards, managers and planners should strive to eliminate all forms of redundancy.”).

²²⁸ F.W. Coker, *Dogmas of Administrative Reform: As Exemplified in the Recent Reorganization in Ohio*, 16 AM. POL. SCI. REV. 399, 408 (1922).

²²⁹ See, e.g., Frank D’Souza et al., *Illuminating the Need for Regulation in Dark Markets: Proposed Regulation of the OTC Derivatives Market*, 12 U. PA. J. BUS. L. 473, 514-15 (2010) (arguing in favor of a single regulatory body with authority to regulate credit derivatives on the ground, inter alia, that it would eliminate “redundancies and duplicative oversight” that result from the current allocation of responsibility to both the Securities and Exchange Commission and the Commodity Futures Trading Commission); John Yoo, *Administration of War*, 58 DUKE L.J. 2277, 2305-06 (2009) (“Centralization can save significant resources by eliminating duplicative redundancies . . .”); see also sources cited *supra* note 6.

²³⁰ See Ahdieh, *supra* note 1, at 897.

²³¹ See COMPTROLLER GENERAL OF THE UNITED STATES, NO. PAD-77-34, GOVERNMENT REGULATORY ACTIVITY: JUSTIFICATIONS, PROCESSES, IMPACTS, AND ALTERNATIVES 45 (1977) (offering, as an example of conflicting regulations, an OSHA regulation requiring “that the floors of a meat processing plant be rough in order to reduce the danger of accidental falls,” and an Animal and Plant Health Inspection Service regulation requiring “that the floors be smooth so that they can be sanitized”).

²³² See, e.g., S. COMM. ON GOVERNMENTAL AFFAIRS, *supra* note 3, at 4 (noting that processing vegetable beef soup, which the Department of Agriculture regulated, required the presence of a government inspector but processing vegetable soup, which the Food and

incoherence, undermine each other's effectiveness, and increase compliance burdens on the targets of regulation.

Coordination

Even where overlapping regulatory jurisdictions do not lead to actually duplicative, conflicting, or inconsistent regulation, they necessitate interagency coordination to avoid such problems.²³³ That coordination, whether formal or informal, costs the agencies time and resources.²³⁴ The necessity of coordination also may hinder beneficial changes in policy.²³⁵

Complexity

Overlapping regulatory jurisdictions also may increase the complexity of regulation,²³⁶ resulting in confusion and uncertainty.²³⁷ Indeed, just the fact that applicable regulations originate and are administered and enforced by multiple regulators increases the burden of compliance on the target of the regulations.²³⁸ The complexity of shared jurisdiction also makes it difficult for the public or Congress to monitor and to hold anyone accountable for an area of regulation.²³⁹ Regulatory overlap thus may lead each regulator to shirk—that is, to reduce its attentiveness to problems that arise within an area of overlapping jurisdiction.²⁴⁰ This creates a regulatory commons that incentivizes agencies to free-ride on the efforts of other regulators who also can share the blame for any regulatory failures.²⁴¹

Drug Administration regulated, did not); see also *id.* at 5 (noting that safety standards may encourage the production of larger cars but environmental standards may encourage the production of smaller cars).

²³³ See Exec. Order No. 12,291, 46 Fed. Reg. 13,193, 13,193 (Feb. 17, 1981).

²³⁴ See, e.g., Brian D. Shannon, *Debarment and Suspension Revisited: Fewer Eggs in the Basket?*, 44 CATH. U. L. REV. 363, 385 n.104 (1995).

²³⁵ See S. COMM. ON GOVERNMENTAL AFFAIRS, *supra* note 3, at 5.

²³⁶ See *id.* at 6.

²³⁷ See Ahdieh, *supra* note 1, at 897; William W. Buzbee, *Contextual Environmental Federalism*, 14 N.Y.U. ENVTL. L.J. 108, 126 (2005).

²³⁸ See Robert A. Schapiro, *Toward a Theory of Interactive Federalism*, 91 IOWA L. REV. 243, 290-91 (2005).

²³⁹ See S. COMM. ON GOVERNMENTAL AFFAIRS, *supra* note 3, at 5; Ahdieh, *supra* note 1, at 897; see also Buzbee, *supra* note 237, at 126; Schapiro, *supra* note 238, at 291.

²⁴⁰ See Ahdieh, *supra* note 1, at 897-98; Buzbee, *supra* note 236, at 126; Anne Joseph O'Connell, *The Architecture of Smart Intelligence: Structuring and Overseeing Agencies in the Post-9/11 World*, 94 CAL. L. REV. 1655, 1680 (2006); Michael M. Ting, *A Strategic Theory of Bureaucratic Redundancy*, 27 AM. J. POL. SCI. 274, 275 (2003).

²⁴¹ See Ahdieh, *supra* note 1, at 897-98; Buzbee, *supra* note 237, at 126; Ting, *supra* note 240 at 275.

2. Counterarguments

The EPA-OSHA case studies suggest that the criticisms of regulatory overlap may overstate its costs in several respects.

First, regulatory overlap does not necessarily entail duplicative regulation. The EPA and OSHA, despite their overlapping regulatory authority over occupational hazards from hazardous substances, have avoided overlapping regulation. Where one agency has regulated, the other has tended to refrain. Thus, OSHA's asbestos worker protection standards and the EPA's asbestos worker protection standards are mutually exclusive: OSHA's apply to employers covered by the OSH Act, and the EPA's apply to state and local government employers excluded from the OSH Act.²⁴² Similarly, in addressing the problem of vapor intrusion, the EPA asked OSHA to clarify its regulatory jurisdiction over vapor intrusion before the EPA determined whether it should address vapor intrusion in workplaces.²⁴³ Even where the two agencies have actively regulated the same subject matter, such as in the area of chemical accidents, their regulations are not wholly duplicative. Differences between the two agencies' programs reflect their different expertise and regulatory missions.²⁴⁴ The EPA's risk management regulations focus on addressing threats to public health and the environment, and OSHA's process safety standards focus on addressing threats to worker safety. To be sure, such overlap is not wholly unproblematic. Any overlap in agencies' regulatory programs probably costs more than if an area were put within the purview of a single agency, especially where both agencies are actively regulating within the same area. But where, as with the EPA and OSHA, the two agencies manage their overlap to minimize duplication, few resources are wasted.

Second, the EPA and OSHA have managed through coordination to avoid conflicts and inconsistencies in their regulations, as

²⁴² See *supra* Part I.B.2.

²⁴³ See *supra* Part I.B.6.

²⁴⁴ See *supra* Part I.B.1; cf. S. COMM. ON GOVERNMENTAL AFFAIRS, *supra* note 3, at 5 (noting that regulatory overlap may be useful where agencies are "considering separate aspects of a problem" or collecting information "for different purposes"); John M. Kamen-sky, Eliminating Government Program Duplication and Overlap (Aug. 5, 2010), *available at* <http://www.businessofgovernment.org/blog/eliminating-government-program-duplication-and-overlap> (opining that some identified instances of regulatory duplication and overlap are "superficial and a political sound bite," because, for example, programs "have different target populations and different goals").

well as to minimize complexity by harmonizing their regulations.²⁴⁵ In fact, where appropriate, the agencies have readily adopted each other's regulatory standards to maximize consistency across their programs. The EPA's risk management regulations adopt the requirements of OSHA's process safety standard, except to the extent their regulatory objectives and statutory mandates differ, so that compliance with OSHA's standard usually satisfies the EPA's requirements as well.²⁴⁶ The EPA's asbestos worker protection regulations incorporate OSHA's standards by reference.²⁴⁷ The EPA's New Chemical Exposure Limits (NCELs) apply only until OSHA issues a Permissible Exposure Limit (PEL) for the chemical in question, at which time the new PEL automatically displaces the existing NCEL.²⁴⁸

Third, at least with respect to these case studies, the EPA and OSHA appear to have coordinated their programs effectively without allowing coordination to become unduly costly. Agencies such as the EPA and OSHA with overlapping jurisdictions must coordinate their programs to avoid conflict and inconsistencies, and coordination costs resources. But coordination among government programs is not unique to interagency relationships; any new government regulation requires coordination to avoid conflicts and inconsistencies with existing regulatory requirements. As an example, when the EPA's Office of Pollution Prevention and Toxics addresses a toxic air emission, it should coordinate with the EPA's Office of Air. Even within a single area—pesticide regulation for example—the EPA's Office of Pesticide Programs should coordinate to ensure that regulatory action against one pesticide does not induce use of a more hazardous substitute. Thus, consolidating programs within a single agency would not obviate the need for coordination, and coordination is not unique to regulatory overlap.

Moreover, the case studies demonstrate that coordination does not necessarily require extensive direct communication. For many of the case studies, the EPA and OSHA effectively coordinated with each other indirectly by considering the other agency's regulatory activities so that the two agencies' regulatory programs were compatible or even synergistic, but without detailed direct communication. For example, the EPA has designed its program for regu-

²⁴⁵ Ahdieh, *supra* note 1, at 895 (suggesting that interactions among agencies with concurrent regulatory authority can lead to some integration of regulatory approaches).

²⁴⁶ See *supra* Part I.B.1.

²⁴⁷ See *supra* Part I.

²⁴⁸ See *supra* Part I.B.5.

lating occupational exposures to new chemicals to coordinate with OSHA's program.²⁴⁹ The EPA uses the same basic regulatory tools that OSHA's programs utilize: personal protection equipment, hazard communication, and inhalation exposure limits. The EPA's standards for the new chemical apply only until OSHA issues its own standards for the chemical. The EPA also uses analytical methods similar to OSHA's. The EPA's and OSHA's programs thereby maintain consistency and avoid unnecessary duplication without extensive ongoing direct communication between the two agencies.²⁵⁰

Fourth, as noted, the EPA and OSHA have managed through coordination to minimize complexity by harmonizing their regulations as much as possible. Indeed, the two agencies have coordinated and harmonized their overlapping regulatory programs to such an extent that they seem to have adopted in practice an informal presumption in favor of harmonization, maintaining differences between their programs only where appropriate to reflect differences in their missions. Thus, to the extent the EPA-OSHA overlap generates additional regulatory complexity, it reflects the complexity of the issues the two agencies are addressing rather than complexity the agencies are adding. Robert Ahdieh has argued that one of the advantages of interdependent, overlapping regulatory programs is that they acknowledge the multiple, or at least multifaceted, conceptual identities of some subjects of regula-

²⁴⁹ See *supra* Part I.B.5.

²⁵⁰ Formal and detailed coordination, by contrast, can be quite costly in terms of time and resources. The EPA and OSHA have made relatively infrequent use of TSCA's inter-agency coordinating mechanisms—interagency testing rules under TSCA § 4 and inter-agency referrals under TSCA § 9—and the uses they have made have involved extraordinarily lengthy processes. See *supra* Part I.B.3, 4. Perhaps for this reason, the formal ongoing coordination contemplated in TSCA has played less of a role in how the EPA and OSHA have managed their jurisdictional overlap than Congress probably anticipated when it enacted TSCA.

tion.²⁵¹ Concurrent regulation thus can be “a regulatory regime suited to multiplicity and complexity.”²⁵²

3. *Advantages*

Despite the predominance of opinions against regulatory duplication and overlap, some work has challenged the assumption that regulatory overlap is a pathology, arguing that, to the contrary, regulatory overlap can be beneficial.²⁵³ Arguments in favor of regulatory overlap have posited that delegating concurrent or overlapping regulatory authority to more than one agency can increase reliability and encourage policy innovation.

Reliability

Bureaucratic redundancy can increase reliability. In a landmark 1969 article, political scientist Martin Landau noted that in applications such as engineering and verbal communication, redundancy can reduce error.²⁵⁴ Commercial aircraft have redundant systems to increase the chance that, if one of the plane's components fails, the aircraft can continue to fly.²⁵⁵ In communication, people artic-

²⁵¹ Ahdieh, *supra* note 1, at 884. Ahdieh's work examines what he calls “dialectical regulation,” which relates to regulatory overlap. Ahdieh identifies a continuum of “cross-jurisdictional interaction among regulatory entities.” *Id.* at 863. The least extensive interaction is merely “dialogic,” and occurs when “regulatory institutions with related missions engage one another to exchange information, share ideas, and otherwise learn from each other.” *Id.* at 863-64. More extensive interactions occur among regulatory institutions with overlapping regulatory jurisdictions. *Id.* at 864. The most extensive interactions arise among institutions with overlapping jurisdictions and regulatory dependence, which Ahdieh defines as circumstances in which “each agency's pursuit of its mandate is shaped—in a non-trivial fashion—by the other entity's acts of commission or omission.” *Id.* at 865; *see also id.* at 899. The agencies' mutual interdependence induces heightened, recurrent interaction that intermingles conflict and cooperation. *Id.* at 865, 906. The essence of Ahdieh's dialectic regulation is regulatory institutions that must interact because they are interdependent, but lack the power to coerce the other. At its greatest extent, such interaction can lead to joint regulation in which “discrete sets of regulatory rules may collapse into a collective whole.” *Id.* at 865.

²⁵² *Id.* at 884.

²⁵³ *See* LEWIS, *supra* note 203 (commenting that it has become “somewhat controversial in modern public administration to argue that duplication and overlapping responsibilities are necessarily bad”).

²⁵⁴ Martin Landau, *Redundancy, Rationality, and the Problem of Duplication and Overlap*, 29 PUB. ADMIN. REV. 346, 346-51 (1969); *see also, e.g.*, Dan S. Felsenthal, *Applying the Redundancy Concept to Administrative Organizations*, 40 PUB. ADMIN. REV. 247, 247 (1980) (describing Landau as having “first alerted administrative scientists to the benefits of redundancy and overlap in administrative organizations”); C.F. Larry Heimann, *Understanding the Challenger Disaster: Organization Structure and the Design of Reliable Systems*, 87 AM. POL. SCI. REV. 421, 421 (1993) (noting that Landau's article was “breaking with conventional wisdom,” and hailing it as “a particularly important contribution”).

²⁵⁵ Landau, *supra* note 254, at 346.

ulate their ideas in multiple ways to clarify their expression, increasing the likelihood that they will be correctly understood.²⁵⁶ Landau argued that redundancy can play a similar role in public administration, increasing the reliability of governmental organizations by decreasing the risk that a particular error or other breakdown in function will doom an entire endeavor.²⁵⁷ Landau noted that the American system of government is replete with examples of redundancy, such as bicameral legislatures.²⁵⁸ Landau thus argued that redundancy in public administration can serve the useful purpose of “suppress[ing] error.”²⁵⁹

Other public administration scholars, building on Landau’s work, developed a more sophisticated characterization of institutional failures against which to evaluate whether and how redundancy can increase reliability.²⁶⁰ Landau had described reliability as if it were a two-state condition: agencies either succeed or fail. But reliability is a three-state condition: agencies can succeed, fail by implementing a bad policy (Type I error), or fail by not acting when they should have acted (Type II error).²⁶¹ Moreover, efforts to reduce one type of error often increase the risk of the other type of error.²⁶² An agency can reduce its risk of implementing a bad policy by arranging its components so that each component must

²⁵⁶ *Id.* at 347.

²⁵⁷ *Id.* at 354-55. Numerous scholars in political science, public administration, and law have since echoed Landau’s argument. See, e.g., Ahdieh, *supra* note 1, at 887; Buzbee, *supra* note 237, at 126; O’Connell, *supra* note 240, at 1678; Robert A. Schapiro, *From Dualism to Polyphony*, in *PREEMPTION CHOICE: THE THEORY, LAW, AND REALITY OF FEDERALISM’S CORE QUESTION* 33, 44 (William W. Buzbee ed., 2009); Schapiro, *supra* note 238, at 289-90.

²⁵⁸ Landau, *supra* note 254, at 351 (“For the charter of the national system is a patent illustration of redundancy. Look at it: separation of powers, federalism, checks and balances, concurrent powers, double legislatures, overlapping terms of office, the Bill of Rights, the veto, the override, judicial review, and a host of other similar arrangements.”).

²⁵⁹ *Id.* at 356. A 1977 Congressional study of regulatory organization found some support for Landau’s argument, concluding that “a certain degree of ‘redundancy’ is not only natural, but also necessary for sound regulatory administration,” S. COMM. ON GOVERNMENTAL AFFAIRS, *supra* note 3, at 6 (citing Landau, *supra* note 254, at 346), and that, “in certain instances this redundancy has reduced errors, . . . [and] resulted in greater reliability for the system as a whole.” *Id.*

²⁶⁰ BENDOR, *supra* note 186, at 50; Heimann, *supra* note 254; Calvin L. Streeter, *Redundancy in Organizational Systems*, 66 SOC. SCI. REV. 97 (1992).

²⁶¹ The distinction between Type I errors and Type II errors originated in statistics, where it is commonly used. See, e.g., FREDERICK J. GRAVETTER & LARRY B. WALLNAU, *STATISTICS FOR THE BEHAVIORAL SCIENCES* 243-44 (8th ed. 2009). A Type I error rejects a hypothesis that is true, and a Type II error does not reject a hypothesis that is false. *Id.*

²⁶² BENDOR, *supra* note 186, at 50; Heimann, *supra* note 254, at 422-23; Streeter, *supra* note 260, at 108-09.

agree to a decision.²⁶³ But this increases the risk that the agency will take no action at all when some action is warranted.²⁶⁴ Conversely, an agency can reduce its risk of not acting when action is warranted by arranging its components so that there are multiple possible paths to action.²⁶⁵ But this increases the risk that the agency will implement a bad policy.²⁶⁶ Each form of redundancy reduces the risk of one type of error but increases the risk of the other type of error.²⁶⁷ An agency can reduce both types of errors only by adding both types of redundancies, but agencies have limited resources.²⁶⁸ Optimal reliability therefore often requires the agency to choose between the two types of redundancies, and in doing so to choose which type of error it wants to minimize, reflecting its relative concern for inaction versus inappropriate action.²⁶⁹

Political dynamics introduce an additional means by which redundancy may increase reliability. Jurisdictional overlap creates a “regulatory safety net.”²⁷⁰ If a particular interest group exerts undue influence over a regulator, inducing it to act ineffectively—in other words, regulatory capture—other regulators are available to take effective action. From the perspective of the interest groups, regulatory authority dispersed across multiple agencies may make it more difficult to influence policy, because they have to target more decisionmakers.²⁷¹ From the perspective of agencies, dispersed regulatory authority makes it more difficult to

²⁶³ Heimann, *supra* note 254, at 426.

²⁶⁴ *Id.*

²⁶⁵ *Id.* at 427.

²⁶⁶ *Id.*

²⁶⁷ *Id.* (“[T]here is a[n] inverse relationship between the reliabilities of series and parallel systems.”); *see also* Streeter, *supra* note 260, at 109 (noting “the trade-offs between the errors”).

²⁶⁸ Heimann, *supra* note 254, at 427.

²⁶⁹ *Cf.* BENDOR, *supra* note 186, at 52 (“Redundancy becomes a political issue when there is no agreement on the weighting of the error types.”). Several legal scholars writing on issues related to federalism have argued that regulatory overlap—in their situation, between federal and state regulators—can improve regulatory policies. These arguments start from the dual premises that political and legal forces operating on regulatory institutions create incentives for underregulation and that underregulation carries high costs. Regulatory overlap is useful, in these accounts, insofar as it reduces deleterious incentives for underregulation. In other words, these federalism scholars implicitly weigh the danger of regulatory inaction over the danger of erroneous action.

²⁷⁰ Kirsten H. Engel, *Harnessing the Benefits of Dynamic Federalism in Environmental Law*, 56 EMORY L.J. 159, 178-79 (2006).

²⁷¹ Neal Kumar Katyal, *Internal Separation of Powers: Checking Today’s Most Dangerous Branch from Within*, 115 YALE L.J. 2314, 2325 (2006); O’Connell, *supra* note 240, at 1677; *see also* Engel, *supra* note 270, at 178-79 (making a similar argument with respect to dispersing authority between federal and state governments).

respond favorably to interest group pressure, because each agency shares control over overall policy with other agencies.²⁷²

Policy Innovation

Allowing multiple regulators to work within the same area promotes policy innovation by facilitating experimentation and productive competition. Martin Landau noted that, in addition to allowing an organization to increase reliability, redundancy “permits several, and competing, strategies to be followed both simultaneously and separately,”²⁷³ thereby “generat[ing] alternate routes of action.”²⁷⁴ Moreover, regulators with overlapping jurisdictions can compete with each other and learn from each other’s experimentation.²⁷⁵ This competition is enhanced to the extent that different agencies adopt different viewpoints and perspectives.²⁷⁶ Even where one regulator is in a better position to regulate, if another regulator takes action this may induce the “optimal” regulator to action.²⁷⁷ “Thus, overlapping jurisdiction may be pivotal to encouraging the more appropriate level [or agency] of government to respond to a given problem.”²⁷⁸

* * *

The EPA and OSHA, despite their significantly overlapping jurisdictions, have little redundancy in their regulations. This may mean that the two agencies are missing some of the potential benefits of redundancy in terms of increased reliability and improved policy innovation. But avoiding redundancy also allows the agencies to avoid redundancy’s downsides, such as waste, conflict, and inconsistency.

The paucity of purely redundant regulation between the EPA and OSHA is not surprising. Because redundancy is so closely

²⁷² See Jean-Jacques Laffont & David Martimort, *Separation of Regulators Against Collusive Behavior*, 30 RAND J. ECON. 232 (1999).

²⁷³ Landau, *supra* note 254, at 355.

²⁷⁴ *Id.* at 356; see also, e.g., Engel, *supra* note 270, at 182-83.

²⁷⁵ Ahdieh, *supra* note 1, at 889; William W. Buzbee, *Contextual Environmental Federalism*, 14 N.Y.U. ENVTL. L.J. 108, 121-22 (2005); Robert A. Schapiro, *From Dualism to Polyphony*, in PREEMPTION CHOICE: THE THEORY, LAW, AND REALITY OF FEDERALISM’S CORE QUESTION 33, 34, 43-44 (William W. Buzbee ed., 2009); Schapiro, *supra* note 238, at 288-90.

²⁷⁶ Katyal, *supra* note 271, at 2324; O’Connell, *supra* note 240, at 1676-78; cf. Nancy Staudt, *Redundant Tax and Spending Programs*, 100 Nw. U. L. REV. 1197, 1227-28 (2006) (arguing that the overlapping jurisdictions of congressional committees “allow a range of legislators to bring their knowledge and skill to the policy problem” and “allow Congress to test different theories and enable Congress to try different solutions to cure the problem”).

²⁷⁷ Engel, *supra* note 270, at 177-78.

²⁷⁸ *Id.* at 177.

associated with waste and inefficiency, purely redundant regulation creates an easy political target that can tarnish an agency's reputation and impeach the credibility of its regulatory initiatives. Moreover, both the OSH Act and TSCA contain provisions that might limit purely redundant regulation,²⁷⁹ and the Office of Management and Budget likely would prevent the issuance of purely redundant regulation. Thus, to the extent that critics of regulatory overlap argue that overlapping authority is likely to result in unnecessarily redundant regulation, the EPA-OSHA case studies suggest that such fears may be unwarranted.

At least in the abstract, however, one might expect that some overlapping but non-redundant regulation would be constructive. The dearth of such regulation in the case studies may suggest that the agencies act somewhat overcautiously as to their jurisdictional overlap. Alternatively, it may indicate that overlapping regulation generally is not advantageous even when it is not redundant, especially where the overlapping agencies would regulate from similar methodological perspectives with similar goals.

Unlike criticisms of regulatory overlap, which tend to characterize all regulatory overlap as detrimental, arguments in favor of regulatory overlap do not assert that it is universally beneficial. Scholars who advance arguments in favor of regulatory overlap acknowledge that it can have potential drawbacks, citing the same factors invoked by arguments against regulatory overlap.²⁸⁰ Nevertheless, they argue that regulatory overlap can be managed so that it enhances, rather than reduces, regulatory effectiveness. The challenge, then, is how to organize regulatory systems to effectuate the potential advantages of overlap while avoiding its potential disadvantages²⁸¹—that is, “to minimize its downsides . . . and enhance its upsides.”²⁸²

Given the strong disincentives and obstacles for agencies to regulate redundantly, the normative value of regulatory overlap may depend on whether there are ways for agencies to use overlapping authorities to regulate coherently and thoroughly without duplication. Finding an opportunity to do so may minimize overlap's

²⁷⁹ OSH Act § 4(b)(1), 29 U.S.C. § 653(b)(1) (2006); TSCA § 9(a)(1), 15 U.S.C. § 2608(a)(1) (2006).

²⁸⁰ See Buzbee, *supra* note 237, at 127; Engel, *supra* note 270, at 162; Schapiro, *supra* note 238, at 244.

²⁸¹ Schapiro, *supra* note 238, at 292.

²⁸² Engel, *supra* note 270, at 162.

downsides and enhance its upsides. The problem of statutory discontinuities offers just such an opportunity.

4. *Smoothing Statutory Discontinuities.*

This Article earlier suggested that regulatory overlap should be expected even in a perfectly ordered system of statutes and clear delegations to agencies, because some areas of regulation cut across legal fields and therefore across agencies' jurisdictions as well.²⁸³ We do not, however, have a perfectly ordered statutory system, but rather a body of statutory law that is rife with discontinuities that undermine the law's coherence and rationality. Regulatory overlap can serve an important beneficial function for smoothing over statutory discontinuities, an advantage of regulatory overlap that has gone unrecognized in the existing scholarship.

When legislatures make law by enacting statutes, they create discontinuities, both within and between statutes. Discontinuities arise when the law prescribes different outcomes for functionally identical or similar situations. Thus, not all instances of differential treatment are discontinuities. Discontinuities refer to those differences that lack coherence—that is, legal distinctions that are without functional differences.

Sometimes Congress may intentionally create discontinuities for political reasons.²⁸⁴ In other cases, Congress may act unintentionally. Congress may not have been paying attention to a particular problem, especially if it was acting in a hurry.²⁸⁵ Or Congress may repeatedly amend a statute, “inadvertently creat[ing] discontinuities among the final provisions.”²⁸⁶

The likelihood of discontinuities is even greater when one looks to the interfaces of multiple statutes. Different statutes arising at different legislative moments and with different orientations tend to prescribe different regulatory responses to similar situations.²⁸⁷

²⁸³ See *supra* Part II.A.4.

²⁸⁴ For example, reflecting the power of the agricultural lobby, Congress has carved several important exceptions for agriculture out of the Clean Water Act. See J.B. Ruhl, *Farms, Their Environmental Harms, and Environmental Law*, 27 *ECOLOGY L.Q.* 263, 293-304 (2000).

²⁸⁵ See Robin Kundis Craig, *The Stevens/Scalia Principle and Why It Matters: Statutory Conversations and a Cultural Critical Critique of the Strict Plain Meaning Approach*, 79 *TUL. L. REV.* 955, 999 (2005).

²⁸⁶ *Id.* at 998.

²⁸⁷ For example, the Rivers and Harbors Appropriations Act of 1899, ch. 425, 30 Stat. 112 (codified at 33 U.S.C. §§ 401-467), often called the Refuse Act, prohibits the discharge into navigable waters of “any refuse matter of any kind or description whatever,” but specifically exempts substances “flowing from streets and sewers and passing therefrom in a

These discontinuities may be trifles—negligible in importance, in the magnitude of the differences, or both—or they may pose significant conflicts, such as when two statutes seem to lead to contradictory results.²⁸⁸

Statutory discontinuities are especially troublesome when they lie at the juncture of statutes assigned to different administrative agencies. Sometimes the discontinuities may take the form of gaps, in which no agency has authority to address a problem.²⁸⁹ Other times, the discontinuities may take the form of overlap, where multiple agencies have differing authority.²⁹⁰ Consistent with the predominant view of regulatory overlap, discontinuities leading to overlap create a possibility of regulatory dysfunction, with uncoordinated agencies working at cross-purposes. The EPA-OSHA case studies, however, suggest that in situations of overlap there exists the possibility of regulatory synergy rather than dysfunction, whereby the relevant agencies, each within its own statutory authority, stitch together consistent and mutually compatible—even mutually reinforcing—regulatory programs that operate as smoothing mechanisms and give coherence to the law despite the statutory discontinuities.

We can distinguish between two different common types of statutory discontinuities to which regulatory overlap is a potentially

liquid state,” 33 U.S.C. § 407, because Congress was focused on preventing obstruction of navigation, *see* Joseph D. Abkin, *Federal Programs for Water Pollution Control*, 1 U.C. DAVIS L. REV. 71, 96 (1969). On the other hand, the Clean Water Act, 33 U.S.C. §§ 1251-1387 (2006), enacted eight decades later with a direct focus on addressing the ecological and public health effects of water pollution, 33 U.S.C. § 1251(a)(1) (2006) (establishing a national goal of eliminating discharges of pollutants into navigable waters, so as “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters”), regulates discharges into navigable waters without a comparable exemption, 33 U.S.C. § 1311(a) (2006).

²⁸⁸ *See, e.g.*, *Seneca-Cayuga Tribe of Okla. v. Nat’l Indian Gaming Comm’n*, 327 F.3d 1019, 1044 (10th Cir. 2003) (holding that, where authorization to operate certain gaming devices pursuant to the Indian Gaming Regulatory Act (IGRA) conflicted with the Johnson Act’s prohibition of such devices, IGRA “insulated” operators of such devices from liability under the Johnson Act).

²⁸⁹ For example, neither the EPA under the Clean Water Act nor the Department of Agriculture under any of its statutes has authority to regulate nonpoint source water pollution from farms. *See, e.g.*, *Am. Wildlands v. Browner*, 260 F.3d 1192, 1194 (10th Cir. 2001) (concluding that the EPA lacked authority to regulate nonpoint-source discharges).

²⁹⁰ For example, both the Food and Drug Administration and the Federal Trade Commission have regulatory authority over drug advertising. *See* 15 U.S.C. §§ 52-55 (2006) (authorizing FTC regulation); 21 U.S.C. § 352 (2006) (authorizing FDA regulation); *see also* Paul E. Kalb et al., *Direct-to-Consumer Marketing: The Food and Drug Administration Is Not Alone*, 58 FOOD & DRUG L.J. 25, 26-29 (2003) (noting the FDA’s and FTC’s overlapping authorities over drug advertising).

constructive response that adds coherence. First, statutes tend to have “irregular edges,” in that their scope often includes or excludes situations somewhat erratically, such as exceptions carved out for political expediency.²⁹¹ These exceptions can create regulatory gaps. Where agencies have overlapping jurisdictions, however, one agency can cover a gap in another agency’s jurisdiction. Giving regulatory agencies overlapping jurisdiction thus allows them to cover potential jurisdictional gaps caused by irregular statutory edges.

Second, intersecting statutes often approach the same or similar problems somewhat differently, creating “uneven edges.” In such a situation, several possible conceptual models could govern the relationships between the agencies. Both agencies could exercise their respective regulatory authorities independently, essentially ignoring the overlap. One agency could be treated as the predominant or default regulatory authority, with other agencies taking regulatory action only to the extent the dominant agency does not or cannot. Alternatively, the agencies could coordinate their regulatory responses so that the resulting regulatory scheme reflects a thoughtful combination of the intersecting statutory regimes in a manner that smoothes some of the unevenness among them.

The EPA-OSHA case studies suggest that it is far easier for agencies to smooth discontinuities involving irregular edges by, for example, filling another agency’s jurisdictional gap, than it is for them to smooth discontinuities involving uneven edges. Most of the case studies involve some form of jurisdictional gap-filling. The EPA issued its asbestos standard that applies OSHA’s asbestos standard to state and local government employers not covered by the OSH Act.²⁹² The EPA issued the Dermal Test Rule to obtain data for OSHA that it could not obtain under the OSH Act.²⁹³ The EPA regulates occupational exposures to new chemicals not yet covered by OSHA standards.²⁹⁴

Where statutes have uneven edges, however, the agencies have struggled to regulate in a manner that reconciles multiple overlapping regulatory regimes with different statutory mandates. Problems of uneven edges are fundamentally more difficult to

²⁹¹ Cf. John Burrows, *Common Law Among the Statutes: The Lord Cooke Lecture 2007*, 39 VICT. U. WELLINGTON L. REV. 401, 411 (2008) (noting the “sometimes jagged and awkward interfaces” between statutes and the common law).

²⁹² See *supra* Part I.B.2.

²⁹³ See *supra* Part I.B.3.

²⁹⁴ See *supra* Part I.B.5.

solve than problems of irregular edges, where jurisdictional gap-filling is an obvious route of action. With respect to vapor intrusion, for example, the EPA and OSHA struggled to reconcile regulation under statutes that prescribed wildly disparate outcomes; applicable EPA standards under CERCLA and RCRA are reportedly many orders of magnitude more stringent than applicable OSHA standards under the OSH Act.²⁹⁵ Ultimately this problem of uneven edges transformed into a problem of irregular edges: OSHA decided that it lacks regulatory authority over contamination that does not arise in a workplace, and the EPA has used OSHA's jurisdictional gap as a premise for taking regulatory action under RCRA and CERCLA. The EPA's and OSHA's efforts to resolve their differing statutory authorities thus do not reflect a clear conceptual model for addressing overlapping statutes with uneven edges. It remains to be seen whether other case studies of regulatory overlap will yield an example of agencies constructively addressing uneven overlapping statutes.

C. *What Factors Favor Effective Coordination*

Although the EPA and OSHA appear to have managed their overlapping jurisdictions quite effectively with respect to the six case studies reviewed here, these six studies are too limited to provide a basis for definitively identifying factors that allow agencies to coordinate their regulatory overlap effectively so as to maximize its benefits and minimize its downsides. Such generalized conclusions will require additional case studies involving a range of agencies, and therefore must await future research. That being said, however, the EPA-OSHA case studies do suggest some possible factors that may favor effective coordination and that should be explored in future research. None of these factors guarantees that agencies will coordinate effectively, but they appear to create favorable conditions for effective coordination.

First, overlap that is intragovernmental, rather than intergovernmental, may facilitate effective coordination. Agencies within the same government answer to the same political institutions, which may make it less likely they will be pulled in conflicting directions. Both outsiders and insiders may demand a greater degree of coherence with respect to interagency relationships within the same government, leading to less tolerance of interagency competition, conflict, and duplication. This demand for coherence also may

²⁹⁵ See *supra* note 163.

increase the saliency of overlaps, leading agencies to devote more effort toward coordination. Intragovernmental overlap also provides the benefit of central coordinating mechanisms such as regulatory review by the Office of Management and Budget. Perhaps surprisingly, however, OMB review does not appear to have played a role in any of the EPA-OSHA case studies, although its specter may nevertheless have influenced the agencies.

Second, agencies with similar perspectives and goals are less likely to incline toward conflicting policies that make coordination difficult. To the extent conflicts arise among such agencies, they are more likely to involve inconsistencies in their chosen means rather than fundamentally conflicting objectives or approaches. The EPA and OSHA, for example, share a public health orientation and pursue generally compatible goals that balance health protection and practical feasibility. Although the similarities of the EPA's and OSHA's perspectives and goals do not inevitably induce coordination, they probably make it easier.

Third, tight budgets, which foreclose opportunities for agencies to increase their budgets, may discourage agency officials from attempting to expand their jurisdictions and compete with each other. To the extent that coordination allows agencies to make a plausible claim that their respective jurisdictions are covered, without expending resources on duplicative activities, coordination seems mutually advantageous. Neither the EPA nor OSHA, both of which operate with tight budgets as compared to their statutory responsibilities, has exhibited an appetite for extending its jurisdiction into the other's established domain.

Fourth, agencies may coordinate effectively when they have settled on a clear order of priority among the agencies that gives one agency a right to act primarily within a particular area, but with a quick trigger that allows other agencies to act if the primary agency does not. The EPA and OSHA seem to have adopted an implicit practice along these lines. Where OSHA is able and willing to act against a workplace hazard, the EPA generally has deferred to its sibling agency, as illustrated by the EPA's referrals to OSHA under TSCA.²⁹⁶ But where OSHA has not acted—such as with the asbestos standard,²⁹⁷ new chemical review,²⁹⁸ and vapor intrusion²⁹⁹—the EPA has not hesitated. In combination, this has allowed the

²⁹⁶ See *supra* Part I.B.4.

²⁹⁷ See *supra* Part I.B.2.

²⁹⁸ See *supra* Part I.B.5.

²⁹⁹ See *supra* Part I.B.6.

agencies to coordinate by filling regulatory gaps without unnecessary duplication.

Fifth, statutory coordination mechanisms and extensive direct communication may assist coordination, but they are not necessarily required. The EPA and OSHA have made some use of statutory coordination mechanisms under TSCA, but they also have coordinated effectively, both within TSCA and without, without the use of such mechanisms.

IV. CONCLUSION

The EPA-OSHA case studies are useful vehicles for increasing our understanding of how regulatory overlap arises and functions in the real world. As to both how regulatory overlap arises and whether it is beneficial, the case studies challenge some of the prevailing views of regulatory overlap.

Whereas most accounts of regulatory overlap regard it as either the result of agency attempts to expand their authorities or as an accidental byproduct of broad and ambiguous delegations from Congress, the EPA-OSHA case studies show that, at least as to these two agencies, Congress has intentionally created overlapping jurisdictions. Although Congress's decision to do so may reflect a belief in some of the potential benefits of regulatory overlap that have been posited in the academic literature, such as reducing the likelihood of underregulation and increasing policy innovation, it seems more likely that Congress understands what academics have tended to miss: the way in which regulatory jurisdictions map our conceptual organization of the law into legal fields, and specifically the manner in which regulatory overlap reflects overlapping legal fields. When a situation in the law fits within more than one legal field, it makes ample sense that we would choose to assign jurisdiction over the situation to the agencies that administer those fields, even if that means creating regulatory overlap. To do otherwise—to confine a multifaceted situation to a single agency—would be to ignore something fundamental about the situation.

As to whether regulatory overlap is detrimental or beneficial, the case studies support an optimistic view of regulatory redundancy, challenging the dominant account which perceives overlapping jurisdictions as inefficient and wasteful. For the most part, the EPA and OSHA have managed to avoid the potential dangers of overlap. Within their areas of overlapping jurisdiction, they have effectively coordinated their regulatory programs to minimize

duplication, conflict, and complexity, but in doing so have employed indirect and informal coordination mechanisms—as opposed to more direct and intensive coordination—to reduce coordination costs. The EPA-OSHA case studies also illuminate an important and previously unnoted potential benefit of regulatory overlap: The agencies have been quite successful at using their overlap to smooth statutory discontinuities, in particular by filling dysfunctional gaps in jurisdiction. In an imperfect reality in which statutory discontinuities are inevitable, the opportunity that regulatory overlap provides to increase coherence in legislation is an important benefit that deserves further exploration.

