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What We Learn in Troubled Times: Deregulation and Safe Work in the New Economy

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by Susan Bisom-Rapp

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**What We Learn in Troubled Times: Deregulation and Safe
Work in the New Economy**

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ABSTRACT

Reviews of how federal agencies functioned during George W. Bush's presidency reveal many instances of regulatory capture by industry. One prototypical example is the Occupational Safety and Health Administration (OSHA), the agency responsible for occupational safety and health (OSH) standard setting and enforcement. In contrast, a broad array of stakeholders during the Bush years gave good marks to an entirely separate agency, the National Institute for Occupational Safety and Health (NIOSH), which conducts research and develops recommendations to prevent workplace injury and illness. By reviewing the disparate performance of OSHA and NIOSH during the Bush administration, this article sheds light on the OSH challenges facing employees in the new economy, highlights better ways of protecting workplace safety and health, and identifies sustainable practices worth preserving and strengthening. To those ends, the academic debates surrounding new governance scholarship and responsive regulatory techniques provide a backdrop. Situating the safety agencies' recent records within those debates reveals the pitfalls of traditional and new approaches to regulation and the synergies between them. To improve the safety and health of America's increasingly vulnerable workers, both approaches are required but must be linked. Yet the necessary links between them may be more diffuse than many scholars assume. In other words, it is not necessary or advisable for all cooperative, reflexive, and participatory programs to be housed in traditional regulatory agencies. During periods when, as in the last administration, deregulation is ascendant, agencies that lack enforcement powers may be better positioned to obtain substantive results than are their regulatory counterparts.

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I. Introduction

Even before the financial crisis of September 2008, the average American worker would confidently report we live in troubled times. Staggering income inequality has become the norm in the US.¹ Medical care has become an unaffordable luxury for working Americans who lack employer-provided health insurance. New forms of work organization and employment have rendered once secure jobs vulnerable and, in some cases, removed those who labor from the protective ambit of labor and employment law. A weakened labor movement is increasingly at pains to protect those employees with union representation from the fluctuations of global markets. Of course, most American workers have no representation at all.

Such conditions obviously take a toll on workers' wallets. They also, however, potentially affect employee safety and health. There is evidence, for example, that the flexibility demanded by employers in our new economy acts as a persistent stressor with both physical and mental health ramifications. Although studies of the problem are formative, public health researchers both in the U.S. and abroad express concern over the occupational safety and health (OSH) risks associated with chronic job insecurity.² They recommend developing a research agenda to capture the extent of the problem and identify positive interventions to ameliorate it.³ Especially of concern are the workplace safety and health issues affecting those in precarious or contingent employment relationships, such as those considered temporary employees, part-time workers, independent contractors, and those who labor outside the formal economy.⁴

Assessing the problem, however, also requires focusing on the regulatory challenges inherent in addressing it. Somewhat against the grain, or at least conventional wisdom, this article will argue that there is much to be learned by evaluating the federal government's actions under the Bush administration as it attempted to grapple with emerging OSH issues and those which have plagued workers for years. That the Bush administration accomplished anything related to OSH will come as a surprise to some. Indeed, during George W. Bush's presidency, the Occupational Safety and Health Administration (OSHA), the agency responsible for OSH standard setting and

*Professor of Law, Thomas Jefferson School of Law. B.S., Cornell University; J.D., University of California at Berkeley; LL.M., Columbia University; J.S.D., Columbia University. The author may be contacted at: susanb@tjsl.edu I am indebted to Professors Isabel Medina, Malcolm Sargeant, Paul Secunda, and Mike Zimmer, and Dr. John Howard, who reviewed the manuscript before publication. The article was also improved by the commentary of faculty members of Loyola University, New Orleans, School of Law, who invited me to participate in their annual Faculty Colloquium Series in April 2009 and participants at a special symposium on occupational safety and health held at the International Industrial Relations Association World Congress in Sydney, Australia in August 2009.

¹ See Cynthia Estlund, *Who Mops the Floors at the Fortune 500? Corporate Self-Regulation and the Low-Wage Workplace*, 12 Lewis & Clark L. Rev. 671, 672 (2008).

² See J. Benach & C. Muntaner, *Precarious Employment and Health: Developing a Research Agenda*, 61 J. Epidemiol Community Health 276-77 (2007).

³ *Id.*

⁴ *Id.*

enforcement, was a poor model of regulatory practice.⁵ Harshly criticized by labor unions,⁶ advocates for vulnerable workers,⁷ and Democratic members of Congress,⁸ the agency moved at a snail's pace when it came to rulemaking,⁹ emphasized employer self-regulation through voluntary compliance rather than enforcement of existing standards,¹⁰ and stood accused of routinely reducing the already low penalties assessed for employer violations.¹¹

Nonetheless, the federal government during the last administration was notably active in identifying new occupational hazards, producing reports and recommendations on the OSH challenges posed by worker vulnerability, and promoting safe and healthy workplaces through actual workplace interventions. In fact, an entirely separate agency, the National Institute for Occupational Safety and Health (NIOSH), which bears responsibility for conducting research and developing recommendations to prevent occupational injury and illness, won good marks during the Bush presidency from trade unions, employee advocates, health and safety professionals, and industry.¹² Located within the Centers for Disease Control and Prevention (CDC) in the Department of Health and Human Services (DHHS), NIOSH, during the Bush years, refined and elaborated its research mission, and in so doing increased stakeholder involvement, enhanced agency transparency and accountability, and incentivized the translation of its research into safety and health outcomes in the workplace.¹³ NIOSH's efforts in this respect stand in sharp contrast to the expressly ideological, deregulatory agenda of the Bush Department of Labor (DOL), where OSHA is housed.¹⁴

With a new administration in the White House – an administration committed to changing course on the enforcement of workplace law¹⁵ – one might be tempted to look only to the future by passing new law,¹⁶ reinvigorating regulatory structures that languished over eight years, and

⁵ See *infra* Part IV.

⁶ See, e.g., DEATH ON THE JOB: THE TOLL OF NEGLECT (AFL-CIO 2008) (hereinafter DEATH ON THE JOB 2008). The AFL-CIO issues an annual report using this title. Report content changes from year-to-year although the title does not.

⁷ See, e.g., *And Injustice for All: Workers' Lives in the Reconstruction of New Orleans* (Advancement Project 2006), at 20, available at: <http://www.advancementproject.org/publications/hurricane-katrina.php>; Press Release, Coalition for Hispanic Worker Safety, Hispanic Immigrant Safety Advocates Denounce Bogus OSHA "Summit," (July 22, 2004), available at: <http://www.apha.org/membersgroups/newsletters/sectionnewsletters/occupat/fall04/1260.htm>

⁸ See *infra* note 204 and accompanying text.

⁹ See *infra* note 203 and accompanying text.

¹⁰ See *infra* Part IV.B.

¹¹ See *infra* note 70 and accompanying text.

¹² See *infra* notes 211-213 and accompanying text.

¹³ See *infra* Part IV.C.

¹⁴ See *infra* notes 194-206 and accompanying text.

¹⁵ See *Labor Secretary Solis Pledges to Put Enforcement Back at DOL*, Workplace Law Report, Mar. 6, 2009.

¹⁶ For example, on January 29, 2009, President Obama signed the Lilly Ledbetter Fair Pay Act of 2009, legislation that overturns U.S. Supreme Court precedent that greatly impaired the pursuit of pay equity cases. See Joanna L. Grossman, *The Lilly Ledbetter Fair Pay Act of 2009: President Obama's First Signed Bill Restores Essential Protection Against Pay Discrimination*, Feb. 13, 2009, available at: <http://writ.news.findlaw.com/grossman/20090213.html>

deploying new regulatory techniques. While those steps are certainly necessary, neglecting the past would be regrettable. By looking back and examining how workplace regulation fared and agencies functioned during a period when deregulation flourished, one may identify sustainable practices worth preserving and strengthening.

Mindful of this precept, this article reviews the performance of OSHA and NIOSH during the Bush administration to shed light on the OSH challenges facing employees in the new economy and highlight better ways of protecting workplace safety and health. To that end, the academic debates surrounding new governance scholarship provide a useful backdrop. New governance theory, broadly defined, criticizes traditional, top-down, command and control legal regulation as ossified and, to some extent, outdated.¹⁷ Alternatively, although not exclusively, new governance theorists recommend regulatory techniques that are more cooperative, reflexive, and participatory.¹⁸ Critics of new governance, in contrast, wisely caution that the results of these new techniques are mixed and that they may promote cosmetic rather than actual compliance.¹⁹

Situating the safety agencies' recent records within those debates reveals the pitfalls of traditional and new approaches to regulation and the synergies between them. To improve the safety and health of America's increasingly vulnerable workers, both approaches are required but must be linked. Yet the necessary links between them may be more diffuse than many scholars assume. In other words, it is not necessary or advisable for all programs that are cooperative, reflexive, and participatory to be housed in traditional regulatory agencies. During periods when deregulation is in vogue, agencies that lack enforcement powers may be better positioned to obtain substantive results than are their regulatory counterparts.²⁰

Part II begins with an overview of OSH law and its administration, including the respective roles of and relationship between OSHA and NIOSH. OSHA is a regulatory agency, primarily responsible for promulgating rules and standards, conducting workplace inspections, and assessing fines for employer noncompliance. The agency has long been associated with regulatory inefficiency and ineffectiveness. NIOSH, in turn, is a scientific institute, and OSHA's soft law research counterpart. The Institute has often functioned in the shadow of OSHA, and the relationship between the two has historically been problematic; coordination and collaboration has been relatively rare despite efforts to foster communication through interagency agreement²¹ and an issues exchange group.²² Moreover, both agencies have been battered by political winds. NIOSH, however, emerged from a threat to its very existence in the mid-1990s determined to partner with stakeholders, and increase the real world significance and impact of its research.

¹⁷ See *infra* notes 132-141 and accompanying text.

¹⁸ See *infra* notes 140-141 and accompanying text.

¹⁹ See *infra* notes 142-144 and accompanying text.

²⁰ See *infra* Part IV.

²¹ See *infra* notes 44-45 and accompanying text.

²² See *infra* note 337.

Following this, Part III adds a theoretical component, focusing on recent debates surrounding the work of new governance scholars. Their critique of command and control regulation is a powerful one that provides insight into the difficulties experienced by OSHA since its inception and also during the last presidential administration. Additionally, descriptions of promising new governance techniques, as practiced by OSHA under the Clinton administration, set the stage for understanding the subsequent failure of the Bush administration's cooperative safety and health programming.

Part III also addresses how new governance insights apply to NIOSH. More specifically, Professor Susan Sturm's case study of the National Science Foundation's (NSF) ADVANCE program, which provides grants to universities seeking to diversify their engineering and science faculties, reveals how public agencies lacking traditional regulatory enforcement power may nonetheless positively influence real world outcomes.²³ Two mechanisms available are especially applicable to NIOSH: collaborative problem solving involving agency stakeholders and creative use of agency grant making authority. Like NSF, NIOSH engages in collaborative problem solving with engaged stakeholders, a process it began during the Clinton administration, and exercises influence through its grant making activities. Sturm's study thus provides a framework for evaluating NIOSH's efforts to translate OSH research into real OSH gains for workers.

Part IV reviews the records of OSHA and NIOSH during the Bush administration. OSHA was a model of industry capture during those years.²⁴ The agency withdrew numerous proposed regulations, delayed others, modified warnings based on industry pressure, and emasculated its cooperative programming.²⁵ NIOSH, in contrast, was able to continue and improve vitally important strategic management reforms begun under the Clinton administration, and in the process, bolstered its credibility with its stakeholders, including trade unions, industry, and OSH professionals. Ultimately, these enhanced relationships helped insulate NIOSH from an apparently ideologically-driven, unsuccessful effort in 2004 to demote the Institute within the CDC organizational hierarchy.²⁶

An assessment of the agencies' records reveals that in a deregulatory environment, NIOSH was far more effective than OSHA at interpreting its mission, and in pursuing, through creative program management, actual OSH improvements for American workers. New governance scholarship and this study of the OSH sister agencies suggests why this is so; command and control regulatory systems are sensitive to regime change. Thus, the ideological orientation of a

²³ See generally Susan Sturm, *Gender Equity Regimes and the Architecture of Learning*, in LAW AND NEW GOVERNANCE IN THE EU AND THE US 323-60 (Grainne de Burca & Joanne Scott, eds., 2006) (hereinafter Sturm, *Gender Equity Regimes*).

²⁴ See *infra* notes 200-206 and accompanying text.

²⁵ See *id.*; Part IV.B.

²⁶ See Part IV.C.2.

particular presidential administration and of Congress seems to have a greater impact on traditional regulatory agencies compared with agencies lacking enforcement powers.

The article concludes with Part V, which discusses the lessons to be gleaned from the disparate records of OSHA and NIOSH during the last presidential administration. Most important among these is that during times of deregulation, agencies without regulatory powers may be best positioned to carry on and even to reinterpret their missions to promote positive change. Moreover, the further they are removed from the political fray, the better such non-regulatory agencies will function. Thus, the executive department separation of these two OSH agencies, often seen by scholars as inhibiting safety and health outcomes, may represent an ideal configuration in periods when the very idea of state regulation is under siege. Responding to the sentiments of President Bush and the Republican-dominated Congress, OSHA, during the last administration, greatly curtailed its efforts to promulgate traditional OSH standards and rendered largely cosmetic the new governance regulatory efforts pursued during the Clinton era. The separation of the two OSH agencies, however, protected NIOSH from ideological infection by OSHA, creating space for the former to expand, redefine, and improve the pursuit its OSH-related mission. Had NIOSH been housed within the DOL, this effort would have been much more difficult to sustain.

The challenge moving forward, now that deregulation has fallen from grace and regulation is back in fashion, is to create meaningful yet impermanent links between OSHA and NIOSH. Such links would facilitate translation of NIOSH's research findings into actual hard law regulation by OSHA. The two agencies might also partner on cooperative initiatives aimed at employers. Inter-agency collaboration, however, must not compromise NIOSH's independence. In this sense, NIOSH independence is akin to a vaccination increasing the odds that NIOSH will remain in good health during future periods when deregulation is again ascendant.

II. OSH Law and Its Fractured Administration

Although American OSH legislation dates back to the late nineteenth century, the modern era of OSH regulation began in 1970 with the passage of the Occupational Safety and Health Act (OSH Act).²⁷ The product of trade union political agitation, public concern over a succession of mining and construction industry fatalities, and Congress's determination that national minimum OSH standards were warranted, the OSH Act aims "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions...."²⁸ Considered to be landmark legislation at its passage, the Act grants authority to the Secretary of Labor to promulgate OSH standards, require compliance with those standards, and, to that end, conduct workplace inspections, issue citations and penalties, and prescribe hazard abatement. The

²⁷ 29 U.S.C. §§651-678.

²⁸ 29 U.S.C. §651(b).

Occupational Safety and Health Administration, created shortly after the Act's passage, is the federal agency in the DOL responsible for these activities.²⁹ No private right of action exists under the OSH Act, which leaves enforcement levels dependent upon the budget granted to the agency through the political process.³⁰

When it passed the OSH Act, Congress created an unconventional regulatory structure in two ways. First, Congress decided to locate the scientists responsible for advising OSHA in a different executive department. As noted above, NIOSH is part of the DHHS. The Director of NIOSH reports directly to the Director of the Centers for Disease Control, who in turn reports to the Secretary of the Department of Health and Human Services.³¹ Executive department separation apparently seemed natural because NIOSH's predecessor, the Bureau of Occupational Health and Safety, was located within the Department of Health Education and Welfare (HEW), the precursor to DHHS.³² Safeguarding the interests of the existing bureaucracies, in public health on the one hand and in the DOL on the other, is one way of explaining this split structure.³³

Second, Congress created, outside of any executive department, an independent federal agency, the Occupational Safety and Health Review Commission (OSHRC), as the body which adjudicates disputes over OSH citations. In other words, while OSHA is empowered to promulgate the standards, inspect workplaces, and issue citations where it believes violations have occurred, employers may contest those citations before OSHRC, which acts as an

²⁹ While OSHA has primary authority for US OSH policy and enforcement, it is not the only entity that regulates in the area. By statute, OSHA is prevented from regulating working conditions where any other federal agency occupies the field. 29 U.S.C. §653(b)(1). Thus, health and safety regulation in the mining industry is administered by a separate federal agency, the Mine Safety and Health Administration (MSHA), which is responsible for enforcement of the Mine Safety and Health Act of 1977, as amended by the Mine Improvement and New Emergency Response Act of 2006. For details about the MSHA, see <http://www.msha.gov/>. Similarly, OSHA's authority to regulate farmworker pesticide exposure is restricted due to the Environmental Protection Agency's jurisdiction over pesticide hazard warnings. See Randy S. Rabinowitz & Mark M. Hager, *Designing Health and Safety: Workplace Hazard Regulation in the United States and Canada*, 33 Cornell Int'l L.J. 373, 377 (2000) (hereinafter Rabinowitz & Hager, *Designing Health and Safety*). Courts have also deemed OSHA preempted from regulating in segments of the airline and railroad industries because of the regulatory activities of other federal agencies. *Id.* Furthermore, the OSH Act sets up a separate scheme of OSH regulation for federal employees. 29 U.S.C. §668.

³⁰ I am indebted to Professor Mike Zimmer for raising this point.

³¹ From its establishment in 1970 until 1980, the Director of NIOSH reported directly to the Secretary of Health Education and Welfare, which became DHHS in 1979. Thereafter, "[t]he Reagan administration administratively assigned NIOSH to [the] CDC." Letter from Dr. John Howard to Professor Susan Bisom-Rapp, Aug. 22, 2009, on file with author. See also Jordan Barab, *NIOSH Reorganization: Good, Bad or Ugly?*, Confined Space: News and Commentary on Workplace Health & Safety, Labor and Politics, May 24, 2004, available at: http://spewingforth.blogspot.com/2004_05_01_spewingforth_archive.html ("Although the Occupational Safety and Health Act of 1970 originally envisioned NIOSH as an independent institute like one of the National Institutes of Health, it was put under the Centers for Disease Control umbrella where it has struggled for its independence.")

³² Sidney A. Shapiro & Thomas O. McGarity, *Reorienting OSHA: Regulatory Alternatives and Legislative Reform*, 6 Yale J. on Reg. 1, 57-8 (1989) (hereinafter Shapiro & McGarity, *Reorienting OSHA*).

³³ See Andrew P. Morriss & Susan E. Dudley, *Defining What to Regulate: Silica and the Problem of Regulatory Categorization*, 58 Admin. L. Rev. 269, 322-3 (2006) (hereinafter Morriss & Dudley, *Defining What to Regulate*).

administrative court.³⁴ This procedure, at variance from most regulatory agencies, which have their own internal adjudicative structures, was a necessary political compromise to assuage employers' concerns over potentially biased adjudication. Employers argued that if OSHA were given responsibility for rulemaking, enforcement, and adjudication, adjudicative impartiality would be compromised.³⁵ While criticisms of this split enforcement model are beyond the scope of this article,³⁶ criticisms of the separation of OSHA and NIOSH are important to consider.

Commentators considering the relationship between OSHA and NIOSH have noted the problems inherent in locating the agencies in different executive departments. For example, Professors Shapiro and McGarity have noted:

...NIOSH and OSHA have significant coordination problems. First, OSHA does not have a sufficient number of health professionals to review NIOSH research in-depth. As a result, OSHA employees find that 'OSHA-NIOSH' relations are 'close to non-existent at the working level.'" Second, no single administrator is in a position to resolve disputes between the two organizations. The Secretary of Labor has no authority over NIOSH and the Secretary of HHS has no authority over OSHA. Coordination, therefore, requires either agreement between the two agencies or the intervention of both Secretaries. Since NIOSH and OSHA rarely elevate disputes to that level, the two agencies coexist in an uneasy and sometimes unproductive relationship.³⁷

An earlier but similar critique by Professor Mark Rothstein attributed the difficulties in forging inter-agency collaboration to a shortage of professional expertise at OSHA.³⁸ NIOSH, he noted, generates much more scientific information than OSHA can consume. Moreover, the priorities and policies of the sister agencies are often out of sync.³⁹

Professors Marc Eisner, Jeff Worsham, and Evan Ringquist tie the agencies' coordination problems to the difficulty of integrating the work produced by professionals from different disciplines.⁴⁰ OSHA is an agency made up primarily of safety engineers and industrial hygienists; scientists predominate at NIOSH. The professional norms of these groups vary

³⁴ See U.S. Occupational Safety and Health Review Commission website at: <http://www.oshrc.gov/index.html>

³⁵ Shapiro & McGarity, *Reorienting OSHA*, at n. 333.

³⁶ See, e.g., *id.* at 59-62.

³⁷ *Id.* at 58. See also Cynthia Washam, *Working Toward a New NIOSH*, 104 *Env't. Health Persp.* No. 5 (1996) available at: <http://www.ehponline.org/docs/1996/104-5/soi.html> (quoting Gary Visscher: "The lack of coordination between OSHA and NIOSH has been a recurring problem.") (hereinafter Washam, *Working Toward a New NIOSH*).

³⁸ See Mark A. Rothstein, *Substantive and Procedural Obstacles to OSHA Rulemaking: Reproductive Hazards as an Example*, 12 B.C. *Env'tl. Aff. L. Rev.* 627, 653 (1985) (hereinafter, Rothstein, *Substantive and Procedural Obstacles*).

³⁹ *Id.* at 653-4. See also Frank J. Thompson, *HEALTH POLICY AND THE BUREAUCRACY: POLITICS AND IMPLEMENTATION* 235 (1983) (noting "[a]t times...OSHA and NIOSH administrators failed to see eye-to-eye" on the agenda for inquiry).

⁴⁰ Marc Allen Eisner, Jeff Worsham & Evan J. Ringquist, *CONTEMPORARY REGULATORY POLICY* 176 (2000) (hereinafter Eisner et al., *CONTEMPORARY REGULATORY POLICY*).

widely by discipline. Thus, for example, a scientific study takes years to complete, and this very fact may put NIOSH scientists' agenda into conflict with the incentives of OSHA staff.⁴¹

Professor Ted Greenwood has noted of NIOSH that “[r]esearch whose budget and priorities are set independently of its client regulatory program can tend toward unresponsiveness and even irrelevance from the perspective of the [OSHA] regulators.”⁴² Greenwood also maintained, however, that organizational separation likely “enhanced the quality of the research product and resulted in a better reputation for objectivity [for NIOSH] than would otherwise have been possible.”⁴³

A 1979 Memorandum of Agreement entered into by OSHA and NIOSH sets forth a framework for their regulatory relationship.⁴⁴ The agreement describes the responsibilities of each agency and provides mechanisms for communication. By all accounts, however, the close coordination envisioned by the agreement has never taken place.⁴⁵ In theory, the Office of Management and Budget (OMB), a cabinet level office within the Executive Office of the President, might play a coordinating role for the two OSH agencies. In recent years OMB's Office of Information and Regulatory Affairs (OIRA) has added scientific expertise to its civil service staff to assist it in inter-agency information coordination and the development of regulatory policy.⁴⁶ To date, however, OMB does not appear to have played that role. A recent search of the OMB website using the search terms “National Institute of Occupational Safety and Health” and “NIOSH” turned up just one document, an item not relevant to OSHA-NIOSH relations.⁴⁷

Some see the failure of the Memorandum of Agreement to create a strong inter-agency relationship, and the departmental separation of OSHA and NIOSH more generally, as having hampered OSHA's ability to set standards.⁴⁸ This article, however, will argue that the lack of coordination between the agencies actually protected NIOSH during a period of strong deregulatory sentiment, enabling the creation of important scientific knowledge, and the development of program management techniques designed to get that research into the hands of stakeholders who can use it. Before fleshing out that argument, however, the article will set forth the respective roles and responsibilities of OSHA and NIOSH.

⁴¹ *Id.*

⁴² Ted Greenwood, KNOWLEDGE AND DISCRETION IN GOVERNMENT REGULATION 123 (1985) (hereinafter Greenwood, KNOWLEDGE AND DISCRETION).

⁴³ *Id.* at 124.

⁴⁴ Randy S. Rabinowitz, OCCUPATIONAL SAFETY & HEALTH, 2d ed. 795-6 (2004); OSHA-NIOSH Interagency Agreement on Employee Protection, Apr. 17, 1979, OSH Rep. [Reference File] 21:7001.

⁴⁵ See Rothstein, *Substantive and Procedural Obstacles*, at 654.

⁴⁶ See *EPA's Restructured IRIS System: Hearing Before Subcomm. on Investigations and Oversight of the H. Comm. on Science and Technology*, 110th Cong. 1-2 (2008) (statement of Susan E. Dudley, Administrator, Office of Information and Regulatory Affairs, Office of Management and Budget).

⁴⁷ See *id.*

⁴⁸ Morriss & Dudley, *Defining What to Regulate*, at 323.

A. OSHA's Regulatory Responsibilities and its Position as the Agency People Love to Hate

As noted above, OSHA is a traditional, top-down regulator. OSHA's responsibilities include administering two kinds of safety and health mandates: employer obligations falling within the OSH Act's general duty clause and specific standards promulgated by the agency.⁴⁹ Under the OSH Act's general duty clause, employers must ensure "employment and [a] place of employment which are free from recognized hazards that are causing or likely to cause death or serious physical harm..."⁵⁰ Employers may be liable for breaching their general duty where OSHA has not issued a standard related to the hazard in question.

Additionally, employers must comply with specific OSH standards properly promulgated by OSHA, which fall into three categories: interim standards adopted shortly after OSHA's inception; permanent standards promulgated via agency rulemaking; and temporary or emergency standards adopted without rulemaking but only after the agency finds a "particular substance or new hazard poses a grave danger...and an emergency measure is necessary to protect employees from such danger."⁵¹

From the agency's inception, OSHA's attempts to promulgate standards have been harshly criticized and often judicially challenged. Employers subject to OSHA's initial efforts at standard-setting decried the rules as overly complex, burdensome, and, in some cases, unlikely to yield real gains in safety.⁵² To some extent, this criticism has continued unabated; business groups often howl that OSHA standards, which in some cases increase the cost of doing business, are "inefficient, overbearing, and unnecessary."⁵³ Organized labor and its supporters, in

⁴⁹ Timothy P. Glynn, Rachel S. Arnow-Richman & Charles A. Sullivan, *EMPLOYMENT LAW: PRIVATE ORDERING AND ITS LIMITATIONS* 826 (2007) (hereinafter Glynn, Arnow-Richman & Sullivan, *EMPLOYMENT LAW*).

⁵⁰ 29 U.S.C. §654(a)(1).

⁵¹ Glynn, Arnow-Richman & Sullivan, *EMPLOYMENT LAW*, at 827.

⁵² See Orly Lobel, *Interlocking Regulatory and Industrial Relations: The Governance of Workplace Safety*, 57 Admin. L. Rev. 1071, 1087 (2005) (hereinafter Lobel, *The Governance of Workplace Safety*). Indeed, OSHA's adoption of thousands of interim standards shortly after passage of the OSH Act produced a "storm of controversy" by business interests angered by the complex, numerous, and highly specific new requirements being imposed on employers, their concern fueled by the sometimes tenuous connection between these standards and worker safety and health. Glynn, Arnow-Richman & Sullivan, *EMPLOYMENT LAW*, at 827; see also Eisner et al., *CONTEMPORARY REGULATORY POLICY*, at 184 ("Nixon's assistant secretary of labor, George Guenther, adopted some 4,400 standards wholesale after one month, many of which were widely acknowledged as irrelevant or trivial.").

⁵³ Gregory A. Huber, *THE CRAFT OF BUREAUCRATIC NEUTRALITY: INTERESTS AND INFLUENCE IN GOVERNMENTAL REGULATION OF OCCUPATIONAL SAFETY* 59 (2007) (hereinafter Huber, *Bureaucratic Neutrality*). Decades after OSHA's adoption of thousands of interim standards, business interests continue to complain about them. Surprisingly, interim standards, many of which were simply "consensus standards" adopted by professional standard setting organizations with business interests in mind, still comprise the bulk of OSHA's standards corpus. Glynn, Arnow-Richman & Sullivan, *EMPLOYMENT LAW*, at 827. Ironically, business interests reflexively oppose new OSH regulations as a matter of course, whether those regulations would produce actual safety gains or not.

contrast, have long been frustrated by the length of time required to promulgate safety and health standards.⁵⁴ The creation of OSH standards is a lengthy process requiring extensive opportunity for public and stakeholder input.⁵⁵ Indeed, it is not unusual for the standard-setting process to take a total of eight years or more.

Worksite inspections are also part of OSHA's mandate. Employers are expected to consent to OSHA inspections that are reasonable in time, manner, and scope.⁵⁶ So-called unprogrammed inspections are conducted when hazardous working conditions are identified by employee complaints, the occurrence of fatalities or catastrophes, or referral by another agency.⁵⁷ Programmed inspections are directed at employers evidencing hazardous workplaces through, for example, high rates of employee injury or illness.⁵⁸

Like standard-setting, OSHA inspections have long been a subject of criticism. While employers may experience a compliance inspection as an unwarranted, adversarial regulatory encounter,⁵⁹ many observers consider OSHA to be understaffed and under-funded. Given the breadth of the U.S. workforce, the size of OSHA's staff and its Congressional appropriation are modest at best and more appropriately described as shockingly thin. As of 2008, OSHA reported that there were over 115 million employees in the private sector located at 8 million worksites.⁶⁰ Yet in fiscal year 2008, OSHA employed just 2,186 employees,⁶¹ approximately half of whom work as compliance inspectors.⁶² OSHA's appropriation for fiscal year 2008 was \$490.3 million.⁶³ AFL-CIO Associate General Counsel Lynn Rhinehart recently noted that given its current level

⁵⁴ See Lynn Rhinehart, *Workers at Risk: The Unfulfilled Promise of the Occupational Safety and Health Act*, 111 W. Va. L. Rev. 117, 130 (2008) (noting that the OSHA "rulemaking process is slow and cumbersome") (hereinafter Rhinehart, *Workers at Risk*).

⁵⁵ James T. O'Reily, *Worker Right to Know in 30-Year Retrospect: Did We Get It Right, With What We Know Today?*, 2 Pitt. J. Envtl Pub. Health L. 1, *7 (2008) ("Creation of occupational safety standards must follow a lengthy prescribed process with extensive public input.").

⁵⁶ Horace A. Thompson, III, *Occupational Safety and Health*, in INTERNATIONAL LABOR AND EMPLOYMENT LAWS 23h-1, 23h-13 (William L. Keller & Timothy J. Darby, eds. 2003).

⁵⁷ *Id.* at 23h-12.

⁵⁸ *Id.* at 23h-13.

⁵⁹ See e.g. Eugene Bardach & Robert A. Kagan, GOING BY THE BOOK: THE PROBLEM OF REGULATORY UNREASONABLENESS 106-16 (1982); see also Lobel, *The Governance of Workplace Safety*, at 1089-90 (detailing the counterproductive effects of adversarial OSH enforcement).

⁶⁰ See <http://www.osha.gov/as/opa/oshafacts.html>. Although the OSH Act does not cover state and local governments in their roles as employers, it does encourage states to establish and maintain their own OSH plans, which are then monitored by OSHA. 29 U.S.C. §652(5). There are presently 24 states and two US territories that operate OSHA-approved safety and health programs.

⁶¹ See <http://www.osha.gov/as/opa/oshafacts.html>.

⁶² Lobel, *The Governance of Workplace Safety*, at 1081.

⁶³ See <http://www.osha.gov/as/opa/oshafacts.html>. President Obama's Secretary of Labor, Hilda Solis, has requested an OSHA appropriation of \$563.6 million for OSHA for fiscal year 2010. The funding increase would be used in part to hire 213 additional full-time OSHA employees. A priority for OSHA will be increasing the number of bilingual inspectors. See Gayle Cinquegrani, *DOL FY 2010 Budget Calls for More OSHA and Wage Hour Inspectors*, Daily Labor Report, May 13, 2009, at A-13. Secretary Solis anticipates that the additional funding will make possible the hiring of 130 new inspectors. See Stephen Lee, *More OSHA Inspectors May Not Be Enough*, Daily Labor Report, July 2, 2009, at A-4.

of resources, OSHA can conduct inspections of each workplace under its jurisdiction no more than once every 133 years.⁶⁴

A final major area OSHA responsibility is worth considering: the issuance of citations and penalties to noncompliant employers. Both the OSH Act and OSHA have been subject to significant criticism for failing to provide sufficient sanctions to deter wrongdoing.⁶⁵ The Act contains a civil penalty structure that allows OSHA to assess a maximum \$70,000 penalty for willful or repeated violations, a penalty ceiling that has not increased since 1990.⁶⁶ The inadequacy of the OSH Act's penalty structure is highlighted by penalties available under other statutory schemes. For example, the Department of Commerce may impose a \$325,000 fine for violation of the South Pacific Tuna Act. And the Environmental Protection Agency may impose a \$270,000 penalty for Clean Air Act violations.⁶⁷

Moreover, even the OSH Act's criminal penalties, which may be imposed where a willful violation causes a worker's death, pale in comparison to those of other statutes. Violating a safety law that leads to a worker's death constitutes "a class B misdemeanor, punishable by not more than six months in jail and/or fines of no more than \$250,000 for an individual or \$500,000 for an organization."⁶⁸ In comparison, improperly hunting migratory birds or importing exotic wild birds can result in a maximum prison term of two years.⁶⁹

OSHA has failed to make vigorous use of this weak penalty structure. A recent government review found OSHA supervisors routinely reduce by about 40 percent the penalties initially assessed in worker fatality cases.⁷⁰ In fiscal year 2007, the median final penalty for cases involving fatalities was \$29,400, less than 50 percent of the maximum civil penalty. Additionally, between 2003 - 2008, only 21 percent of eligible fatality cases were referred to the Department of Justice (DOJ) for criminal prosecution; the DOJ pursued only 20 percent of the referrals. Stated in numerical terms, of OSHA's 9,838 fatality inspections in the years 2003 –

⁶⁴ See Rhinehart, *Workers at Risk*, at 122. As Rhinehart points out, if one includes inspectors from OSHA's state partner agencies, the number of inspectors rises to about 2,000 or one inspector for every 63,000 workers. *Id.* The International Labor Organization, the specialized agency of the United Nations that sets international labor standards, recommends industrialized democracies employ 1 inspector for every 10,000 workers. *Id.* Of course, given limited resources, OSHA targets its inspections to prioritize high hazard industries. See Huber, *Bureaucratic Neutrality*, at 112-15. Even with targeting, however, OSHA regions exhibit considerable "variation in enforcement efforts." *Id.* at 113.

⁶⁵ The OSH Act does not provide compensation for injured workers. In the U.S., injured workers receive compensation for their injuries and disabilities through state-administered, no fault workers compensation systems.

⁶⁶ See Majority Staff, U.S. Senate Committee on Health, Education, Labor and Pensions, *DISCOUNTING DEATH: OSHA'S FAILURE TO PUNISH SAFETY VIOLATIONS THAT KILL WORKERS*, April 29, 2008, at 8.

⁶⁷ *Id.*

⁶⁸ *Id.* at 6. The maximum penalties are doubled where the employer has a previous willful violation.

⁶⁹ *Id.*

⁷⁰ *Id.* at 5.

2008, 237 cases were eligible for referral to the DOJ for criminal prosecution, yet OSHA only referred 50 cases and the DOJ pursued 10 of those cases.⁷¹

Penalties for serious non-fatal violations are shockingly low. In fiscal year 2007, the average penalty for a serious violation, defined as a violation posing a substantial probability of death or serious physical harm, was only \$909.⁷² The tendency to avoid imposing stiff penalties is apparently a long-standing part of OSHA's regulatory culture.⁷³ Commentators have described the hesitancy of the agency to aggressively enforce the law as a culture of reluctance.⁷⁴

As a top-down, traditional regulatory agency, OSHA measures its effectiveness through occupational fatality, illness, and injury rates. Less than a week before stepping down as President Bush's long-serving Secretary of Labor, Elaine Chao touted as evidence of effective regulation a 14 percent decrease in the occupational fatality rate between the years 2001 to 2007, and a 21 percent drop in the occupational illness and injury rate between 2002 and 2007.⁷⁵ Yet critics cast doubt on the accuracy of the injury and illness statistics, estimating that perhaps 69 percent of workplace injuries and illnesses remain unreported.⁷⁶ To blame, they argue, is OSHA's recordkeeping and reporting systems, which rely on employer self-reporting of worker illness and injury.⁷⁷ In fact, one recent academic analysis attributes reported injury and illness declines not to OSHA effectiveness but to changes in OSHA recordkeeping requirements.⁷⁸

Moreover, even if fatality rates are actually declining, a lack of fatality data on contract workers, whose numbers have been growing over time, may cause misimpressions of the fatality rate of a particular employer or an industry.⁷⁹ Presently 63.4 percent of American construction workers work as contractors rather than being considered regular employees.⁸⁰ Use of contract workers is also growing in the health care industry, for janitorial services, and in oil refineries.⁸¹ These workers are frequently brought in to do the most dangerous jobs, may lack qualifications for assigned tasks, and often are not provided with safety training. Yet when a contract worker is

⁷¹ *Id.* at 20.

⁷² DEATH ON THE JOB 2008, at 8.

⁷³ A 1992 General Accounting Office study found, for example, that OSHA only cited the maximum penalty for 2.1 percent of its penalty violation caseload and then actually imposed the maximum penalty on less than 1 percent of the caseload. See General Accounting Office, OCCUPATIONAL SAFETY AND HEALTH: PENALTIES FOR VIOLATIONS ARE WELL BELOW MAXIMUM ALLOWABLE PENALTIES 6 (1992).

⁷⁴ Lobel, *The Governance of Workplace Safety*, at 1085-86.

⁷⁵ See Gayle Cinquegrani, *Chao, Leaving DOL After Eight Years, Cites Safety Gains*, Daily Labor Report, Jan. 16, 2009, at AA-1.

⁷⁶ See Majority Staff, U.S. House of Representatives Committee on Education and Labor, HIDDEN TRAGEDY: UNDERREPORTING OF WORKPLACE INJURY AND ILLNESSES, June 2008, at 2.

⁷⁷ *Id.*

⁷⁸ Lee S. Friedman & Linda Forst, *The Impact of OSHA Recordkeeping Regulation Changes on Occupational Injury and Illness Trends in the US: A Time-Series Analysis*, 64 *Occup. Envtl. Med.* 454 (2007).

⁷⁹ See Stephen Lee, *Labor Department to Begin Tracking Fatalities of Contract Workers in 2011*, Daily Labor Report, Feb. 23, 2009, at A-4.

⁸⁰ *Id.*

⁸¹ *Id.*

injured or killed on the job, that individual will not be recorded on the worksite employer's OSHA log or industry classification; rather, the incident is recorded against the contractor employing the worker. Thus, the worksite employer's safety record is not affected by the incident and, where its industry differs from that of the contractor, the worksite employer's industry may appear much safer than it is in reality.

In 2011, in response to this problem, the Obama administration's Bureau of Labor Statistics will begin collecting statistics on contractor fatalities.⁸² Such data is essential to address the needs of this vulnerable and growing population. The failure to track fatalities of these workers heretofore, however, and the criticisms of injury and illness recordkeeping noted above, greatly undercut former Secretary Chao's claims of OSHA's efficacy.

OSHA's overall record reveals an agency hampered in pursuing its mission.⁸³ Some of that difficulty is attributable to the inherent constraints facing OSHA, including resource scarcity, the burdensome legal process associated with promulgating safety and health standards, and the politicized nature of regulating occupational safety and health.⁸⁴ OSHA's record under the Bush administration, however, is described by critics as an abdication of regulatory responsibility. During that time, the agency expended considerable energy on its cooperative compliance programs, which aim to change the relationship between OSHA and employer stakeholders from adversarial to innovative and responsive. The creation of these programs and their management during the Bush administration will be discussed in Parts III and IV below. Before that, however, a description of the role of NIOSH, OSHA's research partner, is in order.

B. NIOSH's Functions as OSHA's Research Partner and the Public's Research Translator for Potential OSH Improvements

The National Institute of Occupational Safety and Health, sometimes described as OSHA's research partner, was created by the OSH Act in 1970. Unlike, OSHA, however, NIOSH is not housed within the Department of Labor. Rather, NIOSH is a division of the Centers for Disease Control, and as such, is within the Department of Health and Human Services.

NIOSH pursues its mission through the use of epidemiological, laboratory, and engineering research methodologies.⁸⁵ Headquartered in Washington, D.C., and Atlanta, Georgia, with labs and offices in seven states, NIOSH maintains a staff of about 1,200, with training in disciplines including, epidemiology, medicine, industrial hygiene, safety, psychology, engineering,

⁸² *Id.*

⁸³ Orly Lobel has noted the OSHA is often held up "as the prime example of regulatory failure and bureaucratic pathologies." Orly Lobel, *Governing Occupational Safety in the United States*, in LAW AND NEW GOVERNANCE IN THE EU AND THE US 269, 270 (Grainne de Burca & Joanne Scott, eds. 2006).

⁸⁴ Shapiro & McGarity, *Reorienting OSHA*, at 4-14.

⁸⁵ See Kovach et al., *OSHA and the Politics of Reform*, 34 Harv. J. on Legis. 169, 172 (1997).

chemistry, physics, and statistics.⁸⁶ The NIOSH Board of Scientific Counselors, made up of well regarded scientists from various fields, guides NIOSH in developing and evaluating its research so that it conforms to the highest scientific standards.⁸⁷ NIOSH's funding for fiscal year 2008 was \$274 million.⁸⁸

Commentator's discussing NIOSH's mission often confine themselves to NIOSH's role in conducting research and making recommendations for the development of safety and health standards in order to prevent occupational injury, illness, disability, and death.⁸⁹ In short, under this view, NIOSH exists to perform the research from which it makes recommendations to OSHA for regulatory standard setting. OSHA then has the option to act on NIOSH's recommendations if it so chooses.⁹⁰

John Howard, NIOSH Director for six years during the Bush administration, conceptualizes NIOSH's mission much more broadly:

NIOSH was established by the Occupational Safety and Health Act of 1970 (29 U.S.C. §651 et seq.) as a scientific organization to generate new knowledge in the field of worker safety and health through research, to transfer that new knowledge into the everyday practice of safety and health, and to educate professionals in the field of safety and health. From the governmental perspective, NIOSH was established to support the standards development responsibilities of its sister agencies....⁹¹

This articulation of the mission, while acknowledging NIOSH's traditional role in assisting OSHA, liberates the Institute from exclusive ties to and reliance upon its sister agency. It also takes into account some important programs at NIOSH, including the Health Hazard Evaluations

⁸⁶ See John Howard, *Informing Public Health Policy and Practice: The Strategic Management of Research Processes and Organizations*, 22 Governance 203, 206 (2009) (hereinafter Howard, *Informing Public Health Policy and Practice*).

⁸⁷ See NIOSH Board of Scientific Counselors Charter, available at: <http://origin.cdc.gov/niosh/BSC/BSCcharter.html> Another advisory committee, the Mine Safety and Health Research Advisory Committee, plays a similar role regarding research germane to the Mine Safety and Health Act. See Mine Safety and Health Research Advisory Committee Charter, available at: <http://cdc.gov/maso/FACM/facmMSHRAC.htm>

⁸⁸ See DEATH ON THE JOB: THE TOLL OF NEGLECT 60 (AFL-CIO 2009), available at: http://www.aflcio.org/issues/safety/memorial/doj_2009.cfm (hereinafter DEATH ON THE JOB 2009).

⁸⁹ See Michael T. Heenan & C. Gregory Ruffennach, *National Institute of Occupational Safety and Health: Limits of Authority in Rulemaking under the Federal Mine Safety and Health Act of 1977*, 7 Min. L. & Pol'y 171 (1992).

⁹⁰ Since 1970, NIOSH's scientific support duties have grown beyond those initially derived from OSH Act, and presently include carrying out research efforts under the Mine Safety and Health Act of 1977 and the Energy Employees Occupational Illness and Compensation Act of 2000. Senate Committee on Appropriations, Report 108-345: Depts. of Labor, Health and Human Services, and Education, and Related Agencies, Appropriations Bill, 2005, Sept. 15, 2004, available at: http://thomas.loc.gov/cgi-bin/cpquery/?&sid=cp108BIGAR&refer=&r_n=sr345.108&db_id=108&item=&sel=TOC_278993& (hereinafter 2005 Senate Appropriations Report).

⁹¹ Howard, *Informing Public Health Policy and Practice: The Strategic Management of Research Processes and Organizations*, at 205.

(HHEs) conducted by the Institute when employees, their representatives, or employers contact the agency about a potentially hazardous or harmful workplace condition.⁹² Accordingly, under this expansive definition, NIOSH plays dual roles with respect to the research it conducts: 1) scientific translation, focused on transforming research into real workplace improvements; and 2) scientific support for federal regulatory standard setting. The latter relies on traditional regulatory process in order to bring about change. The former clearly does not.

Establishing a role for the Institute apart from the lengthy, politicized rule making process also produces three interesting byproducts. First, it tends to insulate NIOSH from potential critics, who may argue that expending taxpayer money for research, much of which is not utilized by OSHA, is economically inefficient. That criticism is greatly blunted, and NIOSH's public accountability enhanced, if the research has applications outside of rulemaking.

Second, an expanded mission is conducive to creating new metrics for measuring NIOSH's real world impact. Tracing NIOSH activity to outcomes apart from OSHA's mandatory standards increases the ways of assessing how effective the agency really is.

Finally, an expanded mission can function as a morale booster and motivator for NIOSH staff. Those devoting their careers to public health can only benefit from knowing there are many ways to improve the safety and health of the public they serve.

Support for Dr. Howard's view of NIOSH's mission can be found in the OSH Act. Thus, Section 22,⁹³ which created NIOSH, ties the Institute to the general purposes set forth in the Act's section 2, which are greater than simply setting mandatory standards, and include providing training programs, encouraging OSH-related joint labor-management efforts, and more generally encouraging employers and workers to institute new OSH-related programs and improve on existing programs.⁹⁴ Section 22 also includes by reference Sections 20 and 21,⁹⁵ the first which lays out the research and related duties of the Secretary of Health and Human Services, including the publication and dissemination of findings, and the second, which covers training and employee education.

1. Measuring NIOSH's effectiveness – Part 1

Like OSHA, NIOSH measures its effectiveness through occupational fatality, illness, and injury rates.⁹⁶ Yet NIOSH does not claim exclusive credit for overall declines in these rates when they occur. Rather, the Institute acknowledges that improvements in worker safety and health are

⁹² See <http://www.cdc.gov/niosh/hhe/HHEprogram.html> . An HHE is a NIOSH study of an actual workplace to determine whether the employees are exposed to hazardous substances or harmful conditions. *Id.*

⁹³ 29 U.S.C. §671.

⁹⁴ 29 U.S.C. §651(b).

⁹⁵ 29 U.S.C. §§669-670.

⁹⁶ See National Institute for Occupational Safety and Health, Strategic Plan: 1997-2002, DHHS (NIOSH) Publ. No. 98-137, at 5-6, available at: <http://www.cdc.gov/Niosh/gpran1a.html> .

brought about by the combined efforts of NIOSH and a host of NIOSH partners, including its federal sister agencies, state and local OSH agencies, employer and labor stakeholders, and academic researchers outside of NIOSH.⁹⁷ In this respect, the Institute's stance stands in stark contrast to the claims of President Bush's Secretary of Labor, Elaine Chao, mentioned above.

Moreover, there are more discrete measures with which to assess NIOSH's effectiveness, such as when NIOSH research is used by OSHA to promulgate a mandatory standard. For example, NIOSH counts as a significant accomplishment, the virtual elimination of byssinosis, or brown lung disease, a condition causally linked to inhaling cotton dust.⁹⁸ OSHA used NIOSH findings in promulgating its cotton dust standard in 1978, and additional NIOSH research led to subsequent revisions of the standard in 1985 and 2001.⁹⁹ Those laboring in the American textile industry, which admittedly has been hard hit by globalization, can benefit from improved factory ventilation and increased medical surveillance.¹⁰⁰ NIOSH research contributed to that outcome.

Another success is NIOSH's creation of a program to eliminate diseases associated with coal mining, especially pneumoconiosis, known popularly as black lung disease.¹⁰¹ Based on on-going surveillance of miners, NIOSH's Respiratory Disease Research Program (RDRP), the Coal Workers' Health Surveillance Program, has conducted hundreds of thousands of x-ray examinations, and issued letters to 18,000 miners informing them of their right to transfer to jobs exposing them to less dust. NIOSH estimates its RDRP has assisted in reducing the level of black lung disease in long-tenure miners from approximately 35 percent in the 1970s to about five percent at present.¹⁰²

In evaluating NIOSH's impact, however, one must look carefully at and also beyond OSHA's regulatory standard setting activities, and for that matter the activities of the other regulatory agencies NIOSH supports.¹⁰³ This is not only because the standard setting process is so lengthy, politically fraught, and cumbersome, but also because OSHA, during various historical periods, has been unreceptive to promulgating regulatory standards. Tracing NIOSH research into OSHA standard setting is difficult enterprise during such periods.

For example, among NIOSH's earliest efforts in the 1970s was the Institute's production of reports on silicosis, which is caused by the inhalation of finely ground sand.¹⁰⁴ Indeed, NIOSH

⁹⁷ *Id.* at 6.

⁹⁸ See Washam, *Working Toward a New NIOSH*, at *1.

⁹⁹ See NIOSH Program Portfolio: Respiratory Diseases – Outcomes, last updated Oct. 2, 2008, (hereinafter, NIOSH Program Portfolio), available at: <http://www.cdc.gov/niosh/programs/resp/outcomes.html> .

¹⁰⁰ See Washam, *Working Toward a New NIOSH*, at *2.

¹⁰¹ *Id.*

¹⁰² *Id.* at 3.

¹⁰³ NIOSH, for example, collaborates with the Mine Safety and Health Administration on issues involving miner health, such as pneumoconiosis.

¹⁰⁴ Gerald Markowitz & David Rosner, *Silicosis and the Ongoing Struggle to Protect Workers' Health*, in *WORKER SAFETY UNDER SIEGE* 61, 64 (Vernon Mogensen, ed. 2006).

recommendations on OSHA standard setting, including a proposed ban of silica sand in abrasive blasting, were issued in 1974. Industry pressure delayed OSHA adoption of NIOSH recommendations during the Carter administration, and the dawn of the vigorously deregulatory era of Ronald Reagan and George H.W. Bush temporarily halted, for a period of 12 years, efforts to convert NIOSH's recommendations on silica into enforceable OSHA standards.¹⁰⁵

Nonetheless, during the Clinton administration, the Mine Safety and Health Administration (MSHA), a sister agency of NIOSH and OSHA, used NIOSH data on silica to establish a rule on rock drilling dust, though no OSHA standard was adopted.¹⁰⁶ Not surprisingly, the promulgation of an OSHA rule was stalled during the eight years of the last Bush administration. Even so, NIOSH has worked to promote substitute materials for silica sand in abrasive blasting, has disseminated information on improved engineering controls for silica dust, and estimates its RDRP has assisted in reducing mortality from silicosis from greater than 1000 workers per year through 1970 to less than 200 per year since 1997.¹⁰⁷ Thus, NIOSH's efforts have produced positive effects even in the absence of regulatory action by OSHA.

Over the last twelve years, through strategic management, NIOSH has become systematic about setting outcome goals for its research and measuring those outcomes.¹⁰⁸ This performance orientation to managing a federal scientific institute is mentioned in Part III below and discussed more thoroughly in Part IV. Before that, however, one must examine NIOSH's encounters with the political establishment since it was a critical political threat to NIOSH's very existence that gave rise to the Institute's strategic management program in the first place.¹⁰⁹

2. NIOSH's encounters with politics – Part 1

In contrast to OSHA, whose top administrator has tended to be a Presidential appointee highly responsive to the political agenda of the White House,¹¹⁰ NIOSH has a reputation for apolitical,

¹⁰⁵ *Id.* at 65-6.

¹⁰⁶ NIOSH Program Portfolio, at 3.

¹⁰⁷ *Id.*

¹⁰⁸ See generally, Howard, *Informing Public Health Policy and Practice: The Strategic Management of Research Processes and Organizations*.

¹⁰⁹ *Id.* at 206.

¹¹⁰ See Eisner et al., CONTEMPORARY REGULATORY POLICY, at 181 ("At OSHA, the selection of the agency executive can have a major impact on the agency's regulatory posture. The history of the agency provides a number of examples of appointees who have furthered presidential agendas.") This is not to say that OSHA's career civil servants operate in a blatantly political manner. One study, in fact, demonstrates that OSHA's field bureaucracy operates in an administratively neutral fashion. See generally Huber, *Bureaucratic Neutrality*. In other words, these civil servants act to implement the law neutrally, without regard to political concerns. *Id.* The political responsiveness referred to above relates to OSHA's top administrator's willingness or unwillingness to advance a traditional regulatory agenda. If, for example, the Assistant Secretary of Labor for Occupational Safety and Health decides that the agency should put its appropriation dollars into voluntary compliance rather than employer inspection activities, he or she can greatly affect the way the agency functions notwithstanding the views or desires of career civil servants.

scientific rigor and independence.¹¹¹ NIOSH's approach to its mission is not accidental; rather it is part-and-parcel of the bifurcated regulatory structure Congress created. As one commentator has noted:

It was no mistake that Congress used "National Institute" in naming NIOSH, thus sending the message that directed research was essential for improving worker health and safety. As the research arm, NIOSH was to be kept away from overt political influence. Congress very specifically placed NIOSH in the DHEW (now DHHS), to keep it separate and independent from the Department of Labor, providing a check and balance to the highly political workplace enforcement environment. Further, NIOSH's Director was to be appointed by the Secretary of DHHS for terms of six years in order to insulate it from presidential politics.¹¹²

And unlike OSHA, which seems a perpetual target of criticism, NIOSH's work over the past dozen years has been praised by organizations as diverse as the U.S. Chamber of Commerce, the American Society of Safety Engineers, the American Industrial Hygiene Association, and the American Federation of Labor – Congress of Industrial Organizations (AFL-CIO), which is one of two major American trade union federations.¹¹³

Yet NIOSH has not escaped politics entirely and, has struggled against efforts to politicize its scientific mission. In 1972, for example, Assistant Secretary of Labor for Occupational Safety and Health George Guenther wrote a memorandum proposing that in order to assist reelecting President Richard Nixon, no controversial safety standards, such as those involving cotton and dust exposure, be proposed by OSHA or NIOSH.¹¹⁴ Shortly after the Guenther memorandum came to light, reports surfaced indicating that OSHA had pressured NIOSH to omit exposure level recommendations in its safety criteria documents.¹¹⁵ Professor Joseph Page contemporaneously opined that OSHA was attempting to obscure the extent to which optimal workplace safety is compromised in favor of industry protection from adverse economic impact.¹¹⁶

¹¹¹ See Rick Weiss, *Change at CDC Draws Protest*, Washington Post, Aug. 31, 2004, at A19 (hereinafter Weiss, *Change at CDC Draws Protest*).

¹¹² Denny Dobbin, *Where to Put NIOSH?*, Medscape Public Health and Prevention, May 31, 2005, available at: <http://www.medscape.com/viewarticle/504483> (hereinafter Denny Dobbin, *Where to Put NIOSH?*).

¹¹³ See generally See Editorial: A Pointless Departure, New York Times, 11 July 2008, available at: http://www.nytimes.com/2008/07/11/opinion/11fri3.html?_r=1&oref=slogin; Alison Young, CDC Chief Criticized for Pushing Safety Director Out, Atlanta Journal-Constitution, 9 July 2008, available at: http://www.ajc.com/news/content/metro/stories/2008/07/09/cdc_gerberding_safety_director.html (both articles evidencing broad support for NIOSH's work by referencing a diverse array of stakeholders concerned over the failure, in July 2008, to reappoint NIOSH Director John Howard for a second term).

¹¹⁴ Joseph A. Page, *Toward Meaningful Protection of Worker Health and Safety*, 27 Stan. L. Rev. 1345, 1354-55 (1975). Apparently the plan was never implemented. *Id.*

¹¹⁵ *Id.* at 1055.

¹¹⁶ *Id.*

Politics as manifested in the appropriations process has also plagued the agency. During the administration of George W. Bush, the union representing NIOSH employees complained that since 1980, the last year of the Carter administration, both Republican and Democratic administrations have undermined the Institute's public health mandate.¹¹⁷ That NIOSH's mission has been disregarded, noted the union, is evidenced by the Institute's diminishing budget over time. Thus, NIOSH's budget for fiscal year 2000, in real dollars \$215 million, was less than NIOSH's 1980 budget of \$249 million.¹¹⁸

NIOSH has additionally, over the years, grappled with critics in industry, especially during the years of the so-called Reagan revolution. NIOSH's efforts were indeed misaligned with the pro-business agenda of the Reagan administration, which came to power in 1981.¹¹⁹ During this period, the Institute turned inward, and its research focused on uncovering problems but often neglected potential solutions.¹²⁰ Many in industry accused NIOSH of insularity, arguing that the Institute was overly academic and out of touch with the needs of the employers, the workplace, and OSHA's efforts.¹²¹

By 1994, when President Clinton's DHHS Secretary Donna Shalala appointed Linda Rosenstock as Director of NIOSH, the Institute was seriously under fire.¹²² NIOSH's moment of crisis arrived in 1995, when Congressman Thomas Cass Ballenger (R-NC) introduced the Safety and Health Improvement and Regulatory Reform Act. The main thrust of the proposed legislation was "to turn OSHA into a cooperative regulator that would work with businesses"¹²³ by, *inter alia*, mandating that 50 percent of OSHA's appropriation be reserved for consultation, compliance assistance, training, and education.¹²⁴ The bill, however, also proposed the dissolution of NIOSH,¹²⁵ which the Institute's foes presented as a solution to its "inefficiency, political bias, insufficient standard development, and over-sized budget."¹²⁶

Ballenger abandoned his effort in 1996, faced with significant opposition mobilized by the AFL-CIO¹²⁷ and a threatened Presidential veto.¹²⁸ Yet, both OSHA and NIOSH were greatly affected

¹¹⁷ American Federation of Government Employees, *THE FUTURE OF NIOSH: A VIEW FROM INSIDE* 3-4 (2004).

¹¹⁸ *Id.* at 4.

¹¹⁹ See Washam, *Working Toward a New NIOSH*, at *2.

¹²⁰ *Id.*

¹²¹ *Id.*; see also *From Washington to Westwood: New Dean Brings Her Public Health Vision to UCLA*, UCLA School of Public Health Newsletter, Winter 2001, at 4 (quoting former NIOSH Director Linda Rosenstock) (hereinafter *From Washington to Westwood*).

¹²² *From Washington to Westwood*, at 4.

¹²³ Eisner et al., *CONTEMPORARY REGULATORY POLICY*, at 191-92.

¹²⁴ *Id.*

¹²⁵ See Kenneth a. Kovach et al., *OSHA and the Politics of Reform: An Analysis of OSHA Reform Initiatives Before the 104th Congress*, 34 Harv. J. on Legis. 169, 172 (1997).

¹²⁶ *Id.* at 181.

¹²⁷ Howard, *Informing Public Health Policy and Practice: The Strategic Management of Research Processes and Organizations*, at 206.

by the experience.¹²⁹ President Clinton's OSHA, as will be described in Part III, embarked on an effort to reinvent itself, launching a number of cooperative initiatives¹³⁰ of interest to new governance theorists.

For NIOSH, in turn, Ballenger's effort was a "near death" experience.¹³¹ In response, Dr. Rosenstock began a process of transformation at the Institute, which was continued and expanded by Dr. Howard. That process, which will be described in Part III, changed the way stakeholders viewed agency, creating NIOSH advocates of former Institute foes. These new allies would, in 2004, join with others to help defeat an ideologically-driven effort to demote NIOSH within the CDC organizational hierarchy. In short, by employing strategic management techniques to increase the real world significance and impact of its research, NIOSH bolstered its standing with its stakeholders and its ability to withstand political threats.

III. The Debate Over New Workplace Governance Techniques

Beginning in the mid-1990s, OSHA and NIOSH began to implement programs that changed the way the agencies functioned. These efforts, as will be described below, which appeared promising during the Clinton administration, played out very differently at the sister agencies during the Bush administration. More specifically, during the last administration, OSHA's efforts at creating cooperative programs designed to incentivize OSH gains faltered and were rendered cosmetic. In contrast, NIOSH, under the direction of Dr. Howard, expanded and extended its creative program management with an eye toward incentivizing real world applications and measurable OSH outcomes for its research.

How is one to understand what the agencies hoped to accomplish and why they performed so differently during the Bush administration, a period in which deregulation ruled the day? In fact, a relatively recent theoretical movement, the new governance movement, sheds light on these questions. Although the concept is far from settled, and its implications far from uncontroversial, for the purpose of this article, new governance implies a range of regulatory techniques marking a shift away from top-down, adversarial, legalistic, command-and-control forms of regulation.¹³² Although applicable to a broad range of substantive areas in law, some scholars of labor and employment law have found in new governance principles a solution to the

¹²⁸ See Kenneth A. Kovach, et al., *New Prescriptions for a Healthier OSHA*, Business Horizons, March-April 1997, available at: http://findarticles.com/p/articles/mi_m1038/is_n2_v40/ai_19685044/?tag=content;col1

¹²⁹ See Eisner et al., CONTEMPORARY REGULATORY POLICY, at 192-93; Howard, *Informing Public Health Policy and Practice: The Strategic Management of Research Processes and Organizations*, at 206.

¹³⁰ See Eisner et al., CONTEMPORARY REGULATORY POLICY, at 192-93.

¹³¹ Howard, *Informing Public Health Policy and Practice: The Strategic Management of Research Processes and Organizations*, at 206.

¹³² See Grainne de Burca & Joanne Scott, *Introduction: New Governance, Law and Constitutionalism*, in LAW AND NEW GOVERNANCE IN THE EU AND THE US 1, 2 (Grainne de Burca & Joanne Scott, eds. 2006) (hereinafter de Burca & Scott, *Introduction: New Governance, Law and Constitutionalism*).

increasingly uneasy fit between workplace law and the modern workplaces it is supposed to govern.¹³³

Indeed, many scholars – both those subscribing to new governance theory and those who remain skeptical – trace an increasing inability of the law to protect working people to a number of factors. First, increasingly common forms of nontraditional working relationships, such as the employment of contract workers, temporary workers, and part-time employees, leave many workers without the protection of workplace law; quite simply, the statutory definition of “employee” renders them bereft of coverage.¹³⁴ At the same time, the precipitous decline of trade unionization has increased worker vulnerability, leaving enforcement of minimum labor standards in the hands of understaffed, under-funded government regulatory agencies.¹³⁵ Further destabilizing the regulatory environment is the present global economic crisis, which may render employees reluctant to complain to regulators about workplace conditions for fear of losing their jobs to business failure or even, in some sectors, corporate relocation outside of the United States.

New governance scholars, however, also point out several more general shortcomings of the command and control model, the model upon which most of workplace law is based. First, command-and control regulatory systems are tied to cumbersome and ineffective rulemaking procedures.¹³⁶ Second, this model has proven incapable of predicting future needs and evolving as conditions change over time.¹³⁷ Next, compliance levels, in areas from tax to environmental law to employment discrimination law, are nowhere near what policymakers would hope.¹³⁸ Lastly, public resources are insufficient thus hindering the state from enforcing the law, assisting with compliance, or monitoring conditions to identify needed legal changes.¹³⁹ Harking back to the description in Part II, it is clear that each one of these shortcomings plagues OSHA’s traditional regulatory activities, contributing to the agency’s poor reputation with many of its stakeholders and the public at-large.

¹³³ See Cynthia L. Estlund, *Welcome, New Ways of Governing the Workplace: Proceedings of the 2007 Meeting of the Association of American Law Schools Section on Labor Relations and Employment Law*, 11 *Employee Rts. & Emp. Pol’y J.* 111-12 (2007) (hereinafter Estlund, *New Ways of Governing*).

¹³⁴ See U.S. Dept. Labor & U.S. Dept. of Commerce, Commission on the Future of Worker-Management Relations: Final Report 64 (1994); Kay E. Brown, et al., *Contingent Workers: Income and Benefits Lag Behind Those of the Rest of Workforce* (U.S. General Accounting Office 2000); Robert E. Robertson, et al., *Employment Arrangements: Improved Outreach Could Help Ensure Proper Worker Classification* 21 (U.S. Government Accountability Office 2006).

¹³⁵ See Estlund, *New Ways of Governing the Workplace*, at 111-12.

¹³⁶ See Jason M. Solomon, *Law and Governance in the 21st Century Regulatory State*, 86 *Tex. L. Rev.* 819, 822 (2008) (hereinafter Solomon, *Law and Governance*); Jody Freeman, *Collaborative Governance in the Administrative State*, 45 *UCLA L. Rev.* 1, 3 (1997).

¹³⁷ Solomon, *Law and Governance*, at 822; Michael Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 *Colum. L. Rev.* 267, 278-79 (1998).

¹³⁸ *Id.*

¹³⁹ *Id.*

As an antidote, new governance scholars recommend new governance techniques that display a number of common characteristics. These techniques, for example, aim to foster self-reflection by regulated parties, active participation of numerous stakeholders, the sharing of information through best practices, continual learning and revision of organizational practices, and cooperative engagement with public authorities.¹⁴⁰ Pointing to regulatory developments in the environment, education, food safety, and employment, they argue that new governance has the potential not only to address complex public policy issues but also, as executed, to revitalize the democratic process.¹⁴¹

Other scholars, however, remain unconvinced that new governance is a phenomenon to be applauded. Critics of the new governance movement worry that results from experimental regulatory programs are mixed.¹⁴² Additionally, the costs of these programs can be prohibitive.¹⁴³ Finally, those skeptical of new governance warn that it may promote compliance that is cosmetic rather than substantive.¹⁴⁴

Such warnings counsel caution in the adoption and promotion new governance efforts for if improperly designed, these programs can divert scarce public resources away from traditional regulation in favor of ineffective regulatory window dressing. Over time, however, this somewhat skeptical author has concluded that there is value in experimentation, and, in any case, it is unlikely that regulatory innovation will cease. Thus, rather than argue against these emerging programs, one must be vigilant in assessing their effectiveness through careful monitoring.¹⁴⁵ Moreover, traditional forms of regulation should not be abandoned; rather they form a necessary backdrop for less traditional public interventions.

A. New Governance Efforts at OSHA: The VPP and CCP

Regulatory experimentation is certainly in evidence in the U.S. and, as noted above, some of these programs have involved OSH regulation. For example, Cynthia Estlund describes OSHA's Voluntary Protection Program (VPP), established in 1982 under the Reagan administration, as an

¹⁴⁰ de Burca & Scott, *Introduction: New Governance, Law and Constitutionalism*, at 3.

¹⁴¹ Sturm, *Gender Equity Regimes*, at 323.

¹⁴² Kimberly D. Krawiec, *Return of the Rogue*, 50 Ariz. L. Review 879, 893 (2008).

¹⁴³ *Id.* at 894.

¹⁴⁴ Kimberly d. Krawiec, *Cosmetic Compliance and the Failure of Negotiated Governance*, 81 Wash. U. L. Q 487 (2003); Samuel R. Bagenstos, *The Structural Turn and the Limits of Antidiscrimination Law*, 94 Cal. L. Rev. 1, 30 (2006).

¹⁴⁵ A theme of my prior work has been the need for monitoring and accountability to ensure that employer efforts to eliminate discriminatory policies, practices, and structures are substantive rather than cosmetic. *See, e.g.* Susan Bisom-Rapp, *Exceeding Our Boundaries: Transnational Employment Law Practice and the Export of American Lawyering Styles to the Global Worksite*, 24 Comp. Lab. L. & Pol'y J. 257, 279-80 (2004); Susan Bisom-Rapp, *An Ounce of Prevention is a Poor Substitute for a Pound of Cure: Confronting the Developing Jurisprudence of Education and Prevention in Employment Discrimination Law*, 22 Berkeley J. Emp. & Lab. L. 1, 44-47 (2001); *see generally* Susan Bisom-Rapp, *Bulletproofing the Workplace: Symbol and Substance in Employment Discrimination Law Practice*, 26 Fla. St. U. L. Rev. 959 (1999).

example of an agency harnessing the self-regulatory capacity of the employers it regulates.¹⁴⁶ The VPP is aimed at employers who develop their own comprehensive OSH systems to identify, prevent, and correct hazardous conditions. In return for their efforts, and so long as they maintain below average numbers of occupational injuries and illnesses, the employers are removed from OSHA's programmed inspection lists and are not subject to OSHA citations for regulatory violations that are promptly corrected.¹⁴⁷

The VPP became part of the Clinton administration's Reinventing Government Initiative. In 1995, as part of the initiative, OSHA announced that the agency was reforming its *modus operandi* from one of top-down, command and control regulation to a paradigm offering employers a choice between cooperative partnership with the government and the traditional regulatory relationship.¹⁴⁸ In thinking about why, among other reasons, OSHA undertook this effort, it helps to recall Congressman Ballenger's efforts at OSH reform. Faced with an effort to gut the agency in order to make it business-friendly and a regulation-averse Republican majority in Congress, OSHA responded by demonstrating its capacity to be a cooperative regulator.

President Clinton's OSHA, however, was not supposed to be a regulator without teeth. Instead, to provide incentives for cooperation, the Clinton administration committed itself to maintain and perhaps even beef up traditional enforcement techniques.¹⁴⁹ In other words, a potential threat of top-down regulation was meant to incentivize program participants to voluntarily make measurable OSH gains.

Obviously, the VPP is designed with the best employers in mind, the employers who are most likely to cooperate even in the absence of the threat of state sanction. A thornier problem is how government can induce voluntary compliance on the part of employers with poor safety records. Professor Orly Lobel highlights another OSHA innovation during the Clinton administration, which was designed to reach this recalcitrant population. Based on a successful pilot program in the state of Maine, in 1996, OSHA launched its Cooperative Compliance Program (CCP) in 29 states.¹⁵⁰ Some 12,500 "relatively dangerous workplaces" were identified for the program.¹⁵¹

Employers were contacted and told that given their poor safety records, they would be put on a primary inspection list and would be inspected by the end of 1999.¹⁵² The companies, however, were presented with a choice. They could avoid routine inspection and the threat of citations by

¹⁴⁶ Cynthia Estlund, *Rebuilding the Law of the Workplace in an Era of Self-Regulation*, 105 Colum. L. Rev. 319, 343-44 (2005) (hereinafter Estlund, *Rebuilding the Law*).

¹⁴⁷ See OSHA Fact Sheet: Voluntary Protection Programs (2004), available at: http://www.osha.gov/OshDoc/data_General_Facts/factsheet-vpp.pdf.

¹⁴⁸ Estlund, *Rebuilding the Law*, at 344; Lobel, *Governing Occupational Safety in the United States*, at 275.

¹⁴⁹ Estlund, *Rebuilding the Law*, at 344 ("noting that the Clinton administration sought "to preserve and even strengthen traditional adversarial enforcement mechanisms for employers who put workers at risk.")

¹⁵⁰ Lobel, *The Governance of Workplace Safety*, at 1118-19.

¹⁵¹ *Id.* at 1119.

¹⁵² *Id.*

signing an employer participation contract, agreeing to create and implement a Comprehensive Safety and Health Program, and, finally, addressing hazards for which no OSHA standards exist, such as those related to ergonomics.¹⁵³

The last requirement, addressing problems for which there are no OSH standards, met with tremendous industry resistance, perhaps best exemplified by a successful lawsuit filed by the U.S. Chamber of Commerce contesting the program.¹⁵⁴ The U.S. Court of Appeals for the District of Columbia Circuit invalidated the program, holding that OSHA, which had adopted the program as a directive rather than a formal rule subject to notice and comment rulemaking requirements, had not observed proper administrative formalities in adopting the CCP.¹⁵⁵

Despite the blow to regulatory experimentation, Lobel intimates that the CCP may well have achieved the correct balance between the promise of cooperation and the threat of government-imposed penalties.¹⁵⁶ Indeed, a number of scholars argue that in order for new governance ideas of cooperation to work, they must be linked to traditional command and control regulation.¹⁵⁷ Thus, for example, Lobel is critical of OSHA's cooperative programs under the Bush administration, which, as will be described below, relied on employer goodwill without the meaningful threat of government sanction. She characterizes the agency's approach during the last administration as an abdication by OSHA of its regulatory powers.¹⁵⁸

Was Clinton era cooperative programming any better? It is hard to say. One can definitively state that OSHA's programs during that period appeared to have potential. The CCP, while based on a seemingly promising program in Maine, was brought to a halt before its results could be assessed. Thereafter OSHA declined to revive the program, which it could have done by recreating it following formal rulemaking procedures.¹⁵⁹

The Clinton era VPP and several other OSHA voluntary programs received a similar assessment by the Government Accountability Office (GAO), which concluded in a 2004 study that the programs showed "promising results."¹⁶⁰ That study, which was conducted in 2003 and 2004 during the Bush administration, involved a review of some data from the Clinton era. Interviews with employers, workers, OSH professionals, and public officials indicated that the programs

¹⁵³ *Id.*.

¹⁵⁴ See Solomon, *Law and Governance*, at 827.

¹⁵⁵ Chamber of Commerce v. Dep't of Labor, 174 F.3d 206 (D.C. Cir. 1999).

¹⁵⁶ See Orly Lobel, *Comments, New Ways of Governing the Workplace: Proceedings of the 2007 Meeting of the Association of American Law Schools Section on Labor Relations and Employment Law*, 11 Employee Rts. & Emp. Pol'y J. 112, 116-17 (2007).

¹⁵⁷ See *id.* at 118.

¹⁵⁸ *Id.*

¹⁵⁹ Lobel, *The Governance of Workplace Safety*, at 1124.

¹⁶⁰ See WORKPLACE SAFETY AND HEALTH: OSHA'S VOLUNTARY COMPLIANCE STRATEGIES SHOW PROMISING RESULTS, BUT SHOULD BE FULLY EVALUATED BEFORE THEY ARE EXPANDED (General Accounting Office, 2004).

encouraged improved OSH outcomes.¹⁶¹ The GAO study also noted that OSHA did not at the time collect comprehensive data on program effectiveness and that without such information, the agency was hampered in making sound decisions on resource allocation.¹⁶²

Ultimately, as will be described below, OSHA's failure under the Bush administration to systematically monitor employers in its voluntary programs would render those programs purely cosmetic. New governance theorists warn about such outcomes, noting that without monitoring and the background threat of sanction, cooperative programming may be nothing more than a cover for deregulation.¹⁶³ Yet how closely must new governance efforts be linked to more traditional forms of regulation? Might there be public agencies without traditional regulatory powers that nonetheless successfully pursue their missions and create real world change?

Professor Susan Sturm has conducted a study of the National Science Foundation that answers the latter question in the affirmative. By reviewing her work on this public intermediary, one may get a sense of how to gauge the work of NIOSH, and also develop a better understanding of why, during the Bush administration, NIOSH was able to continue and build on the Clinton administration's novel programmatic efforts while OSHA was not.

B. New Governance and Public Intermediaries Like NIOSH

New governance techniques emerging in traditional regulatory agencies make for interesting study. Perhaps even more interesting are new governance studies of agencies, like NIOSH, which lack traditional enforcement power. By describing how these public entities craft strategies aimed at tackling significant societal problems, researchers hope to add new tools to the government's arsenal and generate new thinking about how the state can catalyze real world change.

Two mechanisms by which non-regulatory agencies can positively influence and incentivize beneficial outcomes are especially applicable to NIOSH. The first involves agency use of collaborative problem solving designed to bring into the deliberative process those who are directly affected by the problems within the agency's jurisdiction. NIOSH's use of this technique is discussed in subsection 1 below, which reviews the Institute's efforts to establish national OSH research priorities through extensive stakeholder collaboration.

Creative administration of agency grant making authority constitutes the second mechanism. For example, Professor Susan Sturm's recent work examines the positive role government grant making can play in workplace diversification efforts. Sturm's case study of the National Science Foundation's ADVANCE program, which provides grants to universities endeavoring to increase the number of women and minorities on engineering and science faculties, provides a

¹⁶¹ *Id.* at 43.

¹⁶² *Id.*

¹⁶³ Lobel, *The Governance of Workplace Safety*, at 1112.

useful analytical framework for evaluating NIOSH's work during the Bush administration,¹⁶⁴ and is the subject of subsection 2 below.

1. Creating the National Occupational Research Agenda (NORA)

By 1994, when Clinton era appointee Dr. Rosenstock took the helm at NIOSH, it was clear the Institute had failed to sufficiently market its accomplishments to its stakeholders.¹⁶⁵ This failure, in turn, put NIOSH's very existence at risk. Responding to threatened dissolution and potential funding cuts, Dr. Rosenstock initiated an effort to fashion national research priorities with the input of organized labor, industry, other federal science agencies, OSH professionals, and researchers from academia.¹⁶⁶ Meetings were held around the country and about 500 organizations and individuals working outside of NIOSH participated in them.¹⁶⁷

Primacy was given to openness, inclusiveness, and consensus. Assisting an initial working group of senior scientists were three external working groups with diverse stakeholder representation, several internal NIOSH working groups, and three liaison committees: 1) one devoted to Corporate outreach, chaired by General Motors; 2) one tasked with Worker outreach, chaired by the United Auto Workers, and 3) one designed with broad additional stakeholder outreach in mind, chaired by the National Safety Council.¹⁶⁸ Thirty-one federal agencies or programs assigned individuals to work on the development process, and a survey of international OSH institutes was drafted and disseminated.¹⁶⁹ Information gleaned from the process was used to prepare a draft National Occupational Research Agenda (NORA), which was distributed prior to a final meeting in Washington, D.C.

The final National Occupational Research Agenda incorporated input received at the final meeting, and highlighted 21 priority areas for research. In 1996, NIOSH published NORA, its national consensus agenda,¹⁷⁰ thereby introducing a new management model to federal science agencies. As Dr. Howard notes:

In the NIOSH model of partnership, government actively solicited stakeholder interest and involvement to set priorities for scientific research in partnership with both those who are direct beneficiaries of the health protection provided by the agency (i.e.,

¹⁶⁴ See Susan Sturm, *The Architecture of Inclusion: Advancing Workplace Equity in Higher Education*, 29 Harv. J. L. & Gender 247 (2006) (hereinafter Sturm, *The Architecture of Inclusion*).

¹⁶⁵ Howard, *Informing Public Health Policy and Practice: The Strategic Management of Research Processes and Organizations*, at 206.

¹⁶⁶ *Id.*

¹⁶⁷ See Linda Rosenstock, Christopher Olenec & Gregory R. Wagner, *The National Occupational Research Agenda: A Model of Broad Stakeholder Input into Priority Setting*, 88 Am. J. Pub. Health 353 (1998) (hereinafter Rosenstock et al., *The National Occupational Research Agenda*).

¹⁶⁸ *Id.* at 354.

¹⁶⁹ *Id.*

¹⁷⁰ Howard, *Informing Public Health Policy and Practice: The Strategic Management of Research Processes and Organizations*, at 206.

American workers), and with those who serve as intermediaries in achieving health protection goals through scientific research (i.e, researchers, interventionists, communicators, federal and state governments, academia, safety and health professions, labor organizations, employer associations, and print and electronic media).¹⁷¹

NORA's creation was a classic new governance effort utilizing collaborative problem solving to effectuate change, a process undertaken by NIOSH in the wake of its brush with mortality. As Professor Sturm notes, "remedying problems of public significance...requires reallocating priorities and power."¹⁷² A key strategy for such reallocation, a technique that destabilizes the status quo, is to involve through collaboration outsiders affected by the problems under consideration.¹⁷³

Collaboration on NORA produced several outcomes. First and most obviously, diverse stakeholder participation realigned the Institute's research priorities to focus on those most pressing and emerging.¹⁷⁴ Work on NORA also connected stakeholders more directly to NIOSH such that the Institute's programmatic success or failure became more concretely their own.¹⁷⁵ Moreover, the collaborative process enhanced NIOSH's legitimacy and standing with stakeholders, transforming, especially among industry representatives, foes into supporters.¹⁷⁶ A reservoir of broad-based stakeholder support was created, and, as will be described below, deployed to defeat efforts in 2004 to demote the Institute within the CDC hierarchy.

Finally, the Clinton era efforts regarding NORA produced a strong foundation upon which to construct a research management system to incentivize funding relevant research leading to actual OSH improvements. That management system was launched by Dr. Howard, who became Director of NIOSH in 2002, and served in the Bush administration for a period of six years. The system's strategies, its emphasis in setting measurable outcome goals, the research-to-practice (r2p) program, and the Institute's embrace of independent scientific evaluation of NIOSH programs, will be discussed in Part IV. Before that, however, subsection 2 will review Sturm's work on NSF's ADVANCE program, a case study that provides further insight into NIOSH's efforts during the Bush administration.

2. NSF's ADVANCE Program and Creative Use of Grant Making Authority

In addition to collaborative problem solving, agencies that lack traditional regulatory enforcement power, like NIOSH, are beginning to strategically use their grant making authority to positively influence real world outcomes. Professor Susan Sturm's study of the NSF's

¹⁷¹ *Id.* 207.

¹⁷² Sturm, *Gender Equity Regimes*, at 329.

¹⁷³ *Id.* at 329-30.

¹⁷⁴ Rosenstock et al., *The National Occupational Research Agenda*, at 356.

¹⁷⁵ See Sturm, *Gender Equity Regimes*, at 330.

¹⁷⁶ See *From Washington to Westwood*, at 6.

ADVANCE program, which provides funding to universities attempting to diversify their engineering and science faculties, reveals the components that can make this strategy a success, and thus provides a framework for evaluating NIOSH's efforts during the Bush years. NSF is an independent federal agency tasked with promoting research in science and engineering through grant-making.¹⁷⁷ Although it does have a compliance role in the diversity area,¹⁷⁸ it is not properly characterized as a regulatory agency. Instead, NSF influences organizational outcomes through creative involvement with its grantees.¹⁷⁹

According to Sturm, three key factors enable NSF to influence diversity outcomes via the ADVANCE program. First, NSF builds a relationship with grantees based on reciprocity and peer review. Through negotiated agreements, ADVANCE grantees agree to "shared goals and responsibilities for information gathering, standards setting, evaluation and monitoring, and sharing knowledge with the field."¹⁸⁰ Indeed, the program requires principal investigators at each university to collaborate with and evaluate their counterparts at other universities.¹⁸¹ NSF holds itself accountable through the same independent review process to which its grantees must submit.¹⁸² This reciprocity helps build a strong relationship between NSF and those universities it funds.

Second, NSF's program is based on capacity building.¹⁸³ In this respect, NSF helps the universities develop the "knowledge, incentives, and institutional infrastructure"¹⁸⁴ necessary to achieve faculty diversification. Additionally, unlike a compliance approach which penalizes outcomes that deviate from a standard or rule, suboptimal outcomes at participating universities trigger action to identify problems and correct them. NSF builds accountability into the process by monitoring the expenditure of grant funds and requiring outside review.¹⁸⁵

Finally, in order to spread its influence beyond the institutions receiving ADVANCE grants, the NSF leverages its position in the center of the institutional and professional networks that exist at American universities.¹⁸⁶ Even if they do not participate in the ADVANCE program, universities rely on NSF for scientific and engineering research grants, and are aware of NSF activities more generally. Competitive pressures, including competition for top scientific and

¹⁷⁷ See <http://www.nsf.gov/about/who.jsp>

¹⁷⁸ As an agency that provides public financing for educational programming, NSF technically has Title IX compliance responsibilities, though it is the Department of Education's Office of Civil Rights "that bears primary responsibility for investigating complaints at educational institutions." Sturm, *The Architecture of Inclusion*, at 262, n. 55. Title IX of the Education Amendments of 1972 bans sex discrimination by educational institutions in academic and athletic programming. 20 U.S.C. §1681 et seq.

¹⁷⁹ Sturm, *The Architecture of Inclusion*, at 312-13.

¹⁸⁰ *Id.* at 314.

¹⁸¹ *Id.*

¹⁸² *Id.*

¹⁸³ *Id.* at 316.

¹⁸⁴ *Id.*

¹⁸⁵ *Id.* at 320.

¹⁸⁶ *Id.* at 321.

engineering faculty, researchers, and students, at least in theory create incentives for non-participating universities to address their own gender disparities.

Moreover, NSF has mainstreamed gender diversity as a core value by considering as a merit factor how well a grant proposal broadens the participation of under-represented groups.¹⁸⁷

While not dispositive in the awarding of any particular grant, by articulating the way in which the proposal may broaden participation, a potential grantee may increase the score given to the proposal, and hence increase the chances for obtaining NSF funding.¹⁸⁸

The ADVANCE program has delivered significant returns at the University of Michigan, where annual hiring of women science and engineering faculty has tripled since 2001.¹⁸⁹ But, for the purposes of this article, NSF's efforts are also generalizable to other agencies even though those public entities concern themselves with different societal problems. In short, mechanisms for making creative use of an agency's grant making authority are applicable to any institution, public or private, which provides funding to outside organizations.

Applying ADVANCE program precepts to NIOSH is especially appropriate given similarities between the agencies. NSF and NIOSH are comparable in three respects, in that both are agencies: 1) lacking traditional enforcement powers; 2) whose efforts are devoted to science; and 3) whose activities include significant grant making. Indeed, on the last point, although NIOSH conducts a great deal of intramural research, 75 percent of NIOSH's allocated resources for new research are used to fund extramural research.¹⁹⁰

With these similarities in mind, Part IV will use Sturm's three factors – reciprocity and peer review; capacity building; and leveraging networks and practice communities – to assess NIOSH's strategic management reforms during the Bush administration, revealing how the Institute was able to adhere to its mission and catalyze positive OSH outcomes despite a lack of traditional regulatory power. That subject, and OSHA's record during the same period, will be addressed below.

IV. Assessing OSHA's and NIOSH's Records During the Bush Administration

Examining OSHA's and NIOSH's respective records during the Bush administration reminds one of folktales about siblings whose motives and dispositions are diametrical; one sibling is greedy and only interested in self-advancement while the other is good natured and tries to do

¹⁸⁷ *Id.* at 321-22.

¹⁸⁸ See GRANT PROPOSAL GUIDE (National Science Foundation 2008), available at: http://www.nsf.gov/pubs/policydocs/pappguide/nsf08_1/gpg_3.jsp.

¹⁸⁹ Sturm, *The Architecture of Inclusion*, at 286; see also Frank Dobbin & Alexandra Kalev, *The Architecture of Inclusion: Evidence from Corporate Diversity Programs*, 30 Harv. J. L. & Gender 279, 280 (2007).

¹⁹⁰ Howard, *Informing Public Health Policy and Practice: The Strategic Management of Research Processes and Organizations*, at 207.

right. In OSHA's case, however, the agency's disposition, at least at the top, was best characterized as greedy on behalf of corporate interests and predisposed to a radical deregulatory agenda. NIOSH, in turn, comes across as doing its best, given limited means and a lack of regulatory power, to address emerging OSH issues and to get the results of scientific inquiry into the hands of those who might use them.

One partial explanation for these disparate records is the sensitivity of traditional regulatory agencies to regime change in the White House and in Congress. As noted above, OSHA's leadership has historically been responsive to the ideology and political agenda of the White House.¹⁹¹ Such vulnerability has been noted regarding other enforcement agencies. For example, one study of the Office of Federal Contract Compliance Programs (OFCCP), the agency responsible for assessing the equal employment opportunity programs of federal contractors, found the work of the agency greatly impacted by the deregulatory movement of the Reagan years in the 1980s.¹⁹² Those effects are produced in part by changes in resources – the OFCCP's budget was slashed and its staff halved during those years¹⁹³ – and also, undoubtedly by changes in regulatory agency leadership and the degree to which certain stakeholder groups, for example employers, are able to assert their own agendas given the political climate of the time.

The link between the last two factors – agency leadership and the ability of stakeholders to influence agency actions – is illuminated by considering the ideological orientation OSHA's and NIOSH's leaders during the Bush years. For example, John Henshaw, the Bush administration's first head of OSHA, early in his tenure at the agency allegedly stated staff should view employers as OSHA's real customers.¹⁹⁴ A former industrial hygienist for agricultural giant Monsanto, Henshaw in his first two years withdrew 26 draft regulations from OSHA's calendar and, in harmony with the Republican majority in Congress, assisted in the rescission of the Clinton era ergonomics rule.¹⁹⁵ To explain his actions, Henshaw has noted "there wasn't a whole lot of political will for more rules and burdens on industry."¹⁹⁶

Similarly, Edwin Foulke, Jr., who in 2006 became OSHA's second chief during the Bush administration, refers to himself as a "true Ronald Reagan Republican" who "firmly believes in limited government."¹⁹⁷ Foulke, a management-side labor lawyer and Republican Party

¹⁹¹ See *supra* note 110 and accompanying text.

¹⁹² See, e.g., Alexandra Kalev & Frank Dobbin, *Enforcement of Civil Rights Law in Private Workplaces: The Effects of Compliance Reviews and Lawsuits Over Time*, 31 Law & Soc. Inquiry 855 (2006) (noting the sensitivity of the Office of Federal Contract Compliance Programs to presidential regime change).

¹⁹³ *Id.* at 865.

¹⁹⁴ R. Jeffrey Smith, *Under Bush, OSHA Mired in Inaction*, Washington Post, Dec. 29, 2008, A-1 (hereinafter Smith, *OSHA Mired in Inaction*).

¹⁹⁵ *Id.*

¹⁹⁶ *Id.*

¹⁹⁷ Stephen Labaton, *OSHA Leaves Worker Safety in the Hands of Industry*, N.Y. Times, Apr. 25, 2007, at *4 (quoting Edwin Foulke, Jr.) (hereinafter Labaton, *Worker Safety in the Hands of Industry*).

fundraiser, before his OSHA appointment opposed OSH regulations on behalf of clients like the Chamber of Commerce.¹⁹⁸ In place of inspection and enforcement activities, both before and during his time as head of the agency, Foulke primarily promoted OSHA's voluntary compliance programs and corporate self-regulation.¹⁹⁹

A deregulatory, pro-industry ideology was in great evidence at OSHA during the Bush years. Critiques of OSHA's record during that time, based on reports by the agency's career staff, reveal the withdrawal of proposed workplace regulations by political appointees,²⁰⁰ the deliberate delay of others,²⁰¹ and the modification of warnings in response to industry pressure.²⁰²

According to one estimate, President Bush's OSHA issued 86 percent fewer significant rules and regulations from 2001 through 2007 as compared to a period of similar length during the Clinton administration.²⁰³ Hearings conducted by Congress reveal legislators aghast at how poorly the agency performed.²⁰⁴ Media reports suggest both a decided bias in favor of industry by top

¹⁹⁸ *Id.* Writing about the Clinton era Ergonomics Program Standard as a management attorney, for example, Foulke noted the rule's "potential to unfairly saddl[e] employers with responsibility for [musculoskeletal disorders] that are not directly attributable to the job." Edwin G. Foulke & Robert M. Wood, *An Introduction to the New OSHA Ergonomics Program Standard*, 12 S.C. Law. 27 (2001). This was a common industry criticism of the rule.

¹⁹⁹ Labaton, *Worker Safety in the Hands of Industry*, at *4.

²⁰⁰ For example, political appointees at OSHA, responding to concerns voiced by large hospitals, scuttled a tuberculosis regulation, which agency career staff had previously concluded could avert up to 32,700 infections and 190 fatalities, and save \$115 million. Political appointees also stopped work on a long-pending regulation of "ionizing radiation in mailrooms, food warehouses, and hospitals and airports," citing "resource constraints and other priorities." Smith, *OSHA Mired in Inaction*, at A-1.

²⁰¹ A notable example of rulemaking delay involved OSHA's promulgation of a final rule on workplace personal protective equipment (PPE). See Katherine Torres, *OSHA Issues Final PPE Rule*, EHS Today, Nov. 15, 2007. First announced in 1997 and formally proposed in 1999 under the Clinton administration, the rule places the burden of paying for PPE on employers rather than leaving employees vulnerable to demands they shoulder the costs of protecting their occupational safety and health. Getting OSHA to issue the rule in final form, however, was no easy task. During the Bush administration, OSHA repeatedly postponed rulemaking. *Id.* In order to spur agency action, in January 2007, a law suit was filed against the Department of Labor by the AFL-CIO and the United Food and Commercial Workers. Additionally, Congresswoman Lucille Roybal-Allard and Congressman George Miller introduced legislation to require employers to pay for PPE. *Id.* These actions apparently prompted the sluggish agency to act. OSHA issued its final rule on PPE in November 2007. *Id.*

²⁰² Smith, *OSHA Mired in Inaction*, at A-1. One example involves the modification of a warning aimed at dental technicians "that they could be exposed to dangerous beryllium alloys while grinding fillings." *Id.* OSHA political appointees gave a proposed special bulletin on beryllium exposure, prepared by career staff, to a lobbying firm employed by the nation's largest beryllium manufacturer. *Id.* Those top OSHA officials ultimately, over the opposition of career staff, published the bulletin "with a footnote challenging a key recommendation, which the [lobbying] firm opposed." *Id.*

²⁰³ *Id.*

²⁰⁴ See, e.g., *Hidden Tragedy: Underreporting of Workplace Injuries and Illnesses*, Hearing of House Committee on Education and Labor, June 19, 2008, archived webcast available at:

<http://edlabor.house.gov/hearings/2008/06/hidden-tragedy-underreporting.shtml> ; *Is OSHA Failing to Adequately Enforce Construction Safety Rules?*, Hearing of the House Committee on Education and Labor, June 24, 2008, archived webcast available at: <http://edlabor.house.gov/hearings/2008/06/is-osh-failing-to-adequately.shtml> ; *Have OSHA Standards Failed to Keep Up With Workplace Hazards?*, Hearing of the House Committee on Education and Labor's Subcommittee on Workforce Protections, Apr. 24, 2007, archived webcast available at: <http://edlabor.house.gov/hearings/2007/04/have-osh-standards-kept-up-wi.shtml> .

OSHA administrators and incompetence in the agency's top administration.²⁰⁵ Moreover, cosmetic rather than actual regulation ruled the day. For example, an enhanced inspection program aimed at recalcitrant employers and launched by the Bush administration's OSHA was recently deemed shoddily administered.²⁰⁶

The ideological orientation of NIOSH's leadership during this time was far different. For six of the eight years of the Bush administration the Institute was directed by a career public health administrator and former professor. John Howard, before becoming the Institute's director, spent over a decade as chief of the Division of Occupational Safety and Health in California's Department of Industrial Relations.²⁰⁷ Before that he was a professor of environmental and occupational medicine at the University of California at Irvine.²⁰⁸

A review of Dr. Howard's writings, including an essay, *The Future of Occupational Safety and Health*, written in November 2008 after his departure as the Bush administration's NIOSH chief, reveals a highly nuanced view of the regulatory challenges attendant to safeguarding employees in the twenty-first century.²⁰⁹ Included among the new economy issues raised by Howard in that essay are the need to account for changing workforce demographics, in terms of increases in age and immigration, the changing structure of employment, in particular the rise of temporary and contingent employment, the increase of new technologies like nanotechnology, and how, given the slow pace of standards development, we might create a sustainable approach to occupational safety and health regulation.²¹⁰ Dr. Howard's ideological orientation, unlike the two men who led OSHA during the Bush years, puts workers' welfare at the center.

Indeed, the occasion of Dr. Howard's untimely ouster by the Bush administration, which in 2008 declined to reappoint him to a second six-year term, provides a glimpse of the esteem in which

²⁰⁵ Smith, *OSHA Mired in Inaction*, at A-1; Labaton, *Worker Safety in the Hands of Industry*. One example of apparent incompetence was Edwin Foulke's procurement of an efficiency consultant from Foulke's home state of South Carolina via a no bid contract. The consultant, paid \$681,379 in labor and travel costs for 22 months of work, failed to furnish OSHA with a record of services and hours worked. A recent report by the Department of Labor's Inspector General's office found the procurement of the consultant's services improper. See Stephen Lee, *DOL IG Accuses OSHA of No-Bid Contract, Award, Improper Payments to Consultant*, Daily Labor Report, Apr. 6, 2009, at A-15.

²⁰⁶ A recent Department of Labor Inspector General's review of OSHA's enhanced inspection program found that "employers with reported fatalities were not always identified and inspected by" OSHA as required by the program. The audit, which analyzed program performance from October 1, 2003 through March 31, 2008, determined that the agency failed to conduct required inspections, follow-up inspections, and enhanced settlement activities for 97 percent of employers qualifying for the program. *OSHA's Failure to Implement Enhancement Program May Have Cost Lives, Report Says*, Daily Labor Report, Apr. 3, 2009, at A-16.

²⁰⁷ See James Nash, *John Howard Appointed New Director of NIOSH*, EHS Today, Jun. 25, 2002, available at: http://ehstoday.com/news/ehs_imp_35587/.

²⁰⁸ *Id.*

²⁰⁹ See John Howard, *The Future of Occupational Safety and Health*, Nov. 11, 2008 (paper presented at the 75th Anniversary of the International Safety Equipment Association), available at: www.safetysupply.com/FM08Howard.pdf (hereinafter Howard, *The Future of Occupational Safety and Health*).

²¹⁰ See *id.*

he was held by a broad array of stakeholders. A New York Times editorial noted that both the AFL-CIO and the Chamber of Commerce had argued for Dr. Howard's reappointment, as had the American Society of Safety Engineers and the American Industrial Hygiene Association.²¹¹ The latter referred to Howard as "the most respected leader in NIOSH's history."²¹² Several of New York State's congressional representatives and New York Governor David Patterson, impressed with Dr. Howard's leadership on health programs for so-called "9/11 workers" experiencing illness after working at ground zero, unsuccessfully attempted to intervene.²¹³ Such an outpouring of support indicates Dr. Howard ran an agency widely perceived as effective at pursuing its mission.

Below this article compares OSHA's and NIOSH's performance in two different ways. First it uses a case study to examine how each agency adhered to its traditional mission. More specifically, subsection A reviews OSHA's and NIOSH's responses to the emergence of a rare and devastating lung disease, *bronchiolitis obliterans*, linked to inhalation of the flavoring additive diacetyl by microwave popcorn factory workers. The popcorn lung case study is a tale of a regulatory agency, OSHA, abandoning its mission, while its research counterpart, NIOSH remained true to its task.

One might argue, however, that this comparison is inapt. In other words, contrasting OSHA's regulatory performance with NIOSH's research performance might be akin to comparing apples and oranges. Certainly OSHA is subject to far greater internal and external political pressure than is NIOSH. This is likely because OSHA can in theory impose costs on industry through the regulatory process while NIOSH, which lacks such enforcement powers, cannot. It is thus not surprising that OSHA proved, during the Bush administration, much more sensitive to regulatory capture than NIOSH. Political forces aligned with industry, for example, both inside and outside government, care less about NIOSH adhering to its mission because the Institute poses less of an economic threat.

To address that concern and provide an alternative comparison, this article will also evaluate OSHA's and NIOSH's soft law programming during the Bush years. Subsection B thus reviews OSHA's cooperative compliance programming under the leadership of Mr. Henshaw and Mr. Foulke. Subsection C evaluates NIOSH's efforts during the Bush administration to build on new governance efforts begun during the Clinton administration. Ultimately, even in its soft law programming efforts, OSHA succumbed to a radical deregulatory impetus while NIOSH's efforts made documented gains for workers.

²¹¹ See Editorial: *A Pointless Departure*, New York Times, 11 July 2008, available at: http://www.nytimes.com/2008/07/11/opinion/11fri3.html?_r=1&oref=slogin (hereinafter, *A Pointless Departure*).

²¹² *Id.*

²¹³ *Id.*

A. Popcorn Lung: A Case Study of Differential Agency Response.

How did OSHA and NIOSH adhere to their missions during the Bush administration? Assessing the agencies' respective responses to the emergence of a new occupational health risk, that of diacetyl, a butter flavoring additive in microwave popcorn, demonstrates OSHA's willingness to sacrifice employee health in the name of employer self-regulation and NIOSH's determination to minimize worker illness by making scientific results available to those most affected by exposure to the additive.

In 2000, at the end of the Clinton administration, an outbreak of a rare lung disease among several microwave popcorn plant workers in Missouri prompted a local physician to contact state health authorities, who in turn contacted OSHA and NIOSH.²¹⁴ In August 2000, NIOSH began an investigation at one popcorn plant, including health evaluations of 90 percent of the plant's employees, discovering that their rate of chronic respiratory problems was 2.6 times the national average and finding sky-high concentrations of diacetyl in the work environment.²¹⁵ That December, NIOSH published interim recommendations indicating workers should wear respirators until engineering controls to eliminate diacetyl exposure could be developed.²¹⁶ The next year was spent working with the company on control measures and monitoring employee health.²¹⁷

In September 2001, during the first year of the Bush administration, NIOSH representatives returned to the plant to meet with workers and inform them that lung disease was being caused by work-related factors in the plant. Thereafter NIOSH undertook laboratory research and on-site evaluation at ten different microwave popcorn facilities.²¹⁸ By the summer of 2002, NIOSH had presented its findings on the link between diacetyl and *bronchiolitis obliterans* to OSHA, state health authorities, and the flavoring industry.²¹⁹ In December 2003, NIOSH issued an alert to 4000 businesses that make or use diacetyl, informing those employers about the connection

²¹⁴ Labaton, *Worker Safety in the Hands of Industry*, at *1. For a detailed description of *bronchiolitis obliterans*, which in the case of popcorn workers became known as "popcorn lung," see Andrew Scott Dulberg, *The Popcorn Lung Case Study: A Recipe for Regulation?*, 33 N.Y.U. Rev. L. & Soc. Change 87, 88-90 (2009) (hereinafter Dulberg, *A Recipe for Deregulation?*). The disease, caused by, among other things, inhalation of diacetyl, leaves its victims with irreversible obstruction of their bronchioles, manifesting itself in "significantly reduced ability to breath." *Id.* at 90. Once the disease advances beyond its early stages, lung transplant becomes the only viable treatment. *Id.* at 89.

²¹⁵ David Michaels, Chrissy Morgan & Celeste Monforton, *A Case of Regulatory Failure – Popcorn Workers Lung*, July 2006, at *2, available at: http://www.defendingscience.org/case_studies/A-Case-of-Regulatory-Failure-Popcorn-Workers-Lung.cfm (hereinafter Michaels, et al., *Popcorn Workers Lung*). The results of NIOSH's study at the factory were published in the *New England Journal of Medicine*. See Kathleen Kreiss, Ahmed Gomaa, Greg Kullman, Kathleen Fedan, Eduardo J. Simoes, & Paul L. Enright, *Clinical Bronchiolitis Obliterans in Workers at a Microwave-Popcorn Plant*, 347 New Eng. J. Med. 330 (2002).

²¹⁶ Michaels, et al., *Popcorn Workers Lung* at *2.

²¹⁷ *Id.*

²¹⁸ *Id.*

²¹⁹ Andrew Schneider, *Disease is Swift, Response is Slow*, Baltimore Sun, Apr. 23, 2006, available at: <http://www.baltimoresun.com/news/bal-disease042306.0.7428212.story> (hereinafter Schneider, *Response is Slow*).

between the flavoring and the lung condition, suggesting possible safeguards, and asking them to alert their workers to the danger.²²⁰ That document was posted on the NIOSH website, where it remains today.²²¹ NIOSH provided further briefings on its findings to OSHA “at a conference of top OSHA officials and compliance officers in December 2004.”²²² At the present time, the Institute continues its work on *bronchiolitis obliterans* and its link to diacetyl.²²³ Thus, in confronting an emerging health hazard, NIOSH remained true to its mission; the Institute identified the hazard and potential safeguards against it, worked to disseminate that knowledge among those affected by it, and passed relevant data to OSHA, its regulatory counterpart.

OSHA’s response could not have been more different. Rather than issue a temporary emergency standard or invoke the OSH Act’s general duty clause, either of which could have been used to require relevant employers to reduce or eliminate the diacetyl hazard, OSHA chose to address the popcorn lung crisis through voluntary, self-regulation.²²⁴ In September 2002, a so-called alliance agreement was initiated between OSHA’s regional office in Kansas City and The Popcorn Board, a trade association of the popcorn industry. The agreement provided that the Popcorn Board would provide OSHA with a mailing list of its members so that OSHA could send them information on the “potential adverse health effects” of diacetyl.²²⁵ A separate provision in the agreement gave the Board an opportunity to provide feedback on a draft OSHA Hazard Information Bulletin, which was supposed to be prepared for internal distribution at the agency.²²⁶ The agreement, which contained no enforcement component, no mechanism for employee or trade union involvement, no provision for participation by public health professionals, was concluded in March 2003.²²⁷

Faced with agency inaction and hundreds of ill workers in several states,²²⁸ in 2006, the United Food and Commercial Workers and the International Brotherhood of Teamsters petitioned OSHA for a temporary emergency standard for the additive.²²⁹ Appended to the petition was a letter signed by over 40 respected scientists and former government officials.²³⁰

²²⁰ Michaels, et al., *Popcorn Workers Lung*, at *2.

²²¹ See Preventing Lung Disease in Workers Who Use or Make Flavorings (NIOSH 2004), available at: <http://www.cdc.gov/niosh/docs/2004-110/>.

²²² Schneider, *Response is Slow*, at *5.

²²³ Dulberg, *A Recipe for Deregulation?*, at 98.

²²⁴ Michaels, et al., *Popcorn Workers Lung*, at *3; David Michaels & Celeste Monforton, *Scientific Evidence in the Regulatory System: Manufacturing Uncertainty and the Demise of the Formal Regulatory System*, 13 J.L. & Pol’y 17, 29 (2005) (hereinafter Michaels & Monforton, *Manufacturing Uncertainty*).

²²⁵ Michaels, et al., *Popcorn Workers Lung*, at *3; Michaels & Monforton, *Manufacturing Uncertainty*, at 29-30.

²²⁶ Michaels, et al., *Popcorn Workers Lung*, at *3.

²²⁷ *Id.*

²²⁸ Many of the workers brought suit against chemical companies that sold diacetyl. For a description of the legal theories upon which they have sued see Dulberg, *A Recipe for Deregulation?*, at 99-106.

²²⁹ Labaton, *Worker Safety in the Hands of Industry*, at *7-*8.

²³⁰ Dulberg, *A Recipe for Deregulation?*, at 108.

OSHA responded with its refusal one year later, noting a dearth of evidence that a standard was necessary, “would be technologically and economically feasible,” or that “current exposures constitute a grave danger.”²³¹ In April 2007, Edwin Foulke, testifying at a Congressional hearing, in terms reminiscent of the Bush administration’s position on global warming described the science on diacetyl as “murky,” but told lawmakers OSHA would prepare a safety bulletin on popcorn lung.²³² That same month, years after NIOSH first reported its findings on the link between diacetyl and popcorn lung disease, OSHA launched a national emphasis program to target inspection resources to microwave popcorn manufacturers.²³³

Pressure to prompt OSHA to regulate butter flavoring via a standard, however, continued. In June 2007, Congressional Representative Lynne C. Woolsey (D-CA) introduced legislation requiring the reluctant agency to issue an emergency interim standard “within 90 days of passage and a permanent standard within two years.”²³⁴ OSHA and the White House weighed in against the bill, with Edwin Foulke arguing that it did not provide sufficient protection for workers, was inappropriate as it bypassed the administrative process, and failed to account for other uses of diacetyl outside the popcorn industry.²³⁵ Industry opponents of the legislation echoed OSHA’s position that the scientific evidence was unclear, and that more time was needed to study popcorn lung. A coalition of industry groups also argued that regulation was unnecessary because some microwave popcorn manufacturers planned to cease using diacetyl.²³⁶

Two days before the House of Representatives was scheduled to vote on Woolsey’s bill, OSHA preempted the legislation by announcing the initiation of rulemaking.²³⁷ No doubt Edwin Foulke intended that process to exceed the timetable in Woolsey’s bill. In fact, the Bush years ended without the adoption of a regulation or standard on diacetyl. Commenting on the sister agencies’ actions on popcorn lung during the eight years of the Bush administration, Dr. David Michaels, who has recently been nominated by President Obama to head OSHA,²³⁸ noted:

Here you have one federal agency, NIOSH, doing a great job exploring the science behind a problem and a second agency, OSHA, which is supposed to be moving forward with enforcement and standard setting, and they are not.²³⁹

²³¹ *Id.* at 108-09.

²³² Labaton, *Worker Safety in the Hands of Industry*, at *1-*2.

²³³ Katherine Torres, *OSHA Launches Diacetyl Program*, EHS Today, Apr. 25, 2007.

²³⁴ Dulberg, *A Recipe for Deregulation?*, at 111.

²³⁵ *Id.* at 116.

²³⁶ *Id.*

²³⁷ *Id.* at 117.

²³⁸ Stephen Lee, *President Obama Announces Intention to Nominate David Michaels to Lead OSHA*, Daily Labor Report, July 29, 2009, at A-8.

²³⁹ Labaton, *Worker Safety in the Hands of Industry*, at *8 (quoting Dr. David Michaels).

Clearly, as exemplified by the popcorn lung case study, OSHA, the command and control regulator, proved highly susceptible to deregulatory ideology and regulatory capture during the Bush administration. NIOSH, in contrast, remained true to its mission.

Beyond demonstrating the differences in the sister agencies' records, however, the popcorn lung case study also represents a cautionary tale. Academics writing about regulatory strategy, technique, and innovation must be mindful that the prevailing political environment can exert considerable pressure on agency performance. As noted regarding OSHA and OFCCP, some agencies are quite responsive to political regime change. Given recent political history, researchers should be especially concerned with how agencies will operate in troubled times – times when the state appears hostile to the concept of regulation itself. It is during those times that at least some soft law structures demonstrate their sustainability. The sections below will describe in more detail how sister agencies OSHA and NIOSH operated such programs in such troubled times.

B. OSHA's VPP Revisited

Critics and others reviewing OSHA's record during the Bush administration often noted the agency's emphasis on voluntary compliance programs and employer self-regulation, an emphasis which, some argued, came at the expense of enforcement efforts.²⁴⁰ OSHA itself evidenced pride in its cooperative programming in a report issued at the end of the Bush administration:

OSHA would prefer to help a business prevent injuries, illnesses, and fatalities, rather than answer a single call about a workplace tragedy. Therefore, OSHA offers a number of opportunities for businesses and organizations to work cooperatively with the Agency....OSHA extends a helping hand by providing compliance assistance. A wide range of cooperative programs are tailor-made to help businesses and organizations improve their safety and health performance and provide recognition for their successes.²⁴¹

One program highlighted by the OSHA report was the Voluntary Protection Program, which has been described above. That program allows employers who develop their own comprehensive OSH systems and maintain below average numbers of occupational injuries and illnesses to

²⁴⁰ See, e.g., *Worker Safety and Health*, in TURN AROUND AMERICA: AFL-CIO RECOMMENDATIONS FOR THE OBAMA ADMINISTRATION 1, report produced for and submitted to the Obama-Biden Transition Project, Dec. 2008, available at: http://change.gov/open_government/entry/afl_cio_turn_around_america/ (“Voluntary compliance has been favored over enforcement, and the Administration has promoted building partnerships and alliances with employers and shut workers and unions out of agency programs and deliberations.”); Labaton, *Worker Safety in the Hands of Industry*, at *2 (“Instead of regulations, Mr. Foulke and top officials at other agencies favor a “voluntary compliance strategy,” reaching agreements with industry associations and companies to police themselves.”); DEATH ON THE JOB 2009, at 1 (“For eight years, the Bush administration failed to take action to address major safety and health problems. ... Voluntary efforts were favored over strong enforcement.”)

²⁴¹ OSHA FACT BOOK: OSHA ADDS VALUE TO BUSINESS, WORK AND LIFE 32 (Dec. 2008), available at: <http://www.osha.gov/briefing.html> (hereinafter OSHA FACT BOOK).

avoid programmed OSHA inspections.²⁴² VPP participants are additionally not subject to OSHA citations for promptly corrected regulatory violations.²⁴³

President Bush's OSHA described the VPP as "promot[ing] effective worksite-based safety and health by setting performance-based criteria."²⁴⁴ The agency also noted that the VPP "showcases employers who provide exemplary employee protection."²⁴⁵ As for program outcomes, OSHA noted that in 2006, "VPP participants avoided approximately 6,400 Days Away Injury cases, saving these sites \$243 million."²⁴⁶ According to the report, program participants also experienced on average, total case incident rates and DART (Days Away from work, Restricted work or job Transfer injury and illness) "rates that are 53 percent and 49 percent below the Bureau of Labor Statistics average for their industry."²⁴⁷

OSHA's faith in the VPP program is illustrated by the significant increase in the number of employer worksites participating in it during the Bush years. Between 2003 and 2008, the number of VPP sites more than doubled, from 1,039 to 2,174.²⁴⁸ These increases were fueled by several industries. For example, chemical industry worksites increased 43 percent from 2003 to 2008; motor freight transportation worksites increased 1000 percent; and electric, gas, and sanitary services sites increased fourfold.²⁴⁹

A recent Government Accountability Office Report noted that a central factor influencing these increases was OSHA's decision to expand the VPP.²⁵⁰ Bush administration Secretary of Labor Elaine Chao, for example, in 2003 announced the expansion of eligibility criteria so that greater numbers of employers could participate.²⁵¹ The OSHA regions were given "targets for the number of new sites to be approved each year."²⁵² Thus, the agency clearly made a conscious decision to devote its resources to these programs.

Until recently, however, good data was lacking on VPP outcomes.²⁵³ Indeed, writing in November 2008, not long after his NIOSH reappointment was rejected, Dr. John Howard wondered about the budgetary impact of supporting the more than 2000 VPP worksites and queried whether a program evaluation had been conducted to determine the return on that

²⁴² See *supra* Part III.A.

²⁴³ *Id.*

²⁴⁴ OSHA FACT BOOK, at 35.

²⁴⁵ *Id.*

²⁴⁶ *Id.* at 36.

²⁴⁷ *Id.* at 35.

²⁴⁸ See OSHA'S VOLUNTARY PROTECTION PROGRAMS: IMPROVED OVERSIGHT AND CONTROLS WOULD BETTER ENSURE PROGRAM QUALITY 7 (Government Accountability Office, 2009) (hereinafter VOLUNTARY PROTECTION PROGRAMS 2009).

²⁴⁹ *Id.* at 8.

²⁵⁰ *Id.* at 10.

²⁵¹ *Id.*

²⁵² *Id.*

²⁵³ Howard, *The Future of Occupational Safety and Health*, at 8.

budgetary investment.²⁵⁴ Extending his thoughts to OSHA's industry and employer alliances and partnerships he asked whether these efforts really produce concrete results or are instead "a form of public relations."²⁵⁵

While some of Dr. Howard's queries remain unanswered, the GAO report mentioned above provides some definitive answers regarding the administration of the VPP during the Bush years. In short, GAO concluded OSHA lacked internal controls to ensure only qualified employers became and remained VPP participants.²⁵⁶ Both the minimal documentation requirements of the VPP and OSHA's failure to ensure regional offices complied with VPP policies were deemed significant failings.²⁵⁷

GAO was particularly concerned about two aspects of the VPP. First, OSHA, during the study period, did not require the OSHA regions to document their own actions in response to fatalities and serious injuries at VPP sites.²⁵⁸ While the *VPP Manual* requires the OSHA regions to review employer OSH systems after such incidents to determine whether, among other things, the site should be removed from the program, the regions were not required to document "their decisions or actions taken in the VPP files."²⁵⁹ This system deficiency, noted GAO, prevented OSHA's national office from determining whether regional staff administered the program appropriately.

In concrete terms, for the period from January 2003 to August 2008, GAO found a lack of documentation of regional OSHA staff actions in 30 of 32 fatality cases occurring at VPP sites.²⁶⁰ To determine OSHA regional staff actions, GAO conducted interviews, which determined that 5 of the 30 sites were placed on 1-year conditional status, 5 more of the 30 sites voluntarily withdrew from the VPP, and OSHA staff permitted 17 of the 30 sites to remain in the program.²⁶¹ One of the 17 sites permitted to remain in the VPP sustained three occupational fatalities in the five-year period under review.²⁶² Another was assessed 10 violations related to a fatality, including 7 deemed serious and 1 regarding discrepancies in the employer's injury and illness logs.²⁶³ Thus, as the report notes, "sites that did not meet the definition of the VPP's Star program to 'successfully protect employees from fatality, injury, and illness' have remained in the program."²⁶⁴

²⁵⁴ *Id.*

²⁵⁵ *Id.*

²⁵⁶ VOLUNTARY PROTECTION PROGRAMS 2009, at 12.

²⁵⁷ *Id.*

²⁵⁸ *Id.*

²⁵⁹ *Id.*

²⁶⁰ *Id.* at 13.

²⁶¹ *Id.* Three of the 30 sites had not been reviewed by regional staff because OSHA enforcement staff needed to complete investigations of those sites. *Id.*

²⁶² *Id.*

²⁶³ *Id.*

²⁶⁴ *Id.* at 14.

Second, GAO found OSHA had neglected to develop performance goals and measures to assess the VPP's effectiveness.²⁶⁵ With regard to this concern, OSHA officials told GAO that VPP site injury and illness rates, which average approximately 50 percent below their industries' average, are the best measure of the VPP's performance.²⁶⁶ Yet GAO found reason to doubt those statistics, noting that "for 35 percent of the sites [reviewed]..., there were discrepancies between the injury and illness rates reported by the sites and the rates noted in OSHA's regional on-site review reports for the same time periods."²⁶⁷ Additionally, OSHA failed to rigorously evaluate the impact of the VPP on participants' illness and injury rates as compared to similar sites that are non-participants.²⁶⁸

Midway through the Bush years, the Clinton era cooperative efforts were deemed by GAO to show promising results.²⁶⁹ By the end of the Bush administration, GAO concluded that OSHA permitted unqualified employers to remain in the VPP, failed to provide sufficient oversight and internal controls for the program, and neglected to establish much needed performance goals and measures. So committed was President Bush's OSHA to principles of deregulation and employer self-regulation that it rendered its soft law cooperative programming purely cosmetic. Administrative actions speak loudly in this case. OSHA leadership, during the Bush administration, was interested in making the VPP's benefits available to employers but indifferent about whether those employers deserved those benefits or not.²⁷⁰

C. NIOSH's Efforts to Make OSH Research and Programming Transparent, Relevant, and Outcome Oriented

Unlike OSHA, which resisted its role as a traditional regulator during the Bush years and emasculated its cooperative programming, NIOSH continued and built upon the Clinton era efforts which produced the National Occupational Research Agenda. For NIOSH, the Bush years were marked by efforts to increase programmatic transparency, ensure OSH research relevance, and create research outcome goals that were measurable.

²⁶⁵ *Id.* at 16.

²⁶⁶ *Id.*

²⁶⁷ *Id.*

²⁶⁸ *Id.*

²⁶⁹ See *supra* notes and accompanying text.

²⁷⁰ The Obama administration's OSHA responded to the GAO report with a press release, which noted plans for a comprehensive evaluation of the VPP "to determine how the agency should best allocate its resources among cooperative programs, enforcement and the agencies' other activities." *U.S. Department of Labor's OSHA begins evaluation of Voluntary Protection Programs*, OSHA Office of Communications, June 18, 2009, available at: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASES&p_id=18065 A recent memo issued by OSHA's Acting Assistant Secretary of Labor Jordan Barab announced a series of improvements geared to respond to the GAO report's criticisms of the VPP. See *Following GAO Criticism, OSHA Memo Outlines Compliance Program Improvements*, Daily Labor Report, Aug. 18, 2009, at A-7.

1. Measuring NIOSH's effectiveness – Part 2

As noted above, during the Bush administration, NIOSH took significant steps to expand and enhance its mission beyond its support work for the standard-setting activities of other OSH agencies. In the process, the Institute became a more nimble, accountable agency, more engaged with its stakeholders, and better positioned to meet the OSH challenges of the new economy. These ends were accomplished by employing five strategies that aimed to make the Institute's research and programming transparent, relevant, and outcome oriented. As noted by Dr. Howard:

...(1) all programs conducted by NIOSH were gathered together into a portfolio of programs; (2) each program formulated a set of measurable outcome goals in partnership with relevant stakeholders; (3) each program in the portfolio, even if its science was more basic science than applied, had to have a *research to practice* (r2p) focus; (4) a process existed to provide startup funding for emerging risk issues like nanotechnology; and (5) each program's research activities had to undergo independent evaluation.²⁷¹

After conducting an extensive inventory of all Institute research programs, NIOSH created the NIOSH Program Portfolio, consisting of 32 outcome-oriented programs divided among two categories. Eight programs track major economic sectors – agriculture, construction, health care, manufacturing, mining, services, wholesale and retail trade, and transportation.²⁷² The remaining programs, which are applicable across industrial sectors, focus on adverse OSH outcomes,²⁷³ statutory programs under NIOSH's jurisdiction,²⁷⁴ and programs of great import to NIOSH and its stakeholders.²⁷⁵ Additionally, each program partnered with stakeholders and reached agreement on an agenda with measurable outputs,²⁷⁶ measurable ultimate outcomes,²⁷⁷ or measurable intermediate outcomes.²⁷⁸

An important dimension of these efforts was an emphasis on “research to practice” or r2p; in other words, a central focus of the research effort is on translating findings into real OSH improvements. Thus, no matter how theoretical the science involved, in comparison to research that is applied, each program was required to plan to transfer the results of its research into actual OSH practice.²⁷⁹

²⁷¹ Howard, *Informing Public Health Policy and Practice: The Strategic Management of Research Processes and Organizations*, at 208.

²⁷² *Id.*

²⁷³ These include cancer, respiratory diseases, and traumatic injuries. *Id.*

²⁷⁴ Included in this category are NIOSH health hazard evaluations and radiation dose reconstruction. *Id.*

²⁷⁵ In this category are emergency preparedness and response, personal protective technology, and stress and work organization. *Id.*

²⁷⁶ Measurable outputs include the production of research papers and presentations at scientific meetings. *Id.*

²⁷⁷ Ultimate outcomes include reductions in particular injuries, illnesses, and fatalities. *Id.*

²⁷⁸ Intermediate outcomes include the reduction in the *risk* of particular injuries, illnesses, and fatalities. *Id.*

²⁷⁹ *Id.* at 209.

Also important for NIOSH's new approach was to plan, through careful budgeting, for the funding of emerging OSH issues during times of resource scarcity. NIOSH thus requires contingent budgeting by its divisions to take into account, among other things, a budgetary shortfall of four percent.²⁸⁰ This approach to funding gives NIOSH the flexibility to provide initial funding to cutting edge issues of concern as they become evident.

The final noteworthy aspect of NIOSH's scientific management approach during the Bush years was subjecting its programming to outside, independent evaluation by the National Academies, specifically to determine program relevance and impact. Work began in 2005 and ended in 2008, with eight programs, whose funding represents a majority of NIOSH's budget, receiving evaluation reports.²⁸¹ Each program evaluated was responsible for developing an implementation plan based on the National Academies' findings and recommendations, seeking stakeholder input on its plan, and then integrating the implementation plan into its strategic plan for the future.²⁸² The latter is reviewed annually to assess progress toward accomplishing the National Academies' recommendations.

While these efforts are descriptively impressive, applying the three factors from Sturm's NSF study – reciprocity and peer review; capacity building; and leveraging networks and practice communities – reveals, in new governance terms, why they were effective and also how they might be improved. The ADVANCE program represents a successful non-regulatory agency effort at creative use of its grant-making authority and its influence with networks and practice communities. NIOSH also has the ability to affect outcomes through the way in which it makes grants – recall that 75 percent of the NIOSH budget for new research is devoted to extramural research – and by broadly disseminating research through OSH networks and practice communities, including ongoing efforts related to NORA.

Below subsection (a) will describe the way in which NIOSH's strategic management system utilizes two of the three Sturm factors to advance the agency's goals of making its research and programming transparent, relevant, and outcome oriented. After that, subsection (b) will assess one particular NIOSH program, the Personal Protective Technology (PPT) program in light of Sturm's factors. Ultimately, as will be described, NIOSH scores well in terms of reciprocity and peer review, and leveraging networks and practice communities. NIOSH's efforts might be improved, however, by a greater emphasis on capacity building; in other words, in order to best ensure its research will have actual real world impact, NIOSH needs more programming promoting work with those who will put into practice the changes NIOSH research recommends.

²⁸⁰ *Id.* at 210.

²⁸¹ *Id.* at 211.

²⁸² *Id.* at 212-13.

a. Assessing NIOSH's strategic management system

The new governance principles identified by Sturm as contributing to the ADVANCE program's success apply a bit differently to NIOSH's strategic management system. This is because there are important distinctions between the NSF's faculty diversity program and the scientific management efforts undertaken by NIOSH.

Through creative use of NSF's grant making authority, the ADVANCE program seeks to catalyze specific changes in the organizational structure of its grantees. In order to effectuate faculty diversity gains, NSF must create a strong relationship with the universities that participate in the program. This relationship enables NSF to assist its grantees in altering the organizational routines that stymie diversification. The ADVANCE program is thus an effort focused on achieving one particular goal – faculty diversification – in a concrete fashion at specific universities. Lessons from those efforts are then disseminated to other universities as best practices.

NIOSH, in contrast, uses its grant making authority in the service of far broader goals. More specifically, the Institute has created a strategic management super-structure that guides and influences grant making but ultimately requires less direct intervention with individual grantees. Additionally, the ultimate outcomes NIOSH seeks – a reduction of particular injuries, illnesses, and fatalities – are aimed not at its grantees but at workplaces that can benefit from its grantees' research.

Nonetheless, Sturm has identified new governance techniques that enable non-regulatory agencies to affect change even though they lack traditional enforcement powers. It thus makes sense to see whether and in what respect these techniques are utilized by NIOSH. In the final analysis, applying Sturm's factors to NIOSH's efforts reveals how those efforts effectuate sought after change and where they may fall short.

Aspects of NIOSH's strategic management system utilize the first Sturm factor, reciprocity and peer review, to incentivize OSH research that is NORA-relevant and produces measurable outcomes. In terms of reciprocity, to ensure the highest caliber scientific proposals receive NIOSH funding, the Institute decided in 2005 to apply to its own internal research a competitive grant process similar to the one used for extramural NIOSH research.²⁸³ The idea is to create a level playing field for scientists working on similar research inside and outside the Institute. Thus, all scientists whose work is NIOSH funded share similar responsibilities for ensuring research of the highest scientific caliber contributes to a NORA priority area and to the r2p

²⁸³ *Id.* at 210.

initiative.²⁸⁴ Additionally, the CDC's Policy on Releasing and Sharing Data ensures timely release and sharing of data by extramural and intramural NIOSH researchers.²⁸⁵

For strategic management purposes, peer review related to grantee work takes place at the program level. Recall that National Academies' expert reviews of the research corpus in eight program areas were completed during the Bush administration.²⁸⁶ Each program's research corpus, made up of extramural and intramural research, was assessed in terms of relevance to NORA and overall impact.²⁸⁷ Program strategic plans were thereafter amended to incorporate National Academies' recommendations.²⁸⁸ The expert review process thus provides incentives to grantees desiring continued NIOSH funding to produce research contributing to a program's overall performance, in terms of relevance and outcome, and to align their future research proposals with that program's evolving strategic plan.

NIOSH also uses its strategic management process to leverage its relationships through professional networks and practice communities, Sturm's third factor. NIOSH uses these relationships to disseminate relevant research that can ultimately affect OSH outcomes and to identify gaps in research that should be filled. Certainly, the Institute's ongoing participation in OSH consensus standard organizations, OSH symposia and scientific meetings, and the like represent opportunities for the diffusion of NIOSH's research-driven innovations. Indeed, this is the thrust of the r2p initiative – to make opinion leaders aware of results that have utility for organizations.²⁸⁹

Here the ongoing role of NORA is also instructive. From an initial articulation of national research priorities, NORA has grown into a comprehensive collaborative strategy to stimulate innovative research.²⁹⁰ NORA's government/stakeholder partnership approach brings Institute personnel into regular contact with stakeholders from industry, workers' organizations, universities, OSH professional societies, and staff from other relevant government agencies. Eight sector councils, which correspond to eight key industrial sectors of the U.S. economy, develop and maintain research agendas that are sector specific.²⁹¹ A cross-sector council made up of industrial sector council leaders provides a forum for coordination and collaboration.²⁹²

²⁸⁴ See, e.g., NIOSH Exploratory and/or Developmental Grant Program, available at: <http://grants.nih.gov/grants/guide/pa-files/PAR-09-139.html>

²⁸⁵ See, e.g. Center for Disease Control, Policy on Releasing and Sharing Data, available at: <http://www.cdc.gov/od/foia/policies/sharing.htm>

²⁸⁶ See *supra* notes and accompanying text.

²⁸⁷ *Id.*

²⁸⁸ *Id.*

²⁸⁹ Howard, *Informing Public Health Policy and Practice: The Strategic Management of Research Processes and Organizations*, at 209.

²⁹⁰ See NORA homepage at: <http://www.cdc.gov/niosh/NORA/>

²⁹¹ See NORA webpage at: <http://www.cdc.gov/niosh/NORA/councils/>

²⁹² See NORA webpage at: <http://www.cdc.gov/niosh/NORA/councils/cross/default.html>

Through NORA, NIOSH disseminates current research and simultaneously updates plans to produce new findings that are relevant and produce actual outcomes.

Having identified in NIOSH's strategic management system elements of reciprocity and peer review, and leveraging networks and practice communities, one is left to ponder Sturm's second factor, capacity building. Of the three, this factor is most difficult to discern in NIOSH's strategic management system. It might be argued that NIOSH program capacity building takes place by integrating National Academies' recommendations into the programs' strategic plans. Yet it is not clear that this is the kind of capacity building that most directly helps workers.

Capacity building is indeed mentioned in NIOSH planning documents. For example, the Institute's 2004 – 2009 Strategic Plan references capacity building among NIOSH's strategic goals. Strategic goal number two is to "[p]romote safe and healthy workplaces through interventions, recommendations, and capacity building."²⁹³ A bullet point under that goal pledges to "[b]uild capacity to address traditional and emerging hazards."²⁹⁴ One assumes the strategic goal is aimed at directly increasing the ability of organizations to create safe and healthy working environments.

Of course, it is one thing to express such sentiments in a strategic plan and quite another to operationalize them in practice. To see whether a particular NIOSH program was able to promote capacity building, subsection (b) below will describe the Institute's Personal Protective Technology Program, which was independently and favorably evaluated by the National Academies. This program is susceptible to assessment using all three Sturm factors and its review may point the way to enhancing NIOSH's capacity-building capabilities. NIOSH's PPT Program also provides another stark contrast with OSHA's recent record. Many critics of OSHA argue that the only significant OSH rule promulgated by the agency during the Bush years was a final rule on workplace personal protective equipment.²⁹⁵ First proposed in 1997 under the Clinton administration, after years of inexcusable delay, a law suit filed by organized labor against the DOL prompted the Bush administration's OSHA to publish the final PPE rule in 2007.²⁹⁶

²⁹³ NIOSH 2004 – 2009 Strategic Plan, available at: <http://www.cdc.gov/niosh/docs/strategic/>

²⁹⁴ *Id.*

²⁹⁵ Another significant rule, albeit one judicially challenged by organized labor and industry representatives, was OSHA's final rule for exposure to hexavalent chromium, which was published in 2006. *See* 71 Fed. Reg. 10,100 (Feb. 28, 2006), codified at 29 C.F.R. § 1910.1026. On February 23, 2009, a three-judge panel of the Third Circuit Court of Appeals upheld almost all aspects of the rule except for requesting on remand that OSHA provide a more comprehensive explanation for its employee exposure notification requirements. *See Public Citizen Health Research Group v. U.S. Dept. of Labor*, Nos. 06-1818 and 06-2604 (Feb. 23, 2009), available at: <http://www.ca3.uscourts.gov/opinarch/061818p.pdf>

²⁹⁶ *See supra* footnote 201.

b. NIOSH's PPT Program

As mentioned above, notable programming at NIOSH during the Bush administration included instituting rigorous, independent review of NIOSH programs by the National Academies of Science. The National Academies' review of one particular NIOSH program, the Personal Protective Technology Program, presents an interesting case study of NIOSH's effectiveness during the years 2001-2007. Applying to the PPT Program the three factors Susan Sturm deemed key to the success of NSF's ADVANCE program reveals how NIOSH, during this period, was able to adhere to its mission and catalyze positive OSH outcomes in PPT despite a lack of traditional regulatory power. Of the three factors – reciprocity and peer review; capacity building; and leveraging networks and practice communities – the PPT program rates strongest on the last. Yet aspects of the other two are evident and point to areas where NIOSH's efforts might improve in the future.

NIOSH defines PPT as "...specialized clothing or equipment worn by individuals for protection against health and safety hazards, as well as the technical methods, processes, techniques, tools, and materials that support their developments, evaluation, and use."²⁹⁷ The mission of the PPT Program is to prevent occupational "injury, illness, and death by advancing the state of knowledge and application of PPT."²⁹⁸ To that end, the program is responsible for three significant tasks: 1) certifying respirators as mandated by federal regulations; 2) conducting research on reducing worker exposure to respiratory, dermal, and injury hazards; and 3) participation in standard setting and policy making.²⁹⁹

The first task is an anchor of the program since employers subject to the OSH Act or the Mine Safety and Health Act, whose workplaces expose employees to hazardous respiratory conditions, are legally required to provide their workers with NIOSH-certified respirators.³⁰⁰ NIOSH has also been quite active regarding the third task. Work on all three tasks, however, is constrained by budget limitations, and such constraints, along with a central programmatic focus on respirators, inhibit efforts to address other forms of PPT.³⁰¹

To ensure proper program functioning and identify areas for improvement, NIOSH in 2004 requested the Institute of Medicine (IOM) and the National Research Council (NRC) form a committee of experts to evaluate the PPT program's relevance and impact.³⁰² That review was completed in 2008. Peer review, the second part of Sturm's first factor, is thus relevant to the overall efficacy of the program and its perception by its stakeholders and partners. By subjecting

²⁹⁷ Committee to Review the NIOSH Personal Protective Technology Program, EXECUTIVE SUMMARY: THE PERSONAL PROTECTIVE TECHNOLOGY PROGRAM AT NIOSH 3 (National Academy of Sciences 2008) (hereinafter NAS, Executive Summary).

²⁹⁸ NIOSH, Evidence for the PPT Program Review, at 2-3.

²⁹⁹ NAS, Executive Summary, at 5.

³⁰⁰ *Id.* at 5-6.

³⁰¹ *Id.* at 5.

³⁰² Both the IOM and the NRC are part of the National Academies of Science.

the PPT Program to outside review, NIOSH demonstrates to its stakeholders and partners the seriousness of its mission, its willingness to have its own work evaluated by the highest scientific standards, and its desire for programmatic transparency. Similarly, the scientific validity of PPT Program outputs is bolstered by publication of its scientific findings in peer reviewed journals. Publishing its research in highly regarded scientific journals places NIOSH scientists within the broader community of OSH researchers and reinforces the agency's reputation as a premiere OSH research institution. In the period from 2001 through 2007, the PPT Program produced for publication 82 peer-reviewed manuscripts on dermal and inhalation hazards.³⁰³

Unlike NSF's ADVANCE program, however, which provides for evaluation and review of its grantees progress in diversifying their science and engineering faculties, the PPT Program does not systematically evaluate end users of its products. Thus, the National Academies' review of the PPT Program noted that field testing respirators would improve program effectiveness³⁰⁴ and suggested research be undertaken to examine barriers to and facilitators of the use of PPT by end users.³⁰⁵ In other words, the National Academies indicated that the PPT Program would benefit from reciprocity in the peer evaluation process; NIOSH should subject itself to review and simultaneously provide for review of how PPT is being used by its partners and stakeholders on the ground. While some of the latter is being done in the area of emergency responders and firefighters, the review report recommended PPT usability research be undertaken for workers employed in other occupations throughout the economy.

As compared to peer review, the PPT's efforts in capacity building, Sturm's second factor, are somewhat less impressive. Here NIOSH's Research to Practice (r2p) Program, adopted during the Bush administration, is relevant to the work of the PPT Program. As described by the PPT Program:

Research to Practice (r2p) is a NIOSH initiative focused on the transfer and translation of research findings, technologies, and information into highly effective prevention practices and products that are adopted in the workplace. The goal of r2p is to reduce illness and injury by increasing workplace use of effective NIOSH and NIOSH-funded research findings. To achieve this, the PPT Program continues to work with our partners to focus research on ways to develop effective products, translate findings into practice, target dissemination efforts, and evaluate and demonstrate the effectiveness of these efforts in improving worker health and safety.³⁰⁶

Rather than transfer the research to practice by directly working with employers and workers to build their capacity, however, the PPT Program generally relies on outreach through less direct

³⁰³ NIOSH, Evidence for the PPT Program Review, at 2-37.

³⁰⁴ NAS, Executive Summary, at 6.

³⁰⁵ *Id.* at 16.

³⁰⁶ NIOSH, Evidence for the PPT Program Review, at 2-35.

means, including participating in standards development organizations (SDO), remaining active in the Interagency Board for Equipment Standardization and Interoperability, and participating in conferences, workshops, professional meetings, and trade shows.³⁰⁷ While these activities enable PPT Program personnel to interact with industry “leaders who are likely to become early adopters of program research,”³⁰⁸ clearly the PPT Program would have more control over outcomes by working directly with end users.³⁰⁹

One area where the PPT Program exhibits capacity building activity is in its response to the over 100 assistance and information requests received annually by the program. Routine contacts frequently involve requests for technical training by user groups such as labor unions.³¹⁰ Through train-the-trainer programs, the PPT Program helps OSH training professionals update their skills to better meet emerging safety and health challenges.

Emergency requests involve the PPT Program in much greater capacity building activity. During the National Academies’ report review period, the PPT Program responded to the attacks of September 11, 2001, the anthrax scare that followed soon thereafter, the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak, and hurricanes Katrina and Rita in 2005.³¹¹ Extensive capacity building, for example, is evidenced in the program’s swift response to a request for help from the New York City Department of Health in the wake of the attacks on the World Trade Center. PPT Program efforts, which began just hours after the attack, included identifying potential hazards, helping select proper protective equipment for workers, developing procedures for cleaning and sanitizing equipment on site to allow for reuse, and developing “guidelines to help supervisors integrate worker safety and health into site operations.”³¹² These efforts have increased the capacity New York City’s emergency first responders to meet future natural and manmade disasters.

The PPT Program’s strongest showing on the Sturm factors, however, is in leveraging professional networks and communities of practice, a technique used effectively by the program in standard setting activities. Helping develop mandatory standards, which are federally required standards developed by enforcement agencies via rulemaking, and consensus standards, which are created by national and international standards development organizations, is an element of

³⁰⁷ *Id.*

³⁰⁸ *Id.*

³⁰⁹ The NIOSH evidentiary report prepared in advance of the National Academies’ review evidences some concern about NIOSH’s lack of control over how research is transferred and what the outcomes of transfer may be. The evidentiary report attributes the lack of control to its dependent but necessary partnerships with employers, labor, industry groups, regulatory bodies, and PPT manufacturers. Attempting to influence the actions of their partners is considered an intermediate output of the PPT program. *Id.* at 1-14.

³¹⁰ *Id.* at 2-38.

³¹¹ *Id.* at 2-39.

³¹² *Id.*

the PPT Program.³¹³ Recall the program's third task is to participate in standard setting and policy making.

Regrettably, the adoption of mandatory standards encompassing the latest technologies and research is hampered by the lengthy and often contentious notice and comment rulemaking process. One important project for the PPT Program, for example, is assisting in updating regulations for mine self-rescue respirators, an essential piece of equipment for miners trapped in mine collapses. Yet the National Academies' review noted in 2008 that rule making was only in its initial stages and needed to be expedited.³¹⁴

Participation in the development of consensus standards, however, enables the PPT Program to increase its influence and spread its research findings broadly. Consensus standards are developed by SDO committees comprised of representatives of PPT users, labor, industry, government, academia, and the professional OSH community. PPT program personnel participate in the activities of a number of SDOs, including those conducted by the International Organization for Standardization (ISO), the American Society for Testing and Materials International (ASTM), the American National Standards Institute (ANSI), and the National Fire Protection Association (NFPA).³¹⁵ The National Academies' review found the PPT Program's participation in setting consensus standards and testing methods has been "productive," especially in the setting of "standards designed to reduce hazardous dermal exposure."³¹⁶ Another positive outcome noted in the review was the PPT program's contributions through the consensus standard making process to "test methods and performance standards for protective gear."³¹⁷

Overall, the National Academies' review of the PPT Program was favorable, as noted in the report's Executive Summary:

...[T]he PPT Program has made meaningful contributions in improving worker health and safety. Using a five-point scoring scale (where 5 is the highest), the committee assigned the NIOSH PPT Program a score of 4 for relevance. This score reflects the judgment that the PPT Program is working in priority areas and is engaged in transferring its research to improved products and processes. The committee also assigned the PPT Program a score of 4 for impact, indicating the program has made probable contributions to end outcomes (improvements in worker health or safety) in addition to well-accepted intermediate outcomes.³¹⁸

³¹³ Id. at 2-5.

³¹⁴ NAS, Executive Summary, at 6.

³¹⁵ NIOSH, Evidence for the PPT Program Review, at 2-6.

³¹⁶ NAS, Executive Summary, at 6.

³¹⁷ Id.

³¹⁸ NAS, Executive Summary, at 2.

In short, the review of the PPT Program is evidence that NIOSH positively influenced OSH outcomes while adhering to and expanding its mission during the Bush administration. While the National Academies' review pointed to areas where improvement in the program was warranted, obtaining such guidance from an independent reviewer is itself an accomplishment for NIOSH. Under the leadership of John Howard, the Institute positioned itself for continual improvement and responsiveness to changing conditions in the years ahead.

Given this record of productivity, it is easy to understand why the Bush administration's NIOSH was held in much higher esteem than its sister agency OSHA. The next section examines the effect NIOSH's enhanced standing had on its ability to survive politically-motivated attacks. In particular, that section addresses the ultimately unsuccessful effort in 2004 to demote NIOSH within the CDC's organizational hierarchy. The aforementioned successful intervention on behalf of the Institute by its stakeholders is an example of the way in which a well-functioning non-regulatory agency can sustain itself during a troubled period of deregulation.

2. NIOSH's encounters with politics – Part 2

As noted above, in the mid-1990s, a critical political threat to NIOSH's existence caused the Institute to rethink its mission and its research agenda. Those efforts, most specifically the process that gave birth to NORA, greatly elevated NIOSH's standing with its stakeholders. Ultimately, the reservoir of good will resulting from the agency's decision to engage with its stakeholders helped NIOSH forestall a less critical but nonetheless significant political threat in 2004. In that year, CDC Director Julie Gerberding proposed a major reorganization of the Centers, including the demotion of NIOSH within the CDC hierarchy.

Under Gerberding's proposal, NIOSH was to be located in a mid-level CDC coordinating center, the Coordinating Center for Environmental Health, Injury Prevention and Occupational Health, and its Director would no longer report directly to the Director of the CDC.³¹⁹ Some attributed the reorganization effort to the Bush administration's aim of politicizing science;³²⁰ in other words, by demoting NIOSH the CDC would gain greater control over the release of NIOSH's scientific findings. Those findings, they argued, would be reframed or suppressed if they failed to advance the Bush administration's political agenda, which was deregulatory and pro-business.³²¹ Evidence for this view was the involvement of Kent "Oz" Nelson in the CDC's Future's Initiative, which aimed to streamline the CDC.³²² Nelson was the former chief of

³¹⁹ Weiss, *Change at CDC Draws Protest*, at A19.

³²⁰ *Id.*

³²¹ *Id.*; see also, Kathleen Hennessey, *Changes at Health Institute Assailed*, L.A. Times, July 24, 2004, at A12.

³²² Weiss, *Change at CDC Draws Protest*, at A19.

United Parcel Service, which had battled against the ergonomic standards promulgated by OSHA in the Clinton administration's waning days.³²³

Regardless of motive, the plan would have reduced the NIOSH Director's access, standing and influence within the CDC. Additionally, by lumping NIOSH in with federal scientific programs that do not study occupational issues, the reorganization would have diluted the Institute's impact, diminished the resources available to it, and hampered its ability to market its successes.³²⁴

Significant opposition to the reorganization by NIOSH stakeholders, along with written protests from every living former NIOSH director, eventually scuttled the Institute's demotion. A former Reagan administration labor official described opposition to the plan as "the first issue in the last decade that all the worker safety and health stakeholder groups agree on."³²⁵ These interests, so rarely in harmony, stood united in their demand that the independence of NIOSH and its position within the CDC be preserved.³²⁶ Congress responded with language in the 2005 appropriations legislation directing the CDC to preserve NIOSH's position within the centers,³²⁷ a result seen as a victory for NIOSH stakeholders.³²⁸ Yet it was also validation of NIOSH's approach to engaging with its stakeholders. By actively involving them in the work of the Institute, NIOSH not only increased transparency, research relevance, and measurable research outcomes. The Institute also increased its ability to withstand political threats during a troubling time of deregulatory sentiment emanating from the White House.

Similar unity was demonstrated in a final political challenge involving NIOSH. More specifically, the failure in 2008 of CDC Director Gerberding to reappoint Dr. Howard to a second six-year term generated significant controversy. Dr. Howard had achieved strong support among business leaders, trade unions, health and safety professionals, and law makers.³²⁹ Some speculated Gerberding's decision was related to the CDC reorganization. This time, however,

³²³ *Id.* Indeed, in March 2001, Congress passed a resolution of disapproval of OSHA's ergonomics regulation. President Bush signed the resolution shortly thereafter repealing the rules. See Stuart Shapiro, *The Role of Procedural Controls in OSHA's Ergonomics Rulemaking*, 67 Pub. Admin. Rev. 688 (2007).

³²⁴ See Denny Dobbin, *Quo Vadis NIOSH*, AOEC News, Summer 2004, at 1.

³²⁵ Weiss, *Change at CDC Draws Protest*, at A19.

³²⁶ Denny Dobbin, *Where to Put NIOSH?*, at 1.

³²⁷ *Id.* The language in the Senate report is quite explicit: "[T]he Committee directs the CDC to maintain the status quo with respect to the direct reporting relationship of the NIOSH director to the CDC director. The Committee further directs the CDC to: (1) make no changes to NIOSH's current operating procedures and organizational structure and (2) ensure that no funds or personnel will be transferred from NIOSH to other components of CDC by means other than traditional reprogramming of funds." 2005 Senate Appropriations Report.

³²⁸ See Sandy Smith, *Congress May Bar NIOSH Reorganization*, EHS Today, Dec. 1, 2004 (quoting Gene Barfield, President of the American Society of Safety Engineers).

³²⁹ See *A Pointless Departure*, available at:

http://www.nytimes.com/2008/07/11/opinion/11fri3.html?_r=1&oref=slogin ; Alison Young, CDC Chief Criticized for Pushing Safety Director Out, Atlanta Journal-Constitution, 9 July 2008, available at: http://www.ajc.com/news/content/metro/stories/2008/07/09/cdc_gerberding_safety_director.html.

stakeholder support was unable to affect the outcome. Dr. Christine Branch became Acting Director of NIOSH in July 2008.

3. NIOSH and the new economy

This article began by considering the OSH challenges and mental and physical effects produced by chronic job insecurity associated with the new economy. As noted above, public health researchers recommend conducting research to assess the extent of the problem and identify strategies to ameliorate it. Here too NIOSH research has remained on the leading edge, with the agency exhibiting continuity in its work despite changes in presidential administration. Moreover, in its work on this important topic, NIOSH has used collaborative problem solving, a key new governance technique.

To better grasp how and why OSH may be affected and promulgate a national research agenda on the subject, NIOSH, in 1996, during the Clinton administration, created an interdisciplinary research team under the auspices of NORA. The team conferred with stakeholders in universities, industry, and organized labor as part of the project. Their efforts concluded in 2002, during the Bush administration, with the publication of a comprehensive report.³³⁰

Noting that little research has been done on the OSH risks of the rapidly changing workplace, the report first recommended developing a comprehensive surveillance system to better track the way in which work patterns are being transformed.³³¹ NIOSH's report also identified significant gaps in existing research on the OSH effects of our changing economy. Developments that may have adverse health effects include: reengineering production processes, organizational downsizing, flexible staffing, increasingly long hours of work and increased workload, telecommuting, and the special risks encountered by vulnerable worker populations such as women, racial and other minority populations, and older workers.³³² Finally, the report highlighted gaps in research on potential interventions that can reverse or moderate the negative OSH effects of our increasingly turbulent workplaces.³³³

Since the publication of the report, NIOSH has engaged in research and further publication aimed at filling the research gaps described above. For example, a 2004 report provides a summary of 52 studies examining the connection between long working hours, OSH, and work performance.³³⁴ Additionally, a 2008 article by NIOSH researchers lays out what is known

³³⁰ See Steven L. Sauter, et al., THE CHANGING ORGANIZATION OF WORK AND THE SAFETY AND HEALTH OF WORKING PEOPLE: KNOWLEDGE GAPS AND RESEARCH DIRECTIONS (NIOSH 2002), available at: <http://www.cdc.gov/niosh/docs/2002-116/> (hereinafter CHANGING ORGANIZATION OF WORK).

³³¹ *Id.* at 6-8.

³³² *Id.* at 9-18.

³³³ *Id.* at 19-23.

³³⁴ Claire C. Caruso, et al., OVERTIME AND EXTENDED WORK SHIFTS: RECENT FINDINGS ON ILLNESSES, INJURIES, AND HEALTH BEHAVIORS (NIOSH 2004), available at: <http://www.cdc.gov/niosh/docs/2004-143/>

about the OSH implications of nontraditional employment relationships, including temporary employees employed by agencies, independent contractors, and part-time employees.³³⁵

Admittedly, the new economy research represents only a small part of the Institute's research corpus. Nonetheless, NIOSH's new economy research demonstrates institutional engagement with the changing nature of the economy and work. The Institute's efforts also illustrate the degree to which, during the Bush administration, the agency was able to pursue its mission and create knowledge that may eventually be utilized by its regulatory counterparts.

V. Conclusion: Lessons From Troubled Times

The story, during the Bush administration, of the disparate performance of sister agencies OSHA and NIOSH offers several lessons. First, it reminds scholars of administrative law and process that in theorizing about how agencies do or should work, one must be mindful that they may function quite differently depending on the political environment of the time. Given this, it may be that the creation of a largely soft law public structure like NIOSH serves an important role in times of deregulation. Less vulnerable to change with the political winds, such public intermediaries may be able to more effectively carry out their missions and produce real world results than their regulatory counterparts.

Second, the saga of OSHA and NIOSH during the Bush presidency may prompt scholars of OSH law and practice to rethink the common assumption that the separation of the two agencies in different executive departments has hindered OSH outcomes on the ground. In fact, it appears likely that their separation was a crucial factor in NIOSH's good performance record during the last presidential administration. Had NIOSH been housed within the DOL, for example, its efforts would have been much more vulnerable to attack. Recalling the popcorn lung case study, it is highly unlikely that OSHA chief John Henshaw, who presided over OSHA's initial ineffective response to the problem, or Edwin Foulke, who deemed the link between diacetyl and the disease "murky," would have sat idly by while NIOSH made vigorous efforts to get its research into the hands of those most affected by the additive. More likely, in this author's opinion, is that OSHA political appointees would have advised Secretary of Labor Elaine Chao to suppress the research or call it into doubt.

Finally, considering the disparate experiences of OSHA and NIOSH during the Bush administration can inform new governance scholars. While under ideal conditions, new governance programming, such as the Clinton administration's ill-fated Cooperative Compliance Program, the OSHA program aimed at employers with poor safety records, melds together the use of carrots and sticks, such programs themselves are subject to sharp and effective political

³³⁵ Kristin J. Cummings & Kathleen Kreiss, *Contingent Workers and Contingent Health: Risks of a Modern Economy*, 299 J. Am. Med. Assoc. (JAMA) 448 (2008).

attack. Moreover, during times of deregulation, the regulatory agencies in which such innovative programs are housed may well be inclined to render the programming cosmetic rather than substantive. Although the impact of soft law public intermediaries may be less direct than hard law regulation during the best of times, during troubled times, agencies like NIOSH may prove much more adept at pursuing their public missions.

Now that the regulatory tide has apparently turned, OSHA and NIOSH should work to create meaningful yet impermanent links so that the research of the latter informs the work of the former. This, one would imagine, may happen as a matter of course since flexible structures for exchange already exist. A change of regulatory mindset on OSHA's part – from indifference to NIOSH findings to engagement with them – is all that is necessary. In addition to regular meetings of the OSHA-NIOSH Issues Exchange Group,³³⁶ greater participation by OSHA in NORA activities is a way to catalyze robust agency interchange. There is certainly precedent for such cooperation. During the Bush administration, for example, NIOSH and OSHA closely collaborated on pandemic flu preparedness, resulting in the creation of a government website for flu preparedness and interim guidance on the use of masks and respirators in health care settings.³³⁷

Indeed we may be poised for an unprecedented period of collaboration between the two agencies. As noted above, President Obama has nominated Dr. David Michaels to head OSHA.³³⁸ Dr. Michaels, who *inter alia* published articles on the popcorn lung debacle,³³⁹ is Research Professor in the Department of Environmental and Occupational Health at George Washington University.³⁴⁰ A particular focus of his research is the use and potential manipulation of science in public policy.³⁴¹ At the time of this article's writing in October 2009, Dr. Michaels is awaiting Senate confirmation.

Meanwhile, DHHS Secretary Kathleen Sebelius announced on September 3, 2009 the reappointment of Dr. John Howard to head NIOSH.³⁴² Secretary Sebelius also appointed Dr.

³³⁶ The OSHA-NIOSH Issues Exchange Group is an inter-agency group designed to encourage interaction between the two agencies on standard setting and other collaborative efforts. See Detailed Information on the CDC: Occupational Safety and Health Assessment, 2004, para. 3.5, available at:

<http://www.whitehouse.gov/omb/expectmore/detail/10002160.2004.html#questions>

³³⁷ See National Advisory Committee on Occupational Safety and Health, Meeting Minutes, Nov. 28, 2006, available at: <http://www.osha.gov/dop/nacosh/nagenda061128A.html>

³³⁸ See *supra* note 238 and accompanying text.

³³⁹ See *supra* notes 215 & 224.

³⁴⁰ See David Michaels' Faculty Profile, George Washington University website, at: http://www.gwumc.edu/sphhs/faculty/michaels_david.cfm

³⁴¹ See David Michaels, DOUBT IS THEIR PRODUCT: HOW INDUSTRY'S ASSAULT ON SCIENCE THREATENS YOUR HEALTH (2008).

³⁴² Press Release, U.S. Dept. Health & Human Services, Secretary Sebelius Announces New Director of CDC's National Institute for Occupational Safety and Health, (Sept. 3, 2009), available at: <http://www.hhs.gov/news/press/2009pres/09/20090903d.html>

Howard to serve as DHHS Coordinator for World Trade Center Programs.³⁴³ Since Dr. Howard's appointment does not require Senate confirmation, his posting took effect immediately.³⁴⁴

Interchange and engagement between Drs. Howard and Michaels and their respective agencies seems almost inevitable. Yet ironically, the closer the two agencies work, the greater the chance that NIOSH will be rendered vulnerable because it, like OSHA, will be seen as part of a regulatory system attempting to impose costs on industry. One can only hope that by scrupulously maintaining its independence and continuing its innovative scientific management, NIOSH can maintain its reputation with its stakeholders, including those from the business community, while simultaneously translating its research findings, where appropriate, into traditional and responsive regulatory efforts by OSHA.

³⁴³ *Id.*

³⁴⁴ *Id.*