# OSHA STANDARDS-SETTING: PAST GLORY, PRESENT REALITY AND FUTURE HOPE

BY
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## I. INTRODUCTION

The Occupational Safety and Health Act of 1970 (Act)[1] provides the statutory foundation for the federal government's efforts to protect workers from the risk of injury, illness, or death in American workplaces. The Act's purpose is "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions."[2] To carry out its ambitious purpose, Congress provided a broad delegation of authority to the Secretary of Labor (Secretary). In 1971, the Occupational Safety and Health Administration (OSHA) was administratively established to carry out the Secretary's duties under the Act.

Among the duties delegated to the Secretary in the Act, the authority to adopt and enforce occupational safety and health standards represents the core functions for OSHA. An occupational safety and health standard is defined in the Act as "reasonably necessary or appropriate to provide safe or healthful employment and places of employment."[3] In adopting a standard that specifically protects workers against toxic materials such as chemicals or harmful physical agents, as opposed to a safety standard like "Cranes and Derricks,"[4] Congress requires OSHA to set a health standard "which most adequately assures, to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity even if such an employee has regular exposure to the hazard . . . for the period of his working life."[5]

Using the Act's broad statutory authorities granted to the Secretary, OSHA adopted the majority of its current standards for toxic chemical and physical agents in the 1970s. The 1970s "period of glory" passed quickly though. Beginning in early 1980s, the flow of OSHA health standards-setting slowed considerably. By 2010, the flow could charitably be described as a trickle. As far back as twenty years ago, though, the slow pace of OSHA health standard setting began to be noticeable to practitioners and academic commentators alike. In the early 1990s,

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1. Pub. L. No. 91-596, 84 Stat. 1590 (1970) (codified at 29 U.S.C. §§ 651-78 (2006)).
2. 29 U.S.C. § 651.
3. *Id.* § 652(8).
4. 29 C.F.R. § 1926.550 (2010).
5. 29 U.S.C. § 655(b)(5).

OSHA's health standards development process was being described as "ossified."[6] In fact, most of the permissible exposure limits (PELs) for toxic agents adopted by OSHA in the 1970s are now considered to be grossly obsolete and not reflective of any current professional standard of occupational safety and health practice.[7]

Even when OSHA decides to engage in standards-setting, the effort can be for naught. For instance, OSHA promulgated a proposed ergonomics program standard on November 23, 1999[8] and a final rule on November 14, 2000[9] after many years of work. In 2001, however, OSHA's ergonomics program standard became the first standard to be nullified by Congress by means of a resolution of disapproval under the Congressional Review of Agency Rulemaking Act (CRA).[10] The resolution of disapproval under the CRA was signed into law by President Bush on March 20, 2001 and OSHA's ergonomics program standard ceased to have any legal effect.[11]

How can the slow pace of OSHA's health standards development process be accelerated to address obsolete PELs, as well as to address emerging risks to workers in a much more timely fashion?

This essay provides some suggestions to address the slow pace of OSHA standards-setting. Section II explores the causes for the slow pace of OSHA's occupational health standards development because to fix a process that is broken you have to know why it is broken. Section III considers the ways OSHA has accomplished its standards-setting mission without benefit of the timely revision of out-of-date standards or the robust adoption of new standards to meet emerging workplace risks. Section IV considers some suggestions to accelerate the slow pace of standards setting at OSHA based on the causes of the slow pace. Finally, Section V considers whether the 111th Congress can reform the standards-setting process at OSHA by means of the Protecting America's Workers Act of 2009.[12]

6. Thomas O. McGarity, *Some Thoughts on "Deossifying" the Rulemaking Process*, 41 DUKE L.J. 1385 (1992).

7. John Howard, *Setting Occupational Exposure Limits: Are We Living in a Post-OEL World?* 7 U. PA. J. LAB. & EMP. L. 513 (2005).

8. 64 Fed. Reg. 65,768 (Nov. 23, 1999).

9. 65 Fed. Reg. 68262 (November 14, 2000).

10. 5 U.S.C. §§ 801-08 (2006).

11. A resolution of disapproval was signed by President Bush on March 20, 2001 and became law. *See* Pub. L. No. 107-5, 115 Stat. 7 (2001).

12. Protecting America's Workers Act of 2009, H.R. 2067, 111th Cong. (1st Sess. 2009), *available at* <http://thomas.loc.gov/cgi-bin/query/z?c111:H.R.2067.IH:>; Protecting America's Workers Act of 2009, S. 1580, 111th Cong. (1st Sess. 2009), *available at* <http://thomas.loc.gov/cgi-bin/query/z?c111:S.1580:>.

## II. WHAT CAUSES THE SLOW PACE OF HEALTH STANDARDS-SETTING AT OSHA?

Although few studies are available to tell us exactly what factors are causative in the slow pace of governmental standards development at OSHA, a number of factors are mentioned as contributors to the slow pace problem by both stakeholders and by commentators from the disciplines of political science, economics, law, and science. What follows is an enumeration of some of the more commonly discussed factors that *may* explain the slow pace of OSHA health standards-setting over the past three decades. Some factors are unique to OSHA or under OSHA's ability to influence, and other factors affect rulemaking at every federal government regulatory agency and are much less amenable to change by OSHA alone.

### *A. Lack of Political Will*

A commonly held belief in the occupational safety and health community – whether sourced from the worker, management, practitioner or academic perspective – is that the political party in charge determines OSHA's approach to standards-setting and in enforcement. The "political party" view suggests that Republicans are generally hostile to standards-setting because corporate interests which tend to support the Republicans do not want to see more standards and regulation from government, and that Democrats are more inclined to standards-setting because organized labor and worker advocates seek more enforceable protections for workers. Starkly stated, OSHA suffers from a lack of political will when a Republican is President, and does not when a Democrat is President. As this view goes, if only the will was present, there would be more standards developed and the pace of OSHA standards-setting would accelerate.

If the "political-party-in-charge" factor were strictly operative as a cause of OSHA's standards-setting problem, the pace of OSHA standards-setting would be expected to wax and wane strictly along political party lines. When we count the number of new OSHA standards, revised PELs or even new recommended exposure limits (RELs) proposed by the National Institute for Occupational Safety and Health (NIOSH) by political administration, we see an overall downward trend in all three indicators of performance beginning in the early 1980s separate from the political party in power.

The trend downward appears to transcend periods of both Republican and Democratic presidential administrations. The inexorable downward trend of health standards productivity since the 1980s, in spite of eight

years of a Democratic administration (1992-2000), suggests that a lack of political will may not represent the sole reason for the slow pace. Yet, one cannot rule out that a lack of political appetite for rulemaking during the de-regulatory era of the 1980s in the Reagan administration, and again during the first decade of the 2000s during the George Bush administration, may have affected OSHA more than other federal agencies.

In addition, a lack of political will is often expressed in the President's appointment of an OSHA administrator. Appointment of an Assistant Secretary of Labor for Occupational Safety and Health may determine OSHA's policy posture about standards-setting. Clearly, a President's selection of an OSHA appointee is an important tool in how the President exerts control over an agency.[13] In OSHA's case, the same political party controlled OSHA in the George H.W. Bush and the George W. Bush Administrations, yet the quantitative production (and attempted production) of health standards in the former was greater than in the latter despite both administrations being of the same political party. Restricting the scope of OSHA's regulatory agenda and directing internal resources from standards-setting to voluntary programs are examples of actions that an OSHA administrator can take to slow the overall pace of standards-setting.[14]

### *B. Insufficient Resources for Standards-Setting*

Less commonly heard is the view that OSHA does not allocate sufficient internal resources (government personnel and/or private contract support) to develop health standards. Developing an occupational health standard with a quantitative PEL requires significant time and resources. At a minimum, OSHA must provide a scientific foundation for the decision to regulate. The decision to regulate depends on data from the peer-reviewed scientific or medical literature, an extensive quantitative risk assessment analysis, as well as economic and technical feasibility analyses. Experienced standards writers are not in abundant supply in the Department of Labor (DOL) as a whole. For example, the Mine Safety and Health Administration (MSHA) asked for a loan of standards writers from OSHA to write standards required by the Mine Improvement and New Emergency Response Act of 2006.[15]

13. MARC ALLEN EISNER ET AL., CONTEMPORARY REGULATORY POLICY 188 (2000).

14. Susan Bisom-Rapp, *What We Learn in Troubled Times: Deregulation and Safe Work in the New Economy*, 55 WAYNE L. REV. 1197 (2009).

15. Mine Improvement and New Emergency Response Act of 2006. Pub. L. No. 109-236, 120 Stat. 493 (2006) (codified at scattered sections of 30 U.S.C.), *available at* <http://www.msha.gov/MinerAct/MineActAmmendmentSummary.asp>.

Every federal agency has a limited budget, and OSHA must allocate its fiscal resources among many competing interests. OSHA's Directorate of Standards and Guidance – the home of standards-setting – must compete internally with enforcement and voluntary programs for limited budgetary resources. Clearly, investment in standards development activities plays a role in maintaining the pace of standards setting (especially when undertaking multiple health standards simultaneously), but a limited internal budget resources for standards-setting does not entirely explain the slow pace of standards setting over OSHA's entire forty-year lifespan.

### *C. Overregulation*

Some of the health standards OSHA has promulgated are complex and quite lengthy, and impose a plethora of employer duties.[16] This overregulation characteristic has been mentioned as a factor to explain OSHA's underregulation problem.

OSHA's health standards are criticized for many different things. Among the most common criticisms are that OSHA health standards are unnecessarily complex, excessively lengthy, and written by lawyers to survive judicial challenge. And, as such, many practitioners say that OSHA standards are not written to aid employer understanding nor are they written for ease of achieving compliance. The sheer length of some health standards is daunting to the regulated industry. Their length and complexity makes it easy to accept that OSHA requires over a decade or more to promulgate a final health standard.

This characteristic of overregulation has been identified as a reason for OSHA's problem of underregulation. Even though it seems somewhat paradoxical, OSHA's problem of little to no health standards output is largely due to its unrestrained tendency to engage in excessiveness when it does promulgate a health standard.[17] For example, the scientific justification for a regulatory provision set forth in the preamble of a standard often includes every published paper on the topic when one carefully selected paper may suffice. If each standard that is developed is overly complex, often taking a decade or more to prepare, overall standards output by OSHA would be expected to suffer. However, describing OSHA's tendency to overregulate when it does promulgate a health standard, and even showing that such complexity does slow the pace of

16. *E.g.*, 29 C.F.R. § 1910.1027 (2010) (cadmium).

17. JOHN MENDELOFF, THE DILEMMA OF TOXIC SUBSTANCE REGULATION: HOW OVERRREGULATION CAUSES UNDERREGULATION AT OSHA 135 (1988).

standards development, does not explain why OSHA gives in to such a tendency. We will see below that OSHA may be engaging in defensive rulemaking to fend off real and imagined judicial challenges to its standards.

### *D. OIRA Review*

Various presidential Executive Orders create review requirements for all federal agencies. Executive Order 12,866, issued by President Clinton requires all federal agencies to assess the benefits and costs of proposed and final economically significant rules.[18] Under Executive Order 12,866, every agency significant regulation action is subject to review by the Office of Information and Regulatory Affairs (OIRA) within the Office of Management and Budget (OMB). This mandatory review of all federal agency standards and regulations adds time to the development of any rule by the federal government including an OSHA health standard. For OIRA to be a significant factor to explain the slow pace of OSHA standards-setting as opposed to other federal agencies whose standards it reviews, the length of time OIRA takes to review OSHA's proposed standards would have to have been disproportionate to account for the slow pace of OSHA standards-setting. Federal agency rulemaking review by OIRA is not transparent, which makes it difficult to discern any disproportionate effect on OSHA standards-setting. Even so, the existence of a differential effect on OSHA as opposed to all other federal rulemaking agencies seems unlikely. What is more likely is that OIRA review is just one more extra-statutory requirement added to the OSHA rulemaking process, as explained in the section which follows.

### *E. Added Rulemaking Requirements*

In 1970, the Act set out what its framers thought would be a sustainable standards-setting process, utilizing "informal" notice and comment rulemaking.[19] Looking forward through forty years of OSHA history, the reality has unfolded far differently. Congress envisioned that OSHA would develop occupational health standards by first determining if the hazard posed a risk of material impairment, then following the straightforward rulemaking requirements found in the U.S. Administrative Procedures Act,[20] making sure to determine whether the proposed standard

18. Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993).
19. 29 U.S.C. § 655.
20. 5 U.S.C. § 553 (2006).

is feasible technically and economically.[21] Starting in the early 1980s and extending to the present, requirements were added to federal rulemaking by Congress, the courts, and the President.

These additional requirements have contributed to greatly slowing OSHA's ability to adopt occupational health standards. Occupational health standards adoption slowed down so much that from 2000 through 2008, OSHA adopted only one occupational health standard – a standard pertaining to exposure to hexavalent chromium.[22] Even that adoption was not spontaneous on OSHA's part, but was done in response to an order from the Third Circuit Court of Appeals. In 2002, the Third Circuit, in response to a petition from Public Citizen Health Research Group, ordered OSHA to promulgate a standard.[23]

What follows is a short review of these added rulemaking requirements which I believe are more responsible for the slow pace of OSHA standards-setting than some of the other factors reviewed above.

### 1. Congress

In 1980, Congress enacted the Regulatory Flexibility Act (RFA) which requires federal agencies to conduct a regulatory flexibility analysis when proposing a standard that could have significant economic impact on a substantial number of small businesses, organizations, or state or local governments.[24] In 1996, the RFA was significantly amended by the Small Business Regulatory Enforcement and Fairness Act (SBREFA).[25] SBREFA requires: (1) that OSHA appoint a special panel of Small Business Administration Office of Advocacy personnel, OSHA personnel, and OMB staff to review any proposed rule and to obtain comments on any proposed rule from small business representatives; (2) that a regulatory flexibility analysis be a part of the rulemaking record if and when the standard is challenged in court; and (3) that courts be empowered to order OSHA to comply with any rulemaking procedure with which it failed to heed and to either remand the rule to OSHA or exempt small businesses from OSHA enforcement until OSHA complies.[26] Since SBREFA gives the courts the right to engage in a substantive review to determine if the standard is supported by substantial evidence, it adds considerably more complexity to

21. Am. Textile Mfrs., Inc., v. Donovan, 452 U.S. 490 (1981).

22. 71 Fed. Reg. 63,238 (Oct. 30, 2006).

23. Pub. Citizen Health Research Group v. Chao, 314 F.3d 143, 152 (3d Cir. 2002).

24. Pub. L. No. 96-354, 94 Stat. 1164 (1980) (codified at 5 U.S.C. §§ 601-12 (2006)).

25. Pub. L. No. 104-121, tit. II, 110 Stat. 857-74 (1996) (codified at scattered sections of the code).

26. Pub. L. No. 104-121, tit. II, § 242, 110 Stat. 865 (codified at 5 U.S.C. § 611).

the standards-setting process.[27]

Another law that impacted the rulemaking process is the Paperwork Reduction Act of 1995 (PRA)[28] and its regulations.[29] The PRA requires that federal agencies receive OMB clearance before requesting most types of information from the public. Collections of information – paperwork that is in proposed standards – are subject to review by OMB under the PRA. The Obama Administration is currently seeking ways to improve the implementation of the PRA.[30]

As discussed above, the CRA permits Congress to review every new federal regulation issued by a federal agency, and, by a joint resolution, nullify the standard.[31] In 2001, OSHA's ergonomics standard was the first standard to be overruled by Congress by using the CRA. Once a standard is nullified, OSHA may not issue another standard that is substantially similar to the version the Congress overturned without its express permission.[32] This particular provision will undoubtedly limit OSHA's discretion if the agency seeks to craft a second ergonomics program standard.

In 2001, Congress put into an appropriations bill a single sentence that ushered in an era where the informational documents that serve as the scientific foundation for a future health standard were put under considerable scrutiny. Congress authorized OMB to develop guidelines "for ensuring and maximizing the quality, objectivity, utility, and integrity of information . . . disseminated by Federal agencies" and granted to aggrieved individuals the right to file a complaint requesting correction of non-compliant information.[33] Although straining the definition of a congressional act, the sentence added is referred to as the "Information Quality Act" (IQA). Following passage of the IQA, OMB issued mandatory guidelines for federal agencies to follow.[34]

Following passage of the IQA, and the issuance of mandatory guidelines, OMB proposed a series of bulletins. The first one proposed was a government-wide peer review policy bulletin to ensure that the science

27. OCCUPATIONAL SAFETY AND HEALTH LAW 485-86 (Randy S. Rabinowitz ed., 2d ed. 2002).

28. Pub. L. No. 104-13, 109 Stat. 163 (1995) (codified at 44 U.S.C. §§ 3501-20 (2006)).

29. 5 C.F.R. pt. 1320 (2010).

30. Inproving Implementation of the Paperwork Reduction Act of 1995, 74 Fed. Reg. 55,269 (Oct. 27, 2009).

31. 5 U.S.C. §§ 801-02 (2006).

32. *Id.* § 801(b)(2).

33. Information Quality Act, Consolidated Appropriations Act, 2001. Pub. L. No. 106-554 app. C, tit. V, § 515(a), 114 Stat. 2763A-153 to -154 (2000).

34. Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, 66 Fed. Reg. 49,718 (Sept. 28, 2001), *available at* <http://www.whitehouse.gov/omb/fedreg_final_information_quality_guidelines/>.

used in any proposed standard was of the highest quality, or in the parlance of the time was sound science and not junk science. Even though the bulletin was heavily criticized as yet another way to slow down standards-setting across all federal government agencies,[35] OMB only slightly modified the final version.[36] Other bulletins followed, but the one on risk assessment in the federal government ran into serious criticism. A panel of the National Research Council of the National Academies of Science deemed it fundamentally flawed, and OMB withdrew the bulletin.[37]

### 2. Executive Branch

The executive branch has not been on the sidelines when it comes to adding to the burden of standards-setting across the federal government. Beginning in the 1980s, each administration has added procedural requirements to standards-setting. In 1981, Executive Order 12,291 required agencies to prepare a regulatory impact analysis for standards that will result in an annual effect on the economy of $100 million or more.[38] In 1985, Executive Order 12,498 required federal agencies to publish an annual regulatory program.[39] In 1993, Executive Order 12,866 replaced Executive Orders 12,291 and12,498 and outlined the regulatory principles and policies that have remained the foundation of White House administrative policy ever since.[40] Executive Order 12,866 establishes the principles all federal agencies must follow when developing a regulation or standard, including a requirement to assess the costs and benefits of various regulatory approaches and select the one that maximizes the net benefits to society.[41]

After President Clinton signed Executive Order 12,866, "Regulatory Planning and Review," the OIRA Administrator convened an interagency group to review the state of the art for economic analyses of regulatory actions required by the Executive Order. On January 11, 1996, OMB

35. OMB Watch, OMB Watch Analysis on Final Peer Review Bulletin (Jan. 10, 2005), <http://www.ombwatch.org/node/2207>.

36. Final Information Quality Bulletin for Peer Review, 70 Fed. Reg. 2664-02 (Jan. 14, 2005).

37. Press Release, National Academies, Report Recommends Withdrawal of OMB Risk Assessment Bulletin (Jan. 11, 2007), *available at* <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=11811>. The report itself is published. COMM. TO REVIEW THE OMB RISK ASSESSMENT BULLETIN, BD. ON ENVTL. STUDIES & TOXICOLOGY, DIV. ON EARTH & LIFE STUDIES, NAT'L RES. COUNCIL OF THE NAT'L ACADEMIES, SCIENTIFIC REVIEW OF THE PROPOSED RISK ASSESSMENT BULLETIN FROM THE OFFICE OF MANAGEMENT AND BUDGET (2007), *available at* <http://www.nap.edu/catalog.php?record_id=11811>.

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

39. Exec. Order No. 12,498, 50 Fed. Reg. 1036 (Jan. 4, 1985).

40. Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993).

41. *Id.*

provided more guidance to federal agencies under Executive Order 12,866 by issuing a directive called "Economic Analysis of Federal Regulations under Executive Order 12866."[42] This document instructs agencies to consider alternative strategies for standards, advising them to determine whether standards should require different results for different segments of regulated industries, requiring publication of agency regulatory agendas, and requiring that agencies submit proposed standards to OMB for review prior to adoption.[43]

In 2002 and 2007, President Bush strengthened Executive Order 12,866 through Executive Orders 13,258[44] and 13,422.[45] These orders gave OMB the power to review significant agency guidance documents (just as OMB already reviews significant agency regulations). Also, federal agencies were required to give OMB advance notice of their upcoming significant guidance documents, and to provide to OMB a draft of the guidance document, an explanation of the need for the guidance, and how it would meet that need. OMB would then notify the agency when additional consultation would be required.[46] On February 4, 2009, President Obama revoked Executive Orders 13,258 and 13,422,[47] alleviating federal agencies from the requirement of OMB review of their guidance documents.

Accompanying Executive Order 13,422, OMB issued a "Final Bulletin for Agencies on Good Guidance Practices" which contains policies and procedures for agencies to follow when developing, issuing and using informational guidance documents.[48] The Good Guidance Practices Bulletin requires that guidance publications be issued only after high-level review within the agency to ensure that the guidance document does not inadvertently contain language that mandates any action and remains in effect.[49]

42. Office of Mgmt. & Budget, Office of Information and Regulatory Affairs, Economic Analysis of Federal Regulations under Executive Order 12866 (1996), *available at* <http://www.whitehouse.gov/omb/inforeg_riaguide/>.

43. *Id.*

44. Exec. Order No. 13,258, 67 Fed. Reg. 9385 (Feb. 26, 2002).

45. Exec. Order No. 13,422, 72 Fed. Reg. 2763 (Jan. 18, 2007).

46. Memorandum M-07-013 from Rob Portman, Office of Management and Budget, Executive Office of the President, to Heads of Executive Departments and Agencies and Independent Regulatory Agencies (Apr. 25, 2007), *available at* <http://www.whitehouse.gov/omb/assets/omb/memoranda/fy2007/m07-13.pdf>.

47. Exec. Order No. 13,497, 74 Fed. Reg. 6113 (Feb. 4, 2009).

48. Final Bulletin for Agencies on Good Guidance Practices, 72 Fed. Reg. 3432-40 (Jan. 25, 2007).

49. *Id.* at 3440.

### 3. Courts

Any person who may be adversely affected by an OSHA standard may file a petition under section 6(f) challenging its validity in the U.S. Court of Appeals in the circuit wherein such person resides or has the principal place of business.[50] A petition for judicial review of an OSHA standard may be filed at any time *prior* to the sixtieth day after the issuance of the standard and unless otherwise ordered, the filing of a petition does not operate as a stay of the standard.[51] Section 6(f) of the OSH Act directs the courts to uphold the Secretary's determinations in promulgating standards if those determinations are "supported by substantial evidence in the record considered as a whole."[52] In practice, federal courts have generally declined to apply a strict substantial evidence standard of review.[53] Instead, the courts have chosen to apply two different standards depending on whether the agency determination to be reviewed is one of *fact* or *policy*.[54] Courts have essentially taken the position that only the Secretary's findings of fact should be reviewed pursuant to a substantial evidence standard, while the Secretary's policy determinations should be substantiated by a detailed statement of reasons, which are subject to a test of reasonableness.[55] It is safe to say that during the forty years of judicial review of OSHA standards, federal courts have added more requirements to the standards-setting process.

In the 1970s, judicial review of OSHA's standards was considered

50. 29 U.S.C. § 655(f) (2006).

51. *Id.*

52. *Id.* The "substantial evidence" standard of judicial review is traditionally conceived of as suited to adjudication or formal rulemaking. OSHA, however, calls for informal rulemaking, which under the Administrative Procedure Act generally entails judicial review pursuant to the less stringent "arbitrary and capricious" test. This apparent anomaly can be explained historically as a legislative compromise. The Senate OSHA bill called for informal rulemaking, but the House version specified formal rulemaking and substantial evidence review. The House receded on the procedure for promulgating standards, but the substantial evidence standard of review was adopted. Indus. Union Dep't, AFL-CIO v. Hodgson, 499 F.2d 467, 472-73 (D.C. Cir. 1974). For a more detailed discussion of these legislative events, see *Associated Indus. of N.Y. State, Inc. v. Dep't of Labor*, 487 F.2d 342, 349 (2d Cir. 1973).

53. *Hodgson*, 499 F.2d at 473.

54. *Id.*

55. Baruch Fellner & Donald W. Savelson, *Review by the Commission and the Courts*, *in* PROCEEDINGS OF THE ABA NATIONAL INSTITUTE ON OCCUPATIONAL SAFETY AND HEALTH LAW 101, 113-14 (1976). This approach has been summarized as one requiring the reviewing court to determine whether the agency (1) acted within the scope of its authority; (2) followed the procedures required by statute and by its own regulations; (3) explicated the bases for its decision; and (4) adduced substantial evidence in the record to support its determination. United Steelworkers of Am. v. Marshall, 647 F.2d 1189, 1206 (D.C. Cir. 1980); *see also* Tex. Indep. Ginners Ass'n v. Marshall, 630 F.2d 398, 404-05 (5th Cir. 1980); Am. Iron & Steel Inst. v. OSHA, 577 F.2d 825, 830-31 (3d Cir. 1978); Soc'y of the Plastics Indus., Inc. v. OSHA, 509 F.2d 1301, 1304 (2d Cir. 1975).

deferential, but that era was short-lived. In its 1980 *Benzene* decision, the U.S. Supreme Court imposed a new threshold requirement for adopting an OSHA health standard. Before adopting a health standard, OSHA must determine if a workplace is unsafe "in the sense that significant risks are present."[56] As a result of the *Benzene* decision, OSHA has had to perform a specific risk assessment for every new toxic agent for which it intends to set a PEL,[57] a very time and resource intensive process, as we have discussed. This judicially imposed factor is a significant one in explaining the slow pace of OSHA standards-setting for health standards in particular.

In 1989, OSHA tried a streamlined approach to blunt the ongoing criticism that the PELs set in OSHA's original start-up standards were becoming obsolete. Pursuant to section 6(b) of the Act, OSHA, in a massive rule, revised 212 obsolete PELs and established 162 new PELs[58] by relying on occupational exposure limits proposed by NIOSH and others, but did not conduct its own risk assessments.[59]

Immediately following promulgation, the air contaminants standard was challenged in court by various labor and industry groups. Eleven such cases were consolidated, and in 1992 the Eleventh Circuit vacated the standard.[60] The Eleventh Circuit ruled that OSHA had failed to establish that each PEL reduced a significant risk to worker health and that each exposure limit was technologically and economically feasible for the affected industries.[61] OSHA decided not to appeal the decision to the U.S. Supreme Court, and returned to its original 1971 limits for the air contaminants at issue.[62]

The Eleventh Circuit's decision was a major blow to OSHA's multiple-substance rulemaking approach, the proponents of which contended that OSHA could not feasibly undertake rulemaking for each

56. Am. Petroleum Inst. v. OSHA, 581 F.2d 493, 495 (5th Cir. 1978), *aff'd sub nom.*, Indus. Union Dep't v. Am. Petroleum Inst., 448 U.S. 607, 615 (1980).

57. *Id.* at 663.

58. 29 C.F.R. § 1910.1000, tbls. Z-1 through Z-3 (2010). Pursuant to a January 1989 rulemaking, OSHA made 212 PELs more protective, established 162 new PELs for previously unregulated substances, and left other PELs unchanged. Air Contaminants, 54 Fed. Reg. 2332, 2333-35 (Jan. 19, 1989) (codified at 29 C.F.R. pt. 1910 (2010). In so doing, OSHA stated that it relied heavily on the widely accepted 1987-88 Threshold Limit Values published by the American Conference of Governmental Industrial Hygienists and the Recommended Exposure Limits (RELs) developed by NIOSH. *Id.*

59. 54 Fed. Reg. at 2365.

60. AFL-CIO v. OSHA, 965 F.2d 962, 962, 968 (11th Cir. 1992).

61. *Id.* at 980, 982.

62. OSHA formally revoked the 1989 PELs in June of 1993 with publication of a notice at Air Contaminants, 58 Fed. Reg. 35,338 (June 30, 1993). In so doing, OSHA republished the less stringent limits that were in effect prior to 1989. *Id.*

and every regulated contaminant in the depth that the court required. They were right. Since that decision, OSHA has been unable to reestablish new PELs for the substances covered in its former air contaminants standard, but not for a lack of trying. In January of 1996, OSHA announced that it was beginning the rulemaking process for twenty toxic substances, all of which had their revised PELs struck down in the Eleventh Circuit decision.[63] However, OSHA did not get past the advisory committee stage for those twenty substances. Fourteen years have elapsed and OSHA has undertaken no further efforts to revise the obsolete PELs.

In addition to the effect that court decisions following judicial challenges have had on the regulatory life of the challenged standard, the cumulative effect of these challenges has complicated the adoption of subsequent standards. Each judicial challenge has contributed to greater time investments by OSHA in analyzing every detail of a proposed occupational health standard during its development phase. The slow pace of standards-setting in no small way results for a forty-year history of judicial challenges – whether successful or not for the plaintiffs – to individual occupational health standards.

More requirements in the future may further slow the pace of standard-setting. Judges are now required by the Supreme Court to serve as gatekeepers of the scientific testimony that juries can hear during a trial by screening scientific expert testimony to ensure that it is not only relevant, but also scientifically reliable.[64] In the past, courts have turned thumbs down to requests from industry to conduct a scientific review of OSHA standards when they are challenged,[65] but that could change. There are commentators who believe that if a science review principle is imported into judicial review of OSHA's risk assessments, further ossification of the standards-setting process may occur.[66] Those who share the employer perspective would disagree and say that a *Daubert* analysis is just what an

63. Updating Permissible Exposure Limits (PELS) for Air Contaminants: Meeting, 61 Fed. Reg. 1947 (Jan. 24, 1996). In March of 1996, OSHA announced that the styrene industry had agreed to a voluntary reduction in the PEL for styrene – considered to be a nervous system toxin with narcotic effects – to the 1989 levels of fifty parts per million (ppm) as an eight-hour time-weighted average (TWA) and a short term exposure limit (STEL) of 100 ppm. Under the voluntary program, employers were to assess compliance with the standard and provide data to OSHA, although individual employers would not be identified in the data. Press Release, Frank Kane, U.S. Dep't of Labor, OSHA Announces that Styrene Industry Has Adopted Voluntary Compliance Program to Improve Worker Protection (Mar. 1, 1996), *available at* <http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASES&p_id=377>.

64. Daubert v. Merrill Dow Pharmaceuticals, Inc. 509 U.S. 579, 597 (1993).

65. Pub. Citizen Health Research Group v. Tyson, 796 F.2d 1479, 1485 (D.C. Cir. 1986).

66. Thomas O. McGarity, Daubert *and the Proper Role for the Courts in Health, Safety, and Environmental Regulation*, 95 AM. J. PUB. HEALTH S92, S92-98 (2005).

OSHA standard needs.

## III. OSHA'S PRESENT REALITY

In the absence of scientifically up-to-date occupational safety and health standards covering specific chemical or physical toxic agents, OSHA has utilized the tools it has at hand. One tool is the general duty clause, which is provided by the Act as a catch-all provision to address risks that are not covered by a specific OSHA standard.[67] The other – voluntary cooperation – provides OSHA with the ability to recognize an employer who, together with workers, voluntarily provides a safe workplace, sometimes even by providing protections not required by existing OSHA standards.[68]

### *A. General Duty Clause*

The Act requires employers to comply with specific occupational health standards and also provides that employers comply with a "general duty" to provide employees with a workplace "free from recognized hazards that are causing or are likely to cause death or serious physical harm."[69] The general duty clause serves as a catch-all provision that provides OSHA with an *employer-by-employer* enforcement option even in the absence of a specific standard that applies to all employers. OSHA's use of the general duty clause is limited to cases in which the hazard is shown to be a recognized hazard, that the injuries suffered were linked to the recognized hazard, and that it was feasible for the employer to eliminate the hazard.[70] To show that the hazard was recognized, there must be evidence of risk to workers' health from authoritative sources such as NIOSH publications, peer-reviewed papers in the scientific literature, industry guidelines, private sector standards, and voluntary national or international codes.[71]

Employer-by-employer enforcement and adjudication is not the most efficient way to change employer behavior in an entire industrial sector on

67. *E.g.*, Reich v. Arcadian Corp., 110 F.3d 1192, 1196 (5th Cir. 1997).

68. Voluntary Protection Programs to Supplement Enforcement and to Provide Safe and Healthful Working Conditions; Request for Comment and Information, 47 Fed. Reg. 2796 (Jan. 19, 1982).

69. 29 U.S.C. § 654(a)(1).

70. Fabi Constr. Co. v. Sec'y of Labor, 508 F.3d 1077, 1081 (D.C. Cir. 2007); *see* Nat'l Realty & Constr. Co v. Occupational Safety & Health Review Comm'n, 489 F.2d 1257, 1268 (D.C. Cir. 1973).

71. *See, e.g.*, R.L. Sanders Roofing Co., 7 O.S.H. Cas. (BNA) 1566 (1979); Boeing Co., Wichita Div., 5 O.S.H. Cas. (BNA) 2014 (1977); Williams Enters., Inc., 4 O.S.H. Cas. (BNA) 1663 (1976); Atlantic Sugar Ass'n, 4 O.S.H. Cas. (BNA) 1355 (1976).

a national basis. Even so, when OSHA lacks a specific standard for a risk, such as prevention of musculoskeletal disorders, use of the general duty clause is the only enforcement game in town.[72] For many years, OSHA has been sporadically using the general duty clause to force abatement of alleged ergonomics hazards, but with mixed litigation results.[73] OSHA's Ergonomics Enforcement Plan makes clear that it will refrain from focusing its enforcement efforts on employers "who are making good faith efforts to reduce ergonomic hazards."[74]

Stakeholders continue to express interest in OSHA's intention with regard to reinstating its late 1990s effort to develop an ergonomics standard. The only movement in the area of ergonomics is OSHA's recent reconsideration of the need for a 300 Log column for work-related musculoskeletal disorders (WMSDs) and for defining musculoskeletal disorders for recordkeeping purposes.[75] In the Bush Administration, OSHA published a final rule to remove the WMSD recording provisions from the recordkeeping regulation and remove a separate column for identifying WMSDs from the OSHA 300 Log of Work-Related Injuries and Illness.[76] In the Obama Administration, OSHA placed on its Fall 2009 Regulatory Agenda a proposed rule entry for Occupational Injury and Illness Recording and Reporting Requirements. OSHA now believes that additional data on WMSDs may help employers and workers track these

72. *See* OSHA, U.S. Dep't of Labor, Safety and Health Topics: Ergonomics, <http://www.osha.gov/SLTC/ergonomics/index.html> (last updated May 11, 2010).

73. The Review Commission finally handed OSHA a victory in its efforts to litigate the question of the use of the general duty clause to cite ergonomics violations when, in April of 1997, it ruled that lifting and repetitive motion hazards can be cited under the general duty clause. Sec'y of Labor v. Pepperidge Farm, Inc., 17 O.S.H. Cas. (BNA) 1993 (1997). In the *Pepperidge Farm* case, a Review Commission Administrative Law Judge had earlier ruled that OSHA could not force employers to "experiment" to lessen ergonomic hazards without promulgating specific standards. In another closely-watched ergonomics case, a Review Commission Administrative Law Judge dismissed a citation for an ergonomics violation, holding that the Secretary had failed even to prove the first element of a general duty clause violation: that the employees suffered harm. Sec'y of Labor v. Dayton Tire, Bridgestone/Firestone, 18 O.S.H. Cases 1225 (1998). Applying the *Pepperidge Farm* precedent, the ALJ reasoned that the existence of a "hazard" – the first element to be proven for a general duty clause violation – requires "actual or potential physical harm, and a sufficient causal connection between that harm and the workplace." The ALJ then held that OSHA had failed to prove actual or potential harm. *Id.* OSHA did not appeal the result.

74. OSHA, U.S. Dep't of Labor, OSHA's Ergonomic Enforcement Plan, <http://www.osha.gov/SLTC/ergonomics/enforcement_plan.html> (last updated June 2, 2010).

75. *See* Statement of Regulatory and Deregulatory Priorities, 74 Fed. Reg. 64,264 (Dec. 7, 2009); Occupational Injury and Illness Recording and Reporting Requirements, <http://www.reginfo.gov/public/do/eAgendaViewRule?pubID=200910&RIN=1218-AC45>. OSHA is developing a proposed rule to add a definition of WMSD to 29 C.F.R. part 1904 and a separate column on the 300 Log to track this class of injury/illness.

76. Occupational Injury and Illness Recording and Reporting Requirements, 68 Fed. Reg. 38,601 (June 30, 2003).

injuries at individual workplaces and that national occupational injury and illness information may benefit from improved statistics on WMSD.[77]

### *B. Voluntary Protection Program*

Coincident with the onset of the slow standards development process in the 1980s, OSHA launched a new program in 1982 that was designed to ensure a safe workplace on a voluntary basis.[78] As time has gone on, OSHA has given more attention and resources to the use of the Voluntary Protection Program (VPP). VPP represents a working collaboration between government, industry and workers on a site or facility basis.

VPP is essentially a government recognition program. Places of employment that have achieved, and are committed to maintaining, superior safety and health performance – some of which is largely beyond the requirements of any standard or regulation – are given a "Star Award" by OSHA and are exempted from programmatic inspections for certain periods of time.[79]

There is no explicit mention of cooperative programs in the Act, but one of the Act's purposes is "to stimulate employers and employees to institute new and to perfect existing programs for providing safe and healthful working conditions."[80] OSHA vigorously marketed VPP during the Bush Administration. During that time, the number of VPP award sites grew significantly from several hundred to several thousand sites.[81] Not everyone is convinced that the VPP should be expanded without being rigorously evaluated.[82]

## IV. SPEEDING UP THE PACE

Whatever are the underlying causes of the slow pace of standards-setting at OSHA, many in the occupational safety and health community would like to see OSHA speed up the pace considerably. There are several

77. Occupational Injury and Illness Recording and Reporting Requirements, <http://www.reginfo.gov/public/do/eAgendaViewRule?pubID=200910&RIN=1218-AC45>.

78. 47 Fed. Reg. at 2796.

79. *Id.*

80. 29 U.S.C. § 651(b)(1) (2006).

81. For information about VPP sites during the Bush Administration, see OSHA, U.S. Dep't of Labor, State Incentives: Promoting Voluntary Compliance, <http://www.osha.gov/dcsp/osp/oshspa/2003_report/state_promoting.html> (last updated Aug. 2, 2007).

82. U.S. GEN. ACCOUNTING OFFICE NO. GAO-04-378, REPORT TO THE CHAIRMAN, SUBCOMMITTEE ON WORKFORCE PROTECTIONS, COMMITTEE ON EDUCATION AND THE WORKFORCE, HOUSE OF REPRESENTATIVES: OSHA'S VOLUNTARY COMPLIANCE STRATEGIES SHOW PROMISING RESULTS, BUT SHOULD BE FULLY EVALUATED BEFORE THEY ARE EXPANDED (2004), *available at* <http://www.gao.gov/new.items/d04378.pdf>.

good reasons to want that. Despite the existence of the General Duty Clause, and some employers who voluntarily implement superior worker protections, the slow pace of the OSHA standards setting process leaves many workers – in both traditional and emerging industries – unprotected and at risk of injury, illness, or death.[83]

Achieving broad consensus on the need for speeding up the pace of standards-setting is much more easily accomplished than actually any increase in speed. What are the possible solutions to the slow pace of standards-setting at OSHA? The discussion below suggests some possible solutions for consideration.

### *A. Get Some Political Will*

Even though the term "political will" is often used in policy discussions as an essential first step in policy development at the federal agency level, the term is still an ambiguous one that political scientists have a tough time explaining.[84] In OSHA's case, political will to develop occupational health standards derives largely from the results of the quadrennial general election for President and less so from stakeholder pressure. The Obama Administration is well-positioned from a policy perspective to respond favorably to pressure from organized labor representatives, occupational safety and health practice associations, academics, and worker advocates, all of whom would like to see a more robust effort to develop more occupational safety and health standards. The new Assistant Secretary for Occupational Safety and Health, David Michaels, gave his first speech on December 16, 2009 at a NIOSH Green Jobs Conference and signaled his interest in OSHA standards-setting.[85]

### *B. Add More Resources for Standards-Setting*

Adding more resources to the standards-setting effort at OSHA will be a good indicator of how sincere OSHA's interest in speeding up the pace of standards-setting really is. The pull of enforcement on resources allocation at OSHA may be stronger than standards-setting. For example, OSHA's

83. *See generally* THOMAS O. MCGARITY & SIDNEY SHAPIRO, WORKERS AT RISK: THE FAILED PROMISE OF OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (1993).

84. *See* Thomas H. Hammond & Jack H. Knott, *Political Institutions, Public Management, and Policy Choice*, 9 J. PUB. ADMIN. RES. & THEORY 33 (1999) (attempting to model how political actors' preferences are translated into political action that produces policy).

85. David Michaels, Assistant Secretary for Occupational Safety and Health, Address at the National Institute for Occupational Safety and Health Workshop: Making Green Jobs Safe: Integrating Occupational Safety and Health into Green and Sustainability (Dec. 16, 2009), *available at* <http://www.cdc.gov/niosh/docs/video/pdfs/OSHA_closing_remarks.pdf>.

FY 2010 budget requests $564 million for OSHA, which is $51 million, or 10 percent, more than that agency received in FY 2009. With this funding, DOL plans to hire 160 new enforcement staff, many of whom will be bilingual to communicate with staff in the changing workplace.[86] It is unclear whether resources for standards-setting will be greatly augmented.

### *C. Simplify Standards*

OSHA may want to consider tempering its tendency to overregulate (i.e., solve every problem associated with a particular risk within the four corners of the standard). Writing more readable standards, keeping in mind safety and health practitioners and not lawyers who bring judicial challenges at every turn, could also be considered. If the standards that are developed by OSHA are less complex or utilize a simpler format (like a question and answer format),[87] OSHA might be able to develop multiple standards in parallel. A more pragmatic basis for standards-setting may overcome the traditional philosophical orientation to cost-benefit considerations in OSHA standards-setting.[88]

### *D. Seek Concurrent OIRA Review*

In addition to seeking concurrent review from the policy office at the DOL, OSHA might consider requesting concurrent review by OIRA/OMB as a standard is developed in order to familiarize OIRA staff with the substance and approach taken in the proposed standard. Consecutive reviews internally in the federal government, by DOL and OIRA/OMB, add time to the standards-setting process and could be converted to concurrent review as certain development milestones are reached.

### *E. Obtain Regulatory Relief*

We have seen that the accretion of procedural, analytical and substantive requirements to federal agency rulemaking since the 1980s has been substantial on all federal agencies,[89] including OSHA, and looms as a

86. For detailed explanation of the FY 2010 Budget by DOL Secretary Hilda Solis, see United States Dep't of Labor, FY 2010 Budget: Secretary Solis Discusses the FY 2010 Budget, <http://www.dol.gov/budget/presentation.htm> (last viewed July 21, 2010).

87. *E.g.*, 29 C.F.R. pt. 1904 (2010), *available at* <http://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=STANDARDS&p_toc_level=1&p_keyvalue=1904> (follow links to see the question and answer format for individual standards).

88. *See generally* SIDNEY A. SHAPIRO & ROBERT L. GLUCKSMAN, RISK REGULATION AT RISK: RESTORING A PRAGMATIC APPROACH (2003).

89. Thomas O. McGarity, *A Cost-Benefit State*, 50 ADMIN. L. REV. 7, 8-9 (1998).

major cause of the slow pace of standards-setting. However, is it plausible to think that OSHA can obtain some special relief from these requirements?

First, it is true that some court decisions have adversely affected the pace of standards development at OSHA perhaps more than at other federal agencies. Yet, it is highly doubtful that the federal courts would suddenly reverse forty years of precedential decision-making affecting all federal government agencies, just for OSHA's sake. That is not to say that OSHA should not confer with the DOL Solicitor and with the Department of Justice to develop a litigation strategy that presents arguments to courts that a less encumbered standards-setting process is consistent with the Act.

Second, it may also be unrealistic to expect Congress to roll back the rulemaking requirements it has imposed on all federal agencies for OSHA's sake alone. However, limited relief should be considered. When enacted, the Act contained a provision that granted the Secretary the power during a two-year period to adopt as an OSHA standard any national consensus standard.[90] In fact, the bulk of OSHA's health standards were promulgated in 1971 as interim standards under authority granted in that section of the Act.[91] Granted, rulemaking was much simpler in 1971, but OSHA could consider seeking another two-year period of relief from some existing rulemaking requirements to update occupational exposure limits originally adopted in 1971 and now grossly inadequate to protect workers.

Third, OSHA should actively seek dialogue with the OIRA/OMB to reconsider the impact of executive branch additions to the OSHA standards-setting process. It is not outside the realm of plausibility that the Obama Administration may reverse or refine some executive orders which have imposed rulemaking requirements that provide excessive obstacles and added costs without appreciable benefits to the rulemaking process.

### *F. Stepping Back From Substance-Specific Standards*

Since 1970, substance-specific rulemaking has been a hallmark of

90. Pub. L. No. 91-596, § 6, 84 Stat. 1593 (1970) (codified at 29 U.S.C. § 655 (2006))

91. *See* JUDSON MACLAURY, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION: A HISTORY OF ITS FIRST THIRTEEN YEARS, 1971-1984 (1984), <http://www.dol.gov/oasam/programs/history/mono-osha13introtoc.htm> (follow link to 1. George Guenther Administration, 1971-1973: A closely watched start-up to see reference to the en masse adoption). 29 U.S.C. § 655(a) states

> Without regard to chapter 5 of title 5 or to the other subsections of this section, the Secretary shall, as soon as practicable during the period beginning with the effective date of this chapter and ending two years after such date, by rule promulgate as an occupational safety or health standard any national consensus standard, and any established Federal standard, unless he determines that the promulgation of such a standard would not result in improved safety or health for specifically designated employees. In the event of conflict among any such standards, the Secretary shall promulgate the standard which assures the greatest protection of the safety or health of the affected employees.

OSHA standards-setting. Providing protections for workers from harmful toxic agents, one chemical at a time, is bound to be a slow process for providing comprehensive workplace safety and health. In addition, setting quantitative exposure levels one agent at a time slows down standards development even further. This is because substance-specific rulemaking which utilizes the process of finding a numerical occupational exposure limit below which no material impairment of health occurs during the working life of any individual worker – a process known as quantitative risk assessment (QRA) – is a complex and lengthy endeavor.

1. Eliminate Quantitative Risk Assessment

QRA provides an estimation of the risk presented by the toxic agent.[92] Multiple steps and scientific disciplines are involved in QRA. These include (1) hazard identification, which determines the qualitative nature of the potential adverse toxicological or epidemiologic consequences of substance regardless of exposure; (2) dose-response analysis, which determines the relationship between exposure (dose) and the probability of an adverse health effect usually by extrapolating results from mouse or rat experiments to humans; and (3) exposure quantification, which determines the amount of a contaminant (dose) that individuals and populations will receive over time through the process of exposure assessment. These three steps result in an estimate of risk.[93]

Clearly, QRA is a scientifically-complex and resource-intensive discipline the results of which are more often than not controversial and difficult to explain.[94] Also, repeating this same process for each chemical or physical toxic agent that OSHA would like to regulate is a daunting process. However inefficient it is to regulate substance-by-substance, single-substance rulemaking is the default setting for OSHA when it comes to developing new toxic agent standards. Precisely because single-substance rulemaking is a lengthy process taking many years, any chemical that is a candidate for regulation can be replaced while rulemaking is taking place with substitutes – substitutes that can be as toxic as the candidate chemical. Such substitution can render pointless a single-substance rule-in-development.

92. *See generally*, ELSA NIELSEN ET AL., TOXICOLOGICAL RISK ASSESSMENT OF CHEMICALS: A PRACTICAL GUIDE (2008).

93. *Id.* at 7.

94. *See* Comm. on Improving Risk Analysis Approaches Used by the U.S. EPA, Bd. on Envtl. Studies & Toxicology, Div. on Earth and Life Studies, Nat'l Research Council of the Nat'l Academies, Science and Decisions: Advancing Risk Assessment (2008), *available at* <http://www.nap.edu/catalog.php?record_id=12209>.

### 2. Watch Out for Substitutes: Case of Diacetyl

In addition to its inefficiency, another pitfall of substance-specific rulemaking is that industry may switch to a substitute for the substance for which OSHA has spent significant time and resources developing a standard. We need not look further than OSHA's current effort to develop a standard, a PEL through quantitative risk assessment, for diacetyl. Diacetyl – a butter food flavoring used in microwave popcorn – has been shown to cause a severe lung disease called *bronchiolitis obliterans*.[95] OSHA placed a diacetyl standard on its Unified Regulatory Agenda as a substance-specific standard to be developed.[96]

Even as OSHA proceeds with standards development, though, some of the chemicals used as alternatives to diacetyl for imparting butter flavor to flavoring mixtures and food products may be similarly hazardous. For example, among the potential replacements for diacetyl, the fermentation product known as "starter distillate" contains high concentrations of diacetyl itself.[97] Another material that adds the flavor of butter to food is acetoin, but its toxicity is incompletely investigated and it accompanies diacetyl in many of the workplaces where *bronchiolitis obliterans* occurs in workers who make or use flavorings.[98] Another butter flavoring, 2,3-pentanedione, is the subject of research at both NIOSH[99] and at the NIEHS.[100] This research suggests that, in rats, 2,3-pentanedione causes airway epithelial damage similar to that produced by diacetyl. The issues noted above for starter distillate, acetoin, and 2,3-pentanedione exemplify the lack of evidence demonstrating the workplace safety of potential substitutes for diacetyl, as well as document some evidence that potential substitutes are also respiratory hazards.

Substance-specific standards-setting – when the particular substance is

95. Kathleen Kreiss et al., *Clinical Bronchiolitis Obliterans in Workers at a Microwave-Popcorn Plant*, 347 NEW ENG. J. MED. 330 (2002), *available at* <http://content.nejm.org/cgi/reprint/347/5/330.pdf>.

96. Semiannual Agenda of Regulations, 74 Fed. Reg. 21, 963 (May 11, 2009); Semiannual Agenda of Regulations, 74 Fed. Reg. 64,463 (Dec. 7, 2009); Statement of Regulatory and Deregulatory Priorities, 74 Fed. Reg. 64,266 (Dec. 7, 2009); *see also* Occupational Exposure to Diacetyl and Food Flavorings Containing Diacetyl, 74 Fed. Reg. 21,966 (May 11, 2009); Occupational Exposure to Diacetyl and Food Flavorings Containing Diacetyl, 74 Fed. Reg. 64,466 (Dec. 7, 2009).

97. Starter Distillate, 21 C.F.R. § 1981.848(a) (2010).

98. *See* Frits G. B. G. J. van Rooy et al., *Bronchiolitis Obliterans Syndrome in Chemical Workers Producing Dacetyl for Food Flavorings*, 176 AM. J. RESPIRATORY & CRITICAL CARE MED. 498, 503 (2007) (stating that acetoin could not be ruled out as a causative agent).

99. Ann F. Hubbs et al., *Airway Epithelial Toxicity of the Flavoring Agent, 2,3-pentanedione*, 114 THE TOXICOLOGIST: SUPP. TO TOXICOLOGICAL SCI. ___ (forthcoming 2010).

100. Daniel L. Morgan et al., *Inhalation Toxicity of Acetyl Propionyl in Rats and Mice*, 114 THE TOXICOLOGIST: SUPP. TO TOXICOLOGICAL SCI. ___ (forthcoming 2010).

being phased out of use by industry, and substitutes of similar or greater harm may be replacing it – can be inefficient, and ultimately pointless, standards-setting. Even without abandoning substance-specific standards-setting altogether, it could be made more efficient in a number of ways.

### 3. Use More Control Banding

One way is to move away from including time-consuming QRA for each toxic agent regulated and use a control or hazard banding approach. Hazard banding is an approach to risk management that concentrates mainly on risk control through qualitative risk assessment, rather than quantitative risk assessment.[101] It is a generic technique that determines a control measure, e.g., dilution ventilation, engineering controls, containment, or other controls, based on a range or band of hazards, e.g., skin/eye irritant, very toxic or carcinogenic, and exposures, e.g., small, medium, large. Control banding is grounded on the fact that there are only a limited number of control approaches available to be applied to the thousands of chemical and physical toxic agents that pose worker hazards. Determining which of these few controls needs to be applied to the particular band of chemicals by virtue of the hazard they pose is the essence of hazard or control banding.[102]

Control banding represents a professional expert approach in that it uses the solutions that experts have developed previously to control occupational chemical exposures and applies those same solutions to other tasks with similar exposure situations. It is a qualitative risk management approach that focuses fiscal, technical, and personnel resources on exposure controls, not on QRA. However, control banding does not eliminate the need to perform exposure monitoring. In fact, control banding relies on exposure monitoring to follow the intervention to ensure the installed controls are working properly.[103] Control banding is being used as an approach to worker protection in the United Kingdom[104] and is being

101. U.S. DEP'T OF HEALTH & HUMAN SERVS., QUALITATIVE RISK CHARACTERIZATION AND MANAGEMENT OF OCCUPATIONAL HAZARDS: CONTROL BANDING (CB): A LITERATURE REVIEW AND CRITICAL ANALYSIS 11-12 (2009), *available at* <http://www.cdc.gov/niosh/docs/2009-152/pdfs/2009-152.pdf > (describing hazard banding as one step in the control banding process and the development of that process). *See generally* Haruo Hashimoto et al., *Evaluation of the Control-Banding Method – Comparison with Measurement-Based Comprehensive Risk Assessment*, 49 J. OCCUPATIONAL HEALTH 482 (2007); Centers for Disease Control & Prevention, Workplace Safety and Health Topics, Control Banding, <http://www.cdc.gov/niosh/topics/ctrlbanding/> (last viewed July 22, 2010).

102. *See generally* U.S. DEP'T OF HEALTH & HUMAN SERVS., *supra* note 101.

103. *Id.* at 2.

104. *See* United Kingdom Health and Safety Executive, COSHH Essentials: Easy Steps to Control Health Risks from Chemicals, <http://www.coshh-essentials.org.uk/> (last viewed July 22, 2010).

explored as a cost-effective means of worker protection in developing countries.[105]

### *G. Bundle Single Toxic Agents by Process or Use*

Another approach to control risks from multiple agents that are linked somehow is by developing a standard not for each one separately, but rather for the entire group of linked agents. This bundling approach, also called a "programmatic approach," has been used by OSHA in the past, but only sporadically. For instance, the Bloodborne Pathogens Standard uses the risk-reducing strategy of universal precautions to protect workers from multiple infectious agents that can be transmitted by blood exposure or exposure to other infectious materials.[106] Another example is bundling infectious agents that can be transmitted through an airborne route. For example, the State of California has adopted a new standard to protect workers from multiple infectious agents that can be transmitted by air.[107] OSHA placed Airborne Infectious Diseases for the first time on their Fall 2009 Regulatory Agenda.[108] There are many activities that utilize a number of specific chemical or physical toxic agents, such as the process of welding that might be suitable for a programmatic approach. Similarly, mold exposure, and even food flavoring chemicals, might be suitable for a programmatic approach. OSHA might achieve greater efficiencies in standards-setting by using grouped-agent programmatic standards as opposed to the single-substance approach.

### *H. Adopt Safety and Health Program Standard*

If the single-substance approach to occupational health standards-setting is inefficient, and a program standard for grouped- or linked-hazards is preferable, then should OSHA adopt a comprehensive occupational safety and health risk management program standard? Adopting a safety and health management standard for all employers would then harmonize OSHA's promotion of safety and health management systems for employer-participants in its voluntary programs with what it recommends

105. Marilyn Fingerhut, *Global Qualitative Risk Management (Control Banding) Activities*, 46 INDUS. HEALTH 305, 305-07 (2008).

106. 29 C.F.R. § 1910.1030 (2010).

107. Aerosol Transmissible Diseases, Cal. Code Regs. tit. 8, § 5199 (2009), *available at* <http://www.dir.ca.gov/oshsb/atdproptext.pdf>.

108. Semiannual Agenda of Regulations, 74 Fed. Reg. 64,463 (Dec. 7, 2009); Statement of Regulatory and Deregulatory Priorities, 74 Fed. Reg. 64,266 (Dec. 7, 2009); see also U.S. Office of Information and Regulatory Affairs, Office of Mgmt. & Budget, Executive Office of the President, Reg info.gov, <http://www.reginfo.gov/public/do/eAgendaViewRule?pubId=200910&RIN=1218-AC 46>.

for all employers.

Many states which operate their own OSHA-approved occupational safety and health plans under Section 18 of the Act have already adopted safety and health management standards. California, for example, adopted its Injury and Illness Prevention Program in 1991.[109] Internationally, occupational risk management standards are popular both as a private sector consensus standard and as a mandatory governmental standard. For instance, Australia and New Zealand adopted a comprehensive safety and health risk management standard – AS/NZ 4360 – in 2004.[110] There is not universal agreement that a comprehensive safety and health management program standard is a good idea, though. Some employers say that the idea is just a paper tiger, that many risks are ignored by such programs, and that such programs generate great deal of paper work without producing commensurate reduction in workplace risks. Labor advocates have expressed concern that a risk-based safety and health program standard could create obstacles to worker involvement and may be a pretext for deregulation.[111]

### *I. Nationalize International Consensus Standards*

The slower pace of governmental occupational safety and health standards-setting, the obsolescence inherent in many existing American occupational exposure limits, and the rise of the global economy,[112] has heightened the influence of non-governmental international consensus standards-setting activities. Given the anemic state of national governmental standards-setting in the United States, one could legitimately ask whether international standards will play the dominant role in determining the occupational safety and health actions of multi-national employers (MNEs).

American MNEs have to conform to a growing number of international standards in the environmental, occupational, and corporate social responsibility arenas.[113] An increasing body of global administrative

109. Injury and Illness Prevention Program, Cal. Code Regs. tit. 8, § 3203 (2009), *available at* <http://www.dir.ca.gov/title8/3203.html>.

110. STANDARDS AUSTRALIA & STANDARDS NEW ZEALAND, AS/NZS 4360:2004: RISK MANAGEMENT (2004). This book has been superseded by STANDARDS AUSTRALIA & STANDARDS NEW ZEALAND, AS/NZS 31000:2009: RISK MANAGEMENT – PRINCIPLES AND GUIDELINES (2009).

111. SYSTEMATIC OCCUPATIONAL HEALTH & SAFETY MANAGEMENT: PERSPECTIVES ON INTERNATIONAL DEVELOPMENT 527 (Kaj Frick et al. eds., 2000).

112. THOMAS L. FRIEDMAN, THE WORLD IS FLAT: A BRIEF HISTORY OF THE 21ST CENTURY 176-77, 202-12, 372-91 (2005).

113. International Standards Organization, Global Social Responsibility Standard: ISO/DIS 2600 (under development, target publication date: Spet. 20, 2010). A summary of this standard is, *available*

law is emerging to provide a needed legal framework for international standardization and compliance with those standards.[114] International standardization is definitely outstripping the pace of national standards-setting when it comes to emerging risks like nanotechnology.[115] For these risks, such as those arising from exposure to nanomaterials, voluntary consensus standards are the only ones that are being actively written despite calls for American national government standards to be developed.[116]

OSHA might consider adopting a widely accepted international consensus standard as a place-holder standard until such time as a home-grown one can be developed. Nationalizing international standards is commonplace in many developed and developing countries, but not the United States. As the U.S. falls further and further behind in development of occupational health standards, this type of an approach should be considered. Modification of an existing OSHA standard to incorporate an international standard should also be considered. In fact, OSHA has proposed to modify its existing Hazard Communication Standard to conform to the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals.[117]

What influence the European Community's new regulation entitled the "Registration, Evaluation, Authorization and Restriction of Chemical Substances" or "REACH"[118] may have on both American MNE manufacturers and importers remains to be seen. What is different is that REACH places the burden on manufacturers and importers to demonstrate safety *pre-marketing*, as opposed to the approach taken by the American Toxic Substances Control Act (TSCA) of 1976 which requires the government to demonstrate harm *post-marketing*.[119]

Under REACH, manufactures and importers are required to gather toxicity information on the properties of chemical substances that are

*at* <http://www.iso.org/iso/pressrelease.htm?refid=Ref800>, and a draft is *available at* <http://isotc.iso.org/livelink/livelink/fetch/-8929321/8929339/8929348/3935837/ISO_DIS_26000_Guidance_on_Social-Responsibility.pfd?nodeid=8385026&vernum=-2> (last viewed July 22, 2010).

114. Benedict Kingsbury et al., *The Emergence of Global Administrative Law*, 68 LAW & CONTEMP. PROBS. 15, 15-16 (2005).

115. Vladimir Murashov & John Howard, *Essential Features of Proactive Risk Management*, 4 NATURE NANOTECHNOLOGY 467, 469 (2009).

116. J. CLARENCE DAVIES, MANAGING THE EFFECTS OF NANOTECHNOLOGY 3, 8 (2006), *available at* <http://www.wilsoncenter.org/events/docs/Effectsnanotechfinal.pdf>.

117. 74 Fed. Reg. 50279 (Sept. 30, 2009).

118. REACH (EC 1907/2006) is a new European Community Regulation on chemicals and their safe use. The new law entered into force on June 1, 2007. For the text of EC 1907/2006, see <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006R1907:EN:NOT>.

119. 15 U.S.C. §§ 2601-95 (2006).

currently on the market and on ones that are coming to market (*before* they can be authorized for sale in the European Union), and to register the data in a central database administered by the European Chemicals Agency in Helsinki, Finland.[120] The existence of such a large chemical toxicity database internationally may assist both OSHA and EPA in the development of occupational and environmental exposure limits in the future. REACH is already having an effect on the U.S. government. In a September 2, 2009 speech at the Commonwealth Club in San Francisco, U.S. Environmental Protection Agency Administrator Lisa Jackson announced core principles that outline the Obama Administration's goals for legislative reform of TSCA.[121]

## V. REFORM THE ACT

Comprehensive reform of the Act has been a topic on the public policy agenda in the occupational safety and health community and in the Congress for twenty years. Yet, Congress has made only four amendments to the Act, and on only two occasions, since it was enacted in 1970.

In 1990, Congress increased the statutory maximum amount specified for civil penalties for serious and other-than-serious violations to $7,000 per violation and $7,000 a day for failures to abate, and set a minimum penalty amount for a willful or repeat violation of $70,000[122] as a part of a deficit reduction move.[123] In 1998, Congress made three amendments to the OSH Act. First, Congress added new section 21(d) to the Act thereby providing a statutory basis for the on-site consultation programs with states.[124] Second, Congress amended the Act to prohibit OSHA from basing inspector performance on the results of enforcement activities and to forbid

120. For information about the new European Chemicals Agency, see <http://echa.europa.eu/home_en.asp>.

121. Lisa Jackson, Administrator, U.S. Environmental Protection Agency speech at the Commonwealth Club, San Francisco, California (Sept. 2, 2009). The core principles are reproduced on the web at U.S. Envtl. Protection Agency, Existing Chemicals, Essential Principles for Reform of Chemicals Management Legislation, <http://www.epa.gov/oppt/existingchemicals/pubs/principles.html> (last updated Apr. 28, 2010).

122. Omnibus Budget Reconciliation Act of 1990, Pub. L. No. 101-508, tit. III, § 3101, 104 Stat. 1388 (1990) (codified at 29 U.S.C. § 666).

123. *See* H.R. Rep. No. 101-964, at 685 (1990) (Conf. Rep.).

124. The Occupational Safety and Health Administration Compliance Assistance Authorization Act of 1998, Pub. L. No. 105-197, 112 Stat. 638 (1998), amended Section 21 of OSHA to add, as subsection (d), language specifically authorizing OSHA's voluntary employer consultation programs, which were created under the Reagan Administration. *See also* Sidney A. Shapiro & Randy S. Rabinowitz, *Punishment Versus Cooperation in Regulatory Enforcement: A Case Study of OSHA*, 49 ADMIN. L. REV. 713, 732-35 (1997) (describing the legislative history of early efforts to establish consultation programs).

the imposition of civil penalty quotas.[125] Third, Congress extended OSHA coverage to the U.S. Postal Service.[126]

Recently, another OSHA reform bill has been introduced. Introduced in 2008 (with then-Senator Obama as a co-sponsor), and reintroduced in April of 2009, the Protecting America's Workers Act (PAWA) of 2009[127] was introduced by the late Senator Edward Kennedy (D-Mass.) and Representative Lynn Woolsey (D-Calif.). Among many provisions of the PAWA, the major provisions would:

(1) Expand coverage of the Act to all federal, state and some local workers, and to millions of other workers who are now inadequately covered, such as airline and railroad employees, and Department of Energy contractors (Title I);

(2) Expand OSHA's whistleblower protection by codifying an employee's right to make safety complaints or refuse to do hazardous work (Title II);

(3) Prohibit employers from discouraging employees from reporting work-related injuries or illnesses, or discriminating against employees who do (Titles II and III);

(4) Clarify that the time spent by an employee accompanying an OSHA inspector during an investigation is considered time worked, for which a worker must be compensated (Title III);

(5) Require OSHA to investigate all accidents resulting in the death of an employee or the hospitalization of two or more employees (Title III);

(6) Prohibit OSHA from designating a citation as an "unclassified citation" where an employer can avoid the potential consequences of a "willful" violation (Title III);

(7) Grant new rights to employees who sustain a work-related injury or illness which is subject to an OSHA inspection, or to the employee's family members where the employee died or is unable to assert his or her rights (Title III);

(8) Require employers to abate a violative hazard, and OSHA to cite, during the pendency of a citation contest before the Occupational Safety and Health Review Commission (Title III);

125. An Act to Amend the Occupational Safety and Health Act of 1970, Pub.L. 105-198, 112 Stat. 640 (1998), amended 29 U.S.C. § 657 to add, as subsection (h) the following: "[T]he Secretary shall not use the results of enforcement activities, such as the number of citations issued or penalties assessed, to evaluate employees directly involved in enforcement activities under this Act or to impose quotas with regard to the results of such activities."

126. The Postal Employees' Safety Enhancement Act, Pub. L. No. 105-241, 112 Stat. 1572 (1998), subjects the U.S. Postal Service to the OSH Act by amending 29 U.S.C. §§ 652(5) and 668(a).

127. S. 1580, 111th Cong. (2009); H.R. 2067, 111th Cong. (2009).

(9) Give injured workers, their families and families of workers who died in work-related incidents, the right to meet with investigators, receive copies of citations, and to have an opportunity to make a statement before any settlement negotiations (Title III);

(10) Allow any worker or worker's representative to object to a modification or withdrawal of a citation, and entitle that person to a hearing before the Occupational Safety and Health Review Commission (Title III);

(11) Increase the maximum penalties for "Repeat" or "Willful" violations from $70,000 to $120,000; repeat or willful violations resulting in the death of an employee could be assessed as high as $250,000; and penalties would be indexed to the Consumer Price Index at least every four years (Title III);

(12) Increase the statutory maximum penalties for "Serious" and "Other-than-serious" violations from $7,000 to $12,000, with penalties up to $50,000 for Serious or Other-than-serious violations causing death; and penalties are indexed to inflation (Title III); and

(13) Expand OSHA's criminal liability provisions to make willful violations causing death or serious bodily injury a felony subject to substantial fines and imprisonment under section 3571 of title 18, U.S. Code (i.e., the general criminal code) (Title III).[128]

Passage in the Second Session of the 111th Congress is uncertain. Aside from its political chances of being enacted, what hope for stimulating the standards-setting process does the PAWA hold?

The major emphases in the current version of the proposed legislation is on (1) enlarging the role of workers by providing new rights under the Act; (2) strengthening enforcement procedures; and (3) increasing civil and criminal penalties. Enlarging the role of workers is much needed as the Act as enacted in 1970 is like a three-legged stool. Two very long legs represent employer duties and government's powers. The third leg – for workers' rights – is a short, stubby leg of the stool. Worker empowerment, through enlarging the role for workers in the Act, is an aspect of the Act that is underdeveloped and would greatly expand under the PAWA.

There is nearly universal agreement that civil penalties under the Act are out-of-date and need to be increased. But the proposed PAWA legislation contains no language that modifies section 6 of the Act pertaining to OSHA standards-setting to provide relief from accumulated

128. The full text of the Senate bill is *available at* <http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:s1580is.txt.pdf>, and the full text of the House version is *available at* <http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:s1580is.txt.pdf>.

rulemaking requirements. Furthermore, PAWA lacks any affirmative duty that would require the Secretary to "devise a process whereby, in addition to other health and safety standards promulgated, permissible exposure limits be modified and established for toxic materials and harmful physical agents on a regular basis."[129]

The provisions about standards-setting are missing completely in the current version of the Protecting America's Workers Act of 2009. Yet, this absence should not be altogether surprising. As this essay has discussed, the many of the issues that have impacted the pace of OSHA standards-setting lie largely outside the four corners of the Act. It would be daunting for any one piece of legislation to tackle the analytical, procedural, and substantive requirements that have been added to federal agency rulemaking since the Act was signed by Richard Nixon on December 29, 1970. OSHA may be on its administrative own when it comes to speeding up the slow pace of its own standards-setting.

## VI. CONCLUSION

After forty years, the OSH Act still enjoys broad support among stakeholders. However, the pace of the standards-setting process,[130] how vigorously the Act's enforcement responsibilities are carried out,[131] and the role of voluntary programs versus standards enforcement[132] have been critically debated almost since the Act was passed, and that debate still continues. How to satisfy the demand for updated quantitative exposure limits, and how to develop standards for emerging risks in a much more timely manner will occupy the current Obama Administration and perhaps presidential administrations to follow. If, however, a solution is not found to the slow pace of standards-setting, the effectiveness of OSHA for future generations of workers who rely on the Act, as both the Act and OSHA, commemorate their fortieth anniversaries in 2010 and 2011, remains uncertain.

129. Press Release No. SPR-09-602-01, American Industrial Hygiene Association, Comments on Protecting America's Workers Act Release, <http://www.aiha.org/news-pubs/newsroom/Documents/SPR-09-602-01_AIHACommentsonProtectingWorkersAct.pdf>.

130. McGarity, *supra* note 6; Howard, *supra* note 7.

131. Shapiro & Rabinowitz, *supra* note 124, at 739-44.

132. Sidney A. Shapiro & Randy Rabinowitz, *Voluntary Regulatory Compliance in Theory and Practice: The Case of OSHA*, 52 ADMIN. L. REV. 97, 101-11 (2000).