Cranes & Derricks
The Prolonged Creation of a Key Public Safety Rule

April 2011
Acknowledgments
This report was written by Taylor Lincoln and Negah Mouzoon of Public Citizen’s Congress Watch division. Celeste Monforton, Professorial Lecturer at the George Washington University Environmental and Occupational Health Department, provided valuable comments.

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Selected Events in the Cranes and Derricks Rulemaking Process, 1998-2010

1998
OSHA advisory committee (ACOSH) meets to discuss updating cranes and derricks standard, a step that has been requested by industry to reduce fatalities at construction sites.

A crane lifting a section of roof for the new Milwaukee Brewers baseball stadium tips over, killing three workers and sending 1 million lbs. of debris to the ground.

The advisory committee recommends that OSHA use a negotiated process to create a revised cranes and derricks standard.

1999
From late-1999 until mid-2002, OSHA decides whether to create an updated cranes and derricks standard and, if so, how.

2002
OSHA announces intent to revise the cranes rule and says that it plans to use a negotiated rulemaking process to do so.

Comments sought on the makeup of the negotiation committee.

In response to public comments, OSHA slightly adjusts the composition of a negotiation panel it had proposed.

2003
OSHA finalizes and announces 23 member negotiation committee.

Negotiation committee meets for the first time.

Negotiation cnte. meeting 2
Negotiation cnte. meeting 3
Negotiation cnte. meeting 4
Negotiation cnte. meeting 5
Negotiation cnte. meeting 6
Negotiation cnte. meeting 7
Negotiation cnte. meeting 8
Negotiation cnte. meeting 9
Negotiation cnte. meeting 10
Negotiation cnte. meeting 11

Negotiation committee reaches consensus on recommended cranes rule.

From mid-2004 until mid-2006, as part of the Preliminary Economic Analysis, OSHA determines the costs and benefits of rule; the number of small businesses affected; the number of lives the rule would save, and fulfills several other required fact-finding tasks.

2004
OSHA determines new rule may pose a significant impact on small entities; this requires OSHA to create SBREFA panel of “small entities” and address panel members’ concerns.

First SBREFA meeting
Second SBREFA meeting

SBREFA panel sends OSHA about 40 recommendations.

From late-2006 until mid-2008, OSHA completes Final Economic Analysis, addressing the SBREFA comments, fulfilling Paperwork Reduction Act requirements, and repeating many of the tasks outlined in the Preliminary Economic Analysis, above.

2006
3 crane accidents in NYC and Miami kill a total of 11 people. Sen. Clinton sends a scathing letter to OSHA over delays in rulemaking. The moderator of the negotiation committee criticizes the delays in an NYT op-ed.

OMB holds three meetings with stakeholders.

2008
OMB completes review of draft proposed standard.

OSHA publishes proposed rule.

Comment sought on the proposed rule. OSHA receives more than 200 comments.

Four days of hearings held on proposed rule.

Post hearing comments and briefs are accepted.

From June 2009 until July 2010, OSHA addresses the contents of pre-hearing comments, remarks made during hearings, and comments and briefs submitted after the hearing.

2009
August 9, 2010, final revised Cranes and Derricks standard published.
Introduction

Federal agencies have long been the object of scorn and criticism by political actors who claim that the employees of public health agencies like the Occupational Safety and Health Administration (OSHA) act as unelected, unaccountable autocrats who hand down burdensome safety rules with little concern about their effects on businesses. But the process of writing these rules—which serve to put the laws that Congress passes into practice—is usually long, complicated, and involves significant input from affected industries and other stakeholders. Additionally, agencies need to be meticulous in fulfilling myriad arcane steps or risk having their final rules overturned by court challenges. In fact, the federal agencies that are charged with protecting public health and safety may be some of the most tightly “regulated” entities in the United States.

This report recounts the creation of an important rule that was badly needed to protect workers—and, sometimes, passersby—from the dangers posed by cranes at construction sites. The final rule, published in August 2010, enhances worker training and certification requirements and adds protocols for job-site analyses before putting cranes into use. But the rule was a long time in the making.

By 1998, federal construction safety standards for the operation of cranes and derricks were badly out of date. Most of the standards were from 1971, when hydraulic cranes (now prevalent) were still rare. Meanwhile, many industry associations’ protocols were out of sync with federal rules.¹

Construction accidents have historically been the leading cause of workplace injuries and fatalities, and cranes have been implicated in a quarter to a third of those accidents.² In the late 1990s, construction accidents involving cranes were killing 80 to 100 workers a year. OSHA later estimated that a modernized rule would prevent about 20 to 40 of those annual tragedies.

Not just worker safety advocates, but even industry wanted an updated cranes and derricks rule. Industry officials, OSHA later recounted, “were concerned that accidents involving cranes and derricks continued to be a significant cause of fatal and other serious injuries on construction sites and believed that an updated standard was needed to address the causes of these accidents and to reduce the number of accidents.”³

If ever there were a rule that seemingly should have breezed to adoption, this was it. The urgency of preventing avoidable deaths and injuries was clear, the regulated industries were asking for a new standard, and a large committee of business and labor representatives would reach near unanimous consensus on a draft rule very early in the process.

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² Anthony Suruda, et al., “Crane-Related Deaths in the U.S. Construction Industry, 1984-94,” Rocky Mountain Center for Occupational and Environmental Health, Department of Family and Preventive Medicine, University of Utah School of Medicine, October 1997.
But a revised cranes and derricks rule did not breeze through. A dozen years, spanning three presidential administrations, would pass between OSHA’s initial action on industry’s request for a new rule and completion of the revised standard. More than 750 construction workers died from crane related incidents during this time. [See Figure 1] By OSHA’s most conservative estimate, the new rule would have saved about 220 of those lives if it took effect in 2000 instead of 2010.4

<table>
<thead>
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<th>Year</th>
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<tbody>
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<td>2008</td>
<td>93</td>
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<tr>
<td>2009</td>
<td>53</td>
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During the dozen years it took to finalize the cranes rule, OSHA and other federal agencies held at least 18 meetings about it. At least 40 notices were published in the Federal Register. OSHA was required by a hodgepodge of federal laws, regulations and executive orders to produce several comprehensive reports, and revisions to such reports, on matters such as the makeup of industries affected by the rule, the number of businesses affected, and the costs and benefits of the rule. OSHA also was repeatedly required to prove that the rule was needed, that no alternative could work, and that it had done everything it could to minimize the effects on small businesses. The regulatory process afforded businesses at least six opportunities to weigh in with concerns that the agency was required to address.

1998 to 2004: The Negotiated Rulemaking Committee Is Formed and Reaches Consensus

The process of updating the cranes and derricks standard began in 1998, when OSHA’s Advisory Committee for Construction Safety and Health (ACCSH)—a 15 member panel made up equally of representatives from government, labor and business—established a workgroup to recommend changes to the rule. The workgroup sent its recommendations to the full ACCSH, which recommended to OSHA in late 1999 that the agency update the rule through “negotiated rulemaking.” Under this rarely used process, OSHA would form a committee—made up primarily of manufacturers, employers, other business interests, and labor representatives—that would seek to develop a draft rule by consensus.5

The dangers of under-regulated cranes became the subject of national attention in July 1999, when a 567-foot crane being used in the construction of a new baseball stadium for the Milwaukee Brewers tipped over as it was lifting a section of a retractable roof. The crane’s collapse sent more than a million pounds concrete and debris crashing to the ground and killed three workers.6

4 Calculation based OSHA’s estimate that the final rule would save 22 lives a year.
In July 2002, two-and-a-half years after ACCSH recommended to OSHA that it use a negotiated process to create a new standard, OSHA announced it would follow the advisory committee’s advice. In a conversation with Public Citizen, an OSHA official who was involved in the creation of the revised crane standard explained the delay by saying that the agency decides to create a new or revised rule only after extensive deliberations.

That month, OSHA published a notice in the Federal Register, listing about 15 “interests”—such as crane manufacturers, construction companies, labor groups, insurance companies, public interest groups, and government entities—that it proposed to be represented on the rule negotiation committee to create a revised cranes standard. The agency sought public comment on this proposed universe of interests and asked for nominees to serve on the committee. In July 2003, OSHA announced a final committee of 18 representatives of affected businesses, four labor representatives, and an OSHA employee.

The negotiation committee convened for the first time at the end of July of 2003. It established ground rules that no decision could be reached without the agreement of at least 21 of the 23 members, including OSHA’s lone representative. The committee deemed that OSHA could not subsequently alter its decisions without seeking the committee’s input. Additionally, committee members agreed not to criticize the rule during the public comment period.

The negotiation committee met 11 times between July 2003 and July 2004. On July 30, 2004, the committee reached consensus (meaning that at least 21 members agreed) and sent a draft standard to OSHA for review.

**2004-2008: Regulatory Red Tape**

The negotiation committee had crafted a draft rule that was satisfactory to at least 21 of its 23 members but work on the rule had just begun. For the next five years, OSHA would toil to satisfy a potpourri of prerequisites for formally proposing a rule.

For example, the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA) required OSHA to evaluate and address the concerns of “small entities,” defined as small businesses, small governmental units, and small nonprofit organizations. This general mandate involves several component parts.

First, SBREFA required OSHA to engage in extensive fact-finding merely to determine which special requirements it needed fulfill. For instance, OSHA was required to produce an Initial Regulatory Flexibility Analysis, including a Preliminary Economic Analysis, to de-

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8 Public Citizen spoke with two OSHA employees to clarify facts for this report on April 7, 2011. The officials asked not to be identified.
termine whether the proposed rule could potentially pose a “significant economic impact” on a substantial number of small entities. If it did, OSHA would have to convene a panel to advocate for small entities.

The requirements of an Initial Regulatory Flexibility Analysis are extensive. They required OSHA to document that it had considered all reasonable regulatory options to minimize the rule’s economic effects on small entities and explain why it chose the approach in its proposal over the alternatives. Additionally, OSHA was required to enumerate the types and number of small entities that would be affected by the rule; the projected reporting and recordkeeping requirements of the proposed rule; and to list all federal rules that may duplicate, overlap or conflict with the proposed rule.12

OSHA also was required to produce several other reports and determinations to move forward:

- OSHA needed to demonstrate, pursuant to its authorizing legislation, that the proposed rule was addressing a significant risk, and that the proposed standard would substantially reduce the risk. OSHA initially determined that the rule would prevent 53 fatalities annually, confirming both that a risk existed and that the rule would help fix it. Additionally, OSHA was required to evaluate whether the market was capable of fixing the safety hazards in the operations of cranes. The agency determined that crane operations involved inequities, such as employers typically knowing more about the risks than employees, and that such inequities were beyond the curative powers of the market. As such, the agency determined that a rule was required.13

- To meet the requirements of executive order 12866, OSHA was required to estimate costs, benefits, and net benefits of the proposed standard.

- Under Regulatory Flexibility Act, OSHA was required to determine the number of small entities (such as general contractors with revenue of less than $31 million) that would be affected. The agency found 204,000.14

- OSHA was required by executive order 13132 to ensure that the rule did not restrict state or local policy any more than necessary, that it only took actions for which it had clear constitutional authority, and that the rule addressed a national problem. The agency made each determination.15

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14 Ibid.
15 Ibid.
Fulfilling these tasks took the agency a significant amount of time. In December 2005, an agency official apologized to members of ACCSH for its failure to make the SBREFA “significant impact” decision, which the agency had expected to complete much earlier that year.16

“We have limited resources, and competing priorities were the reasons for [the delay], particularly the hexavalent chromium rule,” said Keith Goddard, the director of OSHA’s Evaluation and Analysis Directorate. “We have also diverted a considerable amount of resources to meet our commitments on the preliminary regulatory analysis on [the] beryllium [standard], as well.”17

In roughly June 2006, OSHA determined that the cranes and derricks rule would potentially have a significant impact on a substantial number of small entities. That determination required OSHA to convene a SBREFA panel. Such panels, typically drawn largely from recommendations of trade associations, consist of small businesses, small governments, and small nonprofits that are provided with the draft rule and regulatory flexibility analysis. Invited parties are offered an opportunity to comment.

In October 2006, the SBREFA panel sent OSHA about 40 recommendations. These included requests that OSHA reexamine several costs estimates, study the potential effects of the proposed rule’s certification requirements (and the potential loss of jobs that the requirement might cause), and ensure that OSHA’s estimates of the benefits of the rule could be independently verified. The panel also requested that OSHA seek public comment on many of its suggestions. SBA’s Office of Advocacy provided a separate set of recommendations, including a request that OSHA “consider and document any ‘significant alternatives’ to the proposed rule.”18

At a January 2008 ACCSH meeting, some members expressed frustration at delay in issuing a proposed rule. The director of OSHA’s Office of Construction Standards and Guidance said that the negotiated committee’s proposal was extremely detailed, rendering the process of writing an explanation and justification for the rule very time-consuming. The director also said that other standards moving through the agency’s rulemaking process were consuming limited resources.19 Notably, however, OSHA completed only one major rule during the time from 2001 to 2009, and that rule was completed in response to a court order.

While OSHA struggled to fulfill its obligations, several tragedies focused attention on the dangers of crane operations, and on the agency’s lagging effort to produce a new rule. Six construction workers and a bystander died and 24 people suffered injuries when a crane collapsed in New York City on March 15, 2008. Ten days later, a 20-foot crane section in

17 Ibid.
Miami fell 30 stories, killing two construction workers and injuring five. On May 30, another crane fell in New York City, killing two construction workers and injuring a worker and a bystander.20

In May 2008, Sen. Hillary Clinton (D-N.Y.) sent a letter to OSHA Administrator Edwin G. Foulke demanding an explanation for why the new rule was not finished. Clinton noted that the industry-union advisory committee had reached consensus on a proposed rule almost four years earlier.21

“This delay is inexplicable and inexcusable,” Clinton wrote. “Casualties due to crane accidents are occurring at an alarming rate.”22

About then, progress on the rule appeared to quicken:

- In May 2008, the director of OSHA’s Office of Construction Standards and Guidance informed members of ACCSH that it had completed its Final Economic Analysis. The report estimated that the standard would prevent 22 fatalities and 175 non-fatal injuries per year.23 This estimate represented a significant reduction from the initial estimate that the rule would prevent 53 fatalities. The discrepancy was due to a shift in methodology from using records maintained by the Bureau of Labor Statistics to data maintained by OSHA. The agency determined that the costs of compliance would be $154.1 million, and the annual benefits would be $209.3 million, resulting in net benefits of $55.2 million. The agency also was required to provide a comprehensive breakdown of the compliance costs. It determined the additional costs would average about 0.2 percent of affected businesses’ annual revenue, which it deemed “effectively negligible.”24

- Also at that time, pursuant to the Paperwork Reduction Act, the agency submitted to the Office of Management and Budget (OMB) an analysis of the rule’s paperwork requirements for affected businesses.

- During the summer, OMB held four meetings on the proposed standard. Attendees included representatives of businesses that operate cranes, the builders’ insurance industry, the crane operator certification organization, and labor.25

- In late August, 2008, OMB completed its review of the draft proposed standard.26

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22 Ibid.
24 Ibid.
25 Ibid.
2008-2010: The Rule Is Completed

The proposed rule was published in the *Federal Register* on October 8, 2008. It largely reflected the language approved in 2004 by the negotiation committee and responses to the comments sent to OSHA by the SBREFA panel.27

Publication of the proposed rule initiated a public comment period that was initially slated to run through early December but which OSHA extended to Jan 22, 2009, in response to stakeholders’ requests.

Among the comments OSHA received were those from several industries seeking to be exempted from the rule. These included railroads, shipbuilders, electric utilities, the propane gas industry, and companies that install signs. OSHA eventually rejected most of these requests.

The National Association of Homebuilders, which had participated on the negotiation committee, also submitted comments. Although the committee’s members had agreed not to submit “negative comments,” NAHB sent in 45 pages that criticized the rule for being “too complex,” “unduly onerous,” and imposing “disproportionate burdens.”28

The SBA’s Office of Competitiveness requested that the agency consider and document any “significant alternatives” to the proposed rule. An agency official familiar with the proceedings disputes the Competitiveness office’s contention that OSHA had failed to document such alternatives.29

In March 2009, four days of hearings were held to discuss the rule, after which the agency accepted post-hearing comments and briefs. In June 2009, the record was closed. OSHA was then left with the task of addressing the contents of over 200 prehearing comments, more than 1,500 pages of transcribed text from the four days of hearings, as well as post-hearing submissions.

The summary of the final rule published in the *Federal Register* runs 159 pages, many of which are consumed by OSHA’s summaries of public comments on particular sections and the agency’s responses to those comments. An OSHA official estimated to Public Citizen that 30 to 40 percent of the final rule’s sections include substantial alterations that were prompted by the comments the agency received. But a review of OSHA’s summary of its responses to the comments indicates that most concerns were subtle, such as improving the clarity of some of the rule’s language and addressing relatively rare hypothetical scenarios.

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29 Public Citizen telephone conversation with OSHA officials, April 7, 2011.
On Aug. 9, 2010, the final rule was published. In October 2010, the Edison Electric Institute (EEI), which represents publicly traded electric utilities, and the Association of American Railroads filed federal lawsuits challenging the rules. These cases are ongoing.

**Discussion**

A dozen years passed between the first meeting of the ACCSH on the cranes rule to the completion of the standard. By the government’s measure, in which the clock starts ticking only after the agency publishes a notice of its intent to pursue a new or revised rule, the cranes rule took eight years to complete. While slightly longer than average, this timespan was fairly typical. The average length of time for OSHA to complete a major rule since 1990 has been 6.5 years. For a health or safety standard, this means 6.5 years of preventable injuries and deaths.

Although the length of time to make the cranes rules was relatively typical over the past 20 years, OSHA’s rulemaking in the past decade stands in stark contrast to its earlier work because the number of rules it has issued has slowed dramatically. The agency produced 14 major rules between 1990 and the end of the Clinton administration in January 2001. Between January 2001 and 2010, OSHA finalized only one major rule aside from the cranes and derricks standard. Its creation of that rule, on hexavalent chromium, was court-ordered. Both the slow pace of individual rules and the sparcity of total final rules suggest that the anti-regulatory philosophy of President George W. Bush’s administration may have hindered progress.

The use of the negotiated rulemaking process was intended to accelerate the creation of the cranes rule, but there is little evidence that it did. Susan Podziba, who moderated the negotiation committee’s work, complained in a 2008 *New York Times* op-ed that she had expected the rule to be finalized within three years after the negotiation committee finished its work. Instead, seven years passed. The creation of the cranes and derricks standard clearly illustrates that tremendous redundancy exists in the rulemaking process. Setting aside the rare decision to employ a negotiated rulemaking process, stakeholders in the cranes rule had at least five opportunities to have their voices heard: at the SBREFA stage; to the Office of Management and Budget before it signed off on the proposed rule; during the conventional comment period after the proposed rule was published; during hearings on the proposed rule; and in post-hearing comments and briefs. [See Figure 2] Then, if still unsatisfied, stakeholders retained the right to seek redress in court—which two trade associations are now doing.

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30 Public Citizen analysis of data at reginfo.gov.
Figure 2: Businesses Opportunities to Influence the Cranes and Derricks Rule

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
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<tbody>
<tr>
<td>Negotiated Rulemaking</td>
<td>18 of 23 members represented business interests. The committee agreed that the rule could not go forward without the consent of 21 members, including the lone OSHA representative.</td>
</tr>
<tr>
<td>SBREFA</td>
<td>Small entities (small businesses, small governmental units, and small nonprofit organizations) were given a chance to review the draft rule and offer comments. The panel made about 40 recommendations to OSHA.</td>
</tr>
<tr>
<td>Review by the Office of Management and Budget</td>
<td>Businesses and other organizations were afforded the chance to express their concerns to OMB before it signed off on the proposed rule.</td>
</tr>
<tr>
<td>Comments on Proposed Rule</td>
<td>All members of the public, including businesses, were allowed to submit formal comments on the proposed rule.</td>
</tr>
<tr>
<td>Hearings on Proposed Rule</td>
<td>Members of the public, including businesses, had an opportunity to testify during four days of hearings on the proposed rule.</td>
</tr>
<tr>
<td>Post Hearing Comments and Briefs</td>
<td>Parties were allowed to enter comments and briefs into the public record after the hearings.</td>
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In the current Congress, several bills have been introduced to force agencies to fight through even more red tape to create new rules, no matter how sensible and uncontroversial the proposals might be.

These proposals would only waste government resources and add additional delays and costs to an already slow and costly process. An OSHA official who spoke with Public Citizen on background estimated that about 50 percent of the work involved in creating a new rule goes to satisfy bureaucratic requirements that have nothing to do with making a good rule—in other words, waste.32

Moreover, because all new safety rules prevent injuries or deaths, and virtually all provide benefits that outweigh their costs, every unnecessary delay of a new safety rule causes major harm. OSHA estimates that the final cranes and derricks rule will save $55.2 million a year, a benefit largely stemming from value the agency places on the lives the rule will save. By that standard, if the agency were able to complete the rule in half the time, six years instead of 12, it would have saved 100 lives and the equivalent of more than $330 million.

Policymakers who wish to eliminate waste and streamline government functions should seek to improve the speed and efficiency with which agencies can write worthy rules rather than saddling agencies with additional burdens.

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32 Public Citizen telephone conversation with OSHA officials, April 7, 2011.