Deconstructing OSHA: The Case of the Construction Industry

by Vernon Mogensen

On March 15th, 2008, workers at a construction site on East 51st Street in Manhattan were attempting to add steel sections to extend a tower crane's reach. The attempt to "jump" the crane failed and it crashed 22 stories to the ground, killing six workers and a woman in a nearby apartment building, injuring 24. On May 30th, another tower crane collapsed on East 91st Street during an attempt to secure the tower to a building with a collar; two workers were killed, and two others were injured including a bystander. In both cases, New York City's Buildings Department immediately issued stop-work orders and Mayor Michael Bloomberg held press conferences to inform the public about the hazards involved and discuss what could be done to improve crane safety.

New York City's rapid response gave the impression that crane collapses are strictly a matter of local jurisdiction. But where was the U.S. Occupational Safety and Health Administration (OSHA), whose mission is to "assure safe and healthful working conditions for working men and women"? The problem of construction and crane safety is national in scope, but OSHA has been so eviscerated, and many of its functions so privatized, that it is framed as a local issue in political discourse. Indeed, the *New York Times* reporters who covered the story said the alternatives were either to enlarge the city's Buildings Department or rely on more self-policing by contractors, but there was no mention of OSHA. These recent crane collapses illustrate the conundrum confronting OSHA: its mission is broad in scope, but it lacks the political, legal and budgetary powers necessary to carry out its responsibilities. New York City shut down the crane worksites under its authority to protect public safety, but OSHA cannot shut down an unsafe workplace unless it can prove in court that there is an imminent threat to worker safety. Local governments have tried to fill the vacuum left by OSHA, but the Occupational Safety and Health Act (OSH Act) of 1970 prohibits them from enacting worker safety standards. It does allow for state plans, but many are not very effective. For example, twelve construction workers have been killed in a 19-month span in Las Vegas, yet Nevada OSHA's lack of enforcement and fines has failed to stem the tide.

Created in 1970, OSHA's mission includes promulgating safety standards to mitigate recognized hazards, enforcing standards through workplace inspections, and assessing fines for violations of standards sufficient to deter future infractions. The recent wave of construction and crane-related deaths provides a stark reminder that construction work is dangerous. This article will examine working conditions in the construction industry to determine to what extent the administration of President George W. Bush is permitting OSHA is fulfilling its mandate to protect workers' safety and health.

Profile of a Dangerous Industry

The construction industry employs more than 7.5 million workers,⁵ and working conditions are among the most dangerous in the United States. This should come as no surprise when one considers that it is done under conditions that pose considerable risks to workers' safety and health. Much of the work is done outdoors under variable weather conditions, where passing vehicles or construction equipment pose a mobile threat, at heights where the risk of falls is great, on scaffolds that can collapse, by falling objects from above, in trenches that can cave in, or in confined spaces that can trap workers.

Falls are the most common cause of death among construction workers and the second leading cause of death for all workers after highway incidents. There were 827 fatal falls in 2006, up from 770 in 2005.⁶ More than half of all fatal falls were from causes common to construction work; 22 percent involved falls from a roof, 16 percent from ladders, 11 percent from scaffolds, and 4 percent from building girders or structural steel. Many of the remaining categories also involve construction work; 9 percent from nonmoving vehicle, 8 percent from falls on the same level, 6 percent from floor, dock, or ground level, 3 percent down stairs or steps, and 20 percent were unreported, a problem that often occurs in construction work.⁷ Construction laborers have one of he highest numbers of lost workdays, a leading indicator of work hazards.⁸

The construction sector had the largest number of fatal work injuries in 2006 with 1,239 (21 percent of all fatalities), far ahead of transportation and warehousing with 860 workplace fatalities. The magnitude of the hazards of construction work is illustrated by the fact that its fatality rate of 10.9 per 100,000 employed is more than two and one-half times the fatality rate of 4.0 percent for all workers. The number of construction industry deaths went up to 1,239 in 2006 from 1,192 in 2005. According to self-reported statistics, 412, 900 workers were injured in 2006 for a rate of 5.9 workers injured per 100 in 2006, 34 percent higher than the average of 4.4 injuries for all workers. In a construction industry deaths were injured in 2006 for a rate of 5.9 workers injured per 100 in 2006, 34 percent higher than the average of 4.4 injuries for all workers.

Small to mid-sized companies have the highest reported injury rates with companies of 11 to 49 employees having a rate of 6.7 per 100 workers, virtually the same as companies with 50 to 249 workers (6.6). The largest firms (with 1000 or more workers) are the safest with a rate of only 3.8 percent. The smallest firms (1 to 10 workers) are a close second at 4.0, but since the veracity of this data is in doubt since they don't have to report it to BLS.¹¹

Construction laborers are most likely to die on the job with 27 percent of the total in 2006, followed by carpenters (10 percent), first line managers and supervisors of construction trades workers (8 percent), roofers (4 percent), electricians and construction managers (with 5 percent each), heavy and tractor-trailer truck drivers (4 percent), and painters and paperhangers (3 percent).¹²

Lies, Damn Lies and BLS Statistics

The BLS Survey of Occupational illnesses and Injuries (SOII) makes clear that construction work is dangerous, but independent audits have determined that it underestimates the number of workplace injuries and illnesses by as much as 70 percent. Another distortion due to underreporting in BLS data shows a decline in injuries and illnesses during the past 10 years, but academic studies indicate these trends have remained level, or declined slightly at best.¹³ That is, injury rates aren't going down, employers are just reporting fewer injuries under weakened BLS guidelines.

A 1998 study of the compensation and payroll data of workers constructing the Denver International Airport revealed that the official self-reported figures underreported the true magnitude of lost work-time injuries and illnesses by more than half. This finding of underreporting is consistent with other cases, such as the reconstruction of sections of the San Francisco Bay Bridge. The construction firm reported injuries at a rate 55 to 72 percent lower than on similar bridge construction projects. But a 2006 audit by Cal/OSHA investigators found that management employed a carrot and stick approach to reward and intimidate workers in order to discourage reporting of injuries. Management offered cash bonuses up to \$1500 and prizes to work crews that did not report any OSH Log 300 injuries, a negative incentive that encouraged workers to pressure their peers not to report injuries. The contractor benefited by lower rates of reported injuries, which made them eligible for OSHA's voluntary compliance program and exempted them from routine inspections. But in June 2006, Cal/OSHA caught on to the scheme and issued "willful" citations against the contractors for covering up at least 13 worker injuries, not investigating reported accidents, and not recording injuries within the time period required by law. Section 1.5

Another problem is that OSHA does not require that construction firms keep logs of injuries and illnesses incurred on site. They are required to keep internal site logs, but the BLS doesn't use this data to compile its statistics. A recommendation that this be done has been ignored since 1989. Nor does management have to keep track of workers who are hired as independent contractors, or work for subcontractors, a practice common in the construction industry.¹⁶

Construction accounts for 20 percent of workplace deaths and ten percent of reported occupational injuries and illnesses.¹⁷ While it is difficult to cover-up workplace deaths, the reliability of injury and illness data is another story. The 10 percent figure is most certainly an underestimate for a number of reasons. Small contractors with ten employees or less do not have to keep records on injuries and illnesses and they don't have to report such incidences unless three employees are hospitalized. However, injury and illness rates are higher among small contractors than large contractors. Some unscrupulous contractors, especially those who employ undocumented immigrants as day laborers, will go to great lengths not to report injuries and illnesses.

Immigrant workers at risk

There has been a tremendous influx of immigrants into the U.S. workforce in the past twenty years. Foreignborn workers comprised 15.3 percent of the labor force in 2006, up from 9.4 percent in 1990. Foreign-born workers are much more likely than native-born to be employed in high-risk construction jobs. Many of them are employed as day laborers where no safety training is given and do not understand English-only warning signs. Deaths of foreign-born workers increased from 635 in 1992 to 1046 in 2007, a 61 percent increase. Immigrants are more likely to be employed in construction than native-born workers (11.8 percent to 5.6 percent), and almost half of the immigrant labor force is made up of Hispanics. Although they made up less 16 percent of the construction workforce in 2000, Hispanic construction workers suffered 23.5 percent of the fatalities.

Many undocumented workers are afraid to report injuries for fear of losing their jobs, or worse, being deported by the U.S. Homeland Security Department's Immigration and Customs Enforcement agency (ICE). In 2002, OSHA staffers initiated an outreach program to encourage undocumented workers to report problems without fear of reprisal. But ICE agents seized the opportunity to masquerade as OSHA inspectors and conduct workplace raids looking for undocumented workers. In 2005, for example, it set up a sting operation at Seymour Johnson Air Force Base in Goldsboro, North Carolina that was more reminiscent of a criminal investigation than an OSHA outreach session. Promising free coffee and doughnuts ICE agents circulated flyers lured workers into attending a mandatory safety meeting that ensnared 48 Hispanic construction workers.^{23*} While the undocumented workers faced deportation, the construction contractors who hired them went unpunished. The callous action exemplified the lack of concern for worker safety in the Bush administration and was roundly condemned by both labor and immigrant rights officials. The United Food and Commercial Workers International President Joe Hansen said: "For ICE to stage a sham OSHA meeting in order to round up and arrest people undermines OSHA's mission, and is a step backwards for state and federal efforts to reduce worker injuries and death. Furthermore, that kind of action minimizes OSHA's ability to do the critical work of protecting America's labor force."²⁴ ICE announced in 2006 that it would no longer pose as OSHA inspectors, but it eroded the modicum of trust that had been established.

Drowning OSHA in a bathtub

The influential conservative lobbyist Grover Norquist was once quoted as saying that his goal was to cut government by half in 25 years to get it down to the size where it could be "drowned in a bathtub." His dream has already been fulfilled when it comes to OSHA. Although the federal government has grown considerably since the 1970s, OSHA has shrunk.

Three key indicators of OSHA's strength or weakness are the number of staff/inspectors, investigations and penalties. On the first, OSHA clearly doesn't have enough inspectors to cover all workplaces under its jurisdiction. In 1975 OSHA had 2,405 staff to cover 67.8 million workers at 3.9 million workplaces; but in 2006, there were only 2,165 OSHA staff for 133.8 million workers in 8.7 million businesses. Under the Bush administration, OSHA has put a big emphasis on voluntary compliance by business, which gives employers an incentive to avoid inspections by reporting fewer or no worker injuries. Consequently, the number of workers covered by OSHA inspections decreased by 32 percent from the Clinton (FY2000) to Bush (FY2007) presidencies.²⁵

There are so few OSHA inspectors today (821) that it would take them 133 years to visit each workplace under its jurisdiction. OSHA has fallen so low that the situation is better under state OSHA plans. Altogether, the states have 1273 inspectors and it would only take 65 years to inspect workplaces under their jurisdiction.²⁶

Fewer inspectors have meant fewer inspections and that has resulted in lower penalties. For example, the average OSHA penalty for serious violations, situations where death or serious injury are highly likely, has dropped from \$960 in FY2000 during the Clinton administration to \$909 in FY2007 under Bush.²⁷ OSHA penalties are too low to deter wood-be violators.

Refusing to Regulate, then Rushing to Regulate

The Bush administration is the first in OSHA's history not to voluntarily promulgate a new safety standard of its own volition. It wasn't for lack of need. They killed two dozen proposed standards that were in the pipeline when the Clinton administration left office, including one involving the lockout of hazardous equipment in construction. In 2004, OSHA administrator John L. Henshaw summed up the White House's refuse-to-regulate philosophy nicely when he said that "writing another standard" is not the answer to protecting workers' safety.²⁸

Actually, it has issued two standards, but only when they were forced to do so by court order, and then, in watered-down form. The first was a standard in February 2006 to regulate hexavalent chromium, a toxic substance that is found in paints, primers and is created when welding stainless steel. The final rule was five times weaker than OSHA's original proposal; so weak that even OSHA admitted it couldn't prevent workers from getting cancer. Nor did it deal with hexavalent chromium found in Portland cement, a common component of construction work. It also weakened training requirements, workers' right to monitor, and gave employers four years to implement engineering controls. The United Steel Workers and Public Citizen, who filed the first lawsuit, have filed another to challenge the loopholes. The second standard, in November 2007, requires that employers pay for workers' personal protective equipment mandated under OSHA standards, such as equipment required by OSHA's construction standards; the rule would not have been promulgated if the AFL-CIO and United Food and Commercial Workers hadn't sued and Congress applied pressure on OSHA. This rule is important for low wage, especially immigrant, construction workers for whom the cost of paying for the equipment themselves imposed a serious economic burden. Less fortunate are construction workers who work in confined spaces and under noisy conditions; the proposals to regulate Confined Spaces in Construction and Hearing Conservation for Construction Workers remain mired in the White House's Office of Information and Regulatory Affairs.²⁹

But two curious things happened around the Fourth of July weekend, a time when most of the government shuts down and the media is not paying close attention to the policymaking process. On July 3rd, the White House fired John Howard, the respected leader of the National Institute for Occupational Safety and Health's (NIOSH) (more on this later). Then, on Monday, July 7, after refusing to regulate for almost eight years, the Bush administration rushed to regulate when it slipped a previously unknown proposed standard onto OMB's calendar. The White House was in such a hurry to complete its Fourth of July surprise that they skipped the requirement that it first be listed twice on OSHA's semi-annual regulatory agenda. Was it a last minute

change of heart to tighten safety standards? No, it was a rule to weaken the risk assessment formula that would help employers by making it more difficult for OSHA and the Mine Safety and Health Administration (MSHA) to establish and regulate safe thresholds of workers' exposure to toxins and chemicals.³⁰ For example, it proposes to use assumptions favorable to employers to arbitrarily calculate the risk that a worker, exposed to crystalline silica dust, would become ill.³¹ As it is, OSHA found that 26 percent of samples taken in the construction industry exceeded the permissible exposure level, and that 11 percent of construction industry deaths were attributed to silicosis.³² A 2003 study published in the *Annals of Occupational Hygiene* found "that silica exposures are grossly unacceptable in the U.S. construction industry..." and "... concluded that urgent action is required to reduce silica exposures in the U.S. construction industry."

What explains the Bush administration's rush to regulate after seven years of refusing to regulate? For one thing, it has strong ties to business interests, especially in the energy sector. According to the nonpartisan Center for Responsive Politics, the coal mining industry gave 88 percent if its campaign contributions (\$3.2 million) to Republicans during the 1999-2000 election cycle, and when Bush came up for reelection it upped the ante to 90 percent (\$2.1 million) in 2003-2004. But family ties are also involved. Secretary of Labor Elaine Chao, who oversees OSHA and MSHA, is married to Senator Mitch McConnell (R-KY), the former Senate Majority Leader and a staunch supporter of the mining industry that would benefit directly by the weakened rule. A controversial meeting between coal industry tycoon Bob Murray and MSHA officials that took place in Morgantown, West Virginia in September 2002 illustrates the ties that bind the coal industry to McConnell and Chao. Murray is on record as having said: "Mitch McConnell calls me one of the five finest men in America and the last I checked, he is sleeping with your boss... Then Murray pointed at two of the MSHA officials and is reported to have said: "They... are gone." Shortly thereafter, the two were transferred out of the region containing Murray's mines. One of the officials, Tim Thompson the MSHA district manager, was a Republican who said: "... I don't think you should bring up politics at a meeting like that, involving safety."

The Stall-the-Standard Strategy

There were 176 deaths nationwide due to crane accidents in 2007, more than double the 74 fatalities in 2000.³⁶ New York City is undergoing a building boom with construction up 25 percent in the last five years. Building worker deaths are also up: 15 workers have died in construction accidents in the first five months compared with 12 for all of 2007, a 300 percent increase over last year. The Buildings Department increased the number of building inspectors from 277 in 2002 (Bloomberg's first year in office) to 461 in 2008, and it has issued more than 1,200 stop work orders and 4,000 violations in the past year.³⁷ But it has been plagued by lax enforcement due to corruption among the ranks of city inspectors, and its pro-development stance. A startling 80 percent of the building plans submitted under the City's self-certification plan were substandard.³⁸ After the March 15th crane collapse New York City adopted a requirement that buildings inspectors watch cranes being erected, but suspended it just days before the second crane collapse. With only 20 OSHA inspectors including trainees,³⁹ to cover Manhattan and Queens, New York City has had to use Buildings Dept. Inspectors who are mostly not workplace safety inspectors. Only four of the City's buildings inspectors are qualified to check more than 200 cranes, including 26 tower cranes.⁴⁰

After the March 15th collapse, Bloomberg fired his Buildings Commissioner, Patricia J. Lancaster, despite her efforts to make reforms. Besides New York, there have been major crane collapses in Las Vegas, Miami, Kansas City, and Houston this year. Why hasn't President Bush fired his OSHA administrator? For an answer we need to take a look at OSHA's crane standard. Dating back to OSHA's inception in 1971, it has never been updated despite the wealth of knowledge learned from decades of accidents and improvements in crane technology. For example, OSHA doesn't even require that crane operators be licensed, and only 15 states and 6 cities have adopted that basic requirement.⁴¹ Yet, the White House is stalling the crane and derrick standard despite the fact that business and labor groups worked together in 2004 to produce it.

The stall-the-standard strategy simply involves pushing the goal posts back every time the deadline approaches. For example, Labor Secretary Chao's 2007 regulatory agenda said it would finally be published in January 2008, but the May plan pushed it back to August. Also, OMB officials met with corporate representatives twice in 2008 – OSHA and labor officials were excluded – but still no standard. The stall-the-standard strategy allows the Bush administration to have its cake and eat it too. It can offer rhetorical reassurances to workers and the public that it is working on the standard, and it simultaneously sends a signal to corporate interests that it will do everything in its power to avoid promulgating new safety standards.

In an effort to prod OSHA into action, the Center for Construction Research and Training, the research, development and training arm of the AFL-CIO's Building and Construction Trades Department, issued a report on crane-related deaths in June 2008. It made eight recommendations including national certification of all crane operators, inspectors, and signalpersons and riggers who have the important roles of directing the crane and supervising the load for the operator. Also, tower cranes should be inspected after they are assembled, but before being operated. Crane loads should not be directed over street traffic. OSHA should investigate crane deaths more thoroughly than they have, and promulgate the crane and derrick standard.⁴²

The Revolving Door

Further insight into the President Bush's pro-market priorities can be gained by comparing how it values the administrators of OSHA and NIOSH, Edwin G. Foulke and Dr. John Howard, respectively. Foulke's appointment illustrates the revolving door between the executive branch and the business community. Before heading OSHA he was a partner at Jackson Lewis, a Washington, D.C. law firm that specializes in helping employers prevent their employees from joining unions, fighting safety and health fines, and challenging workers compensation claims. One of its seminar brochures carries an ominous warning to employers: "Can your organization survive?" Then it assures attendees that they will be advised on "How to Stay Union Free."

Unlike Foulke, Howard charted an independent course steered by his support for NIOSH's mission to research the causes of workers' injuries and illnesses and make recommendations to OSHA. Howard's professional, nonpartisan approach earned him the respect and support of organized labor and the public health community. They supported his reappointment, as did the American Society of Safety Engineers and the American Industrial Hygiene Association, which called him "the most respected leader in NIOSH's history." But Howard's superior, Dr. Julie L. Gerberding, the head of the Centers for Disease Control and Prevention, gave him his walking papers on July 3, 2008 without giving a reason.

Why did the White House terminate Dr. Howard while retaining Foulke? According to the *New York Times*: "Some members of Congress believe that the White House or the health and human services secretary, Michael Leavitt, wanted him out because he was pushing for 9/11 health programs that they deemed too costly." AFL-CIO worker safety director Peg Seminario puts it more pointedly: "Howard ran afoul of President Bush's political appointees and the business community by his professional, independent approach to administering NIOSH." In contrast, Foulke has carried out White House priorities to protect business interests at OSHA despite serious questions raised about his failure to protect construction workers' safety. Unlike Howard, it would be difficult, if not impossible to imagine this president firing Foulke.

Conclusion

It is imperative for our nation's health that the next president put ideology aside and support OSHA's mission to protect worker safety and health. OSHA has never achieved its full potential in any administration, but it has reached its nadir under President Bush, who is in sync with business interests that oppose OSHA's mission. Workers' safety has suffered as a result.

If Congress wants OSHA to carry out its mission, it must increase OSHA's budget and legal authority. The OSHA legislation should be amended to strengthen OSHA's power to inspect and shut down dangerous workplaces without having to go to court. The White House should stop stalling the crane and derrick standard. Workers must also be empowered to inspect and report dangerous working conditions without fear of reprisal. BLS injury and illness statistics are underreported and hence unreliable. Workers must be immunized against retaliation for reporting injuries and illnesses for their own safety and health and for a more accurate count. OSHA should not automatically rely on self-reported data to determine which jobs are the most dangerous and it should curtail the voluntary compliance program that allows employers who report fewer injuries to be exempt from routine inspection. These are a few of the steps that need to be taken to reconstruct OSHA.

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NOTES

¹ Public Law 91-596, 84 STAT. 1590, 91st Congress, December 29, 1970.

² The OSH Act permits states to establish their own plans and 22 states plus Puerto Rico have done so. The legislative intent was that state plan provisions would have to measure up to federal OSHA, but it has been so weakened under the Bush administration that some state plans like California have surpassed it.

³ The states include California, Connecticut, Hawaii, Massachusetts, Minnesota, Montana, Nevada, New Jersey, New Mexico, New York, Oregon, Rhode Island, Utah, West Virginia, and Washington's law does not become effective until 2010. Besides New York City, the cities include Chicago, Los Angeles, New Orleans, Omaha, and Washington, D.C.

⁴ U.S. Congress, House of Representatives, Statement of Representative George Miller. "Is OSHA Failing to Adequately Enforce Construction Safety Rules?" Hearing before the Subcommittee on Worker Safety, Committee on Education and Labor, June 24, 2008.

⁵ U.S. Bureau of Labor Statistics, U.S. Department of Labor, Economic News Release, "Table 1. Incidence rates of nonfatal occupational injuries and illnesses by selected industries and case types, 2006," 1.

⁶ Ibid., 2008, "Four most frequent work-related fatal events, 1992-2006," 6.

⁷ *Ibid.*, 2008, "Falls, by type of fall, 2006," 7.

⁸ Death on the Job: The Toll of Neglect, 17th Edition, Washington, D.C.: AFL-CIO, 2008, 4.

⁹ U.S. Bureau of Labor Statistics, 2008. "Number and rate of fatal occupational injuries, by industry sector, 2006," Washington, D.C.,

¹⁰ *Ibid.*, Economic News Release, "Table 1. Incidence rates of nonfatal occupational injuries and illnesses by selected industries and case types, 2006" 1. "Table 2. Numbers of nonfatal occupational injuries and illnesses by selected industries and case types, 2006" 1.

¹¹ *Ibid.*, "Table 3. Incidence rates of nonfatal occupational injuries and illnesses by major industry sector and employment size, 2006," 1.

¹² Ibid.. "Distribution of fatalities by selected occupations in the private construction industry, 2005-06," 17.

¹³ *Hidden Tragedy: Underreporting of Workplace Injuries and Illnesses*, A Majority Staff Report by the Committee on Education and Labor, U.S. House of Representatives, June 2008, 8-9.

¹⁴ Judith E. Glazner, Joleen Borgerding, Jan. T. Lowery et al., "Construction Industry Rates May Exceed National Estimates: Evidence

from the Construction of the Denver International Airport," 34 American Journal of Industrial Medicine 105, (1998).

- ¹⁵ Hidden Tragedy, 23.
- ¹⁶ *Ibid.*, 24.
- ¹⁷ Samuel W. Meyer and Stephen M. Pegula, "Injuries, Illnesses, and Fatalities in Construction, 2004," U.S. Bureau of Labor Statistics, May 24, 2006.
- ¹⁸ "The Foreign Born in the US Labor Force: Numbers and Trends," *Immigration Facts*, The Migration Policy Institute, January 2004, No. 4, 4.
- ¹⁹ For more on this issue, see Laura H. Rhodes, "How Safe Are U.S. Workplaces for Spanish Speaking Workers?" in Vernon Mogensen, editor, *Worker Safety Under Siege: Labor, Capital and the Politics of Workplace Safety in a Deregulated World*, (M.E. Sharpe, 2006), 72-96.
- ²⁰ Death on the Job. 93.
- ²¹ U.S. Bureau of Labor Statistics, Foreign-born Workers: Labor Force Characteristics in 2006, "Table 4. Employed foreign-born and native-born persons 16 years and over by occupation and sex, 2006 annual averages," 10.
- ²² Immigrant Workers At Risk: The Urgent Need for Improved Workplace Safety and Health Policies and Programs, Washington, D.C.: AFL-CIO, August 2005, 3.
- ²³ "North Carolina work site enforcement action puts workers at risk," Immigrants' Rights Update, National Immigration Law Center, Vol. 19, Issue 5, October 5, 2005.
- ²⁴ "Safety Scam Threatens Workers Lives: Immigration Officers Pose as Workplace Safety Officials to Entrap Immigrant Workers," United Food and Commercial Workers Union, Press release, July 14, 2005.
- ²⁵ Death on the Job, 8.
- ²⁶ *Ibid.*, 7.
- ²⁷ *Ibid.*, 46.
- ²⁸ Amy Goldstein and Sarah Cohen, "Bush forces a shift in regulatory thrust: OSHA made more business friendly," *Washington Post*, August 15, 2004, A1.
- ²⁹ Death on the Job, 11.
- ³⁰ "Last-Minute Mischief for Labor," editorial, *New York Times*, August 4, 2008, A18. For more on the policy history on this subject see Gerald Markowitz and David Rosner, "Silicosis and the Ongoing Struggle to Protect Workers' Health," in Vernon Mogensen, editor, *Worker Safety Under Siege: Labor, Capital and the Politics of Workplace Safety in a Deregulated World*, (M.E. Sharpe, 2006), 61-71.
- ³¹ U.S. Department of Labor, "Requirements for DOL Agencies' Assessment of Occupational Health Risks" (RIN: 1290-AA23), July 7, 2008. See also, Carol D. Leonnig, U.S. Rushes to Change Workplace Toxin Rules, *The Washington Post*, July 23, 2008, A1.
- ³² Ellen I. Roznowski, "Crystalline Silica Exposures in Construction," OSHA, http://www.osha.gov/SLTC/silicacrystalline/roznowskiei/exposure.html
- ³³ S. M. Rappaport, Mark Goldberg, Pam Susi and Robert F. Herrick, "Excessive Exposure to Silica in the US Construction Industry," *Annals of Occupational Hygiene*, Vol. 47, No. 2, pp. 111-122, 2003.
- ³⁴ "Coal Mining: Long-Term Contribution Trends," *Open Secrets.org*, Center for Responsive Politics, http://www.opensecrets.org/industries/indus.php?ind=E1210
- ³⁵ "Two for the Money," *Lexington Herald-Leader*, October 20, 2006, http://www.kentucky.com/233/story/11062.html.

- ⁴⁰ U.S. Congress, House of Representatives, Statement of Robert LiMadri, Acting Director, Department of Buildings, New York City. "Is OSHA Failing to Adequately Enforce Construction Safety Rules?" Hearing before the Subcommittee on Worker Safety, Committee on Education and Labor, June 24, 2008.
- ⁴¹ The states include California, Connecticut, Hawaii, Massachusetts, Minnesota, Montana, Nevada, New Jersey, New Mexico, New York, Oregon, Rhode Island, Utah, West Virginia, and Washington's law does not become effective until 2010. Besides New York City, the cities include Chicago, Los Angeles, New Orleans, Omaha, and Washington, D.C.
- ⁴²Michael McCann, Janie Gittleman, and Mary Watters, *Crane-Related Deaths in Construction and Recommendations for Their Prevention* (Silver Springs, MD: The Center for Construction Research and Training, 2008).
- ⁴³ "A Pointless Departure," editorial, *New York Times*, July 11, 2008. See also, American Society of Safety Engineers, Letter to President George W. Bush, May 22, 2008, A16.
- ⁴⁴ Press release, Centers for Disease Control and Prevention, Statement Regarding Search for New National Institute for Occupational Safety and Health (NIOSH) Director, July 3, 2008.
- ⁴⁵ "A Pointless Departure," see also, Anthony DePalma, "Chief of 9/11 Programs Gains Support," New York Times, June 28, 2008.
- ⁴⁶ Peg Seminario, Director of Occupational Safety and Health, AFL-CIO, email message forwarded to APHA discussion list, July 7, 2008.

³⁶ Katherine Torres, "Clinton to Foulke: Update Crane and Derrick Standard," *Occupational Hazards*, June 3, 2008, http://www.occupationalhazards.com/News/Article/80655/ArticleDraw.aspx

³⁷ Charles V. Bagli, "City Unveils Plan to Improve Safety at Construction Sites," New York Times, June 5, 2008, B3.

³⁸ Representative Carolyn Maloney, "Following Crane Collapse, Maloney Requests OSHA Inspection of Major NYC Construction Sites," May 30, 2008.

³⁹ Op cit., U.S. Congress, Statement of Representative George Miller.