Occupational safety’s impact on Maine’s boat yards:

What regulatory strategies will most effectively eliminate hazards?

A doctoral thesis presented

by

Jeremy A. Pare

Submitted in partial fulfillment of the requirements

for the degree of

Doctor of Law and Policy

Northeastern University

College of Professional Studies

Boston, Massachusetts

June 2013
# Table of Contents

Abstract .............................................................................................................................................. 3  

Acknowledgments ............................................................................................................................. 4  

Chapter I: Introduction ..................................................................................................................... 6  

*Theoretical Framework* .................................................................................................................. 7  

*The Concern at Maine’s Boat Yards* ............................................................................................... 9  

*Opportunity Presented* .................................................................................................................. 10  

Chapter II: Literature Review .......................................................................................................... 12  

*OSHA Command-and-Control* ...................................................................................................... 13  

*International Cooperative Programs* ............................................................................................. 17  

*Domestic Cooperative Programs* .................................................................................................. 19  

*OSHA and its Effect on Maine* ......................................................................................................... 23  

Chapter III: Methods .......................................................................................................................... 27  

*Data Collection* ............................................................................................................................ 27  

*Data Analysis* .................................................................................................................................. 31  

*Limitations* ...................................................................................................................................... 33  

Chapter IV: Results ............................................................................................................................ 36  

*OSHA’s punitive regulatory strategy is counterproductive* ............................................................... 36  

*OSHA should play a role in workplace safety* ................................................................................. 39  

*OSHA’s regulatory strategy must be more flexible* ....................................................................... 40  

*OSHA must cooperate more with the boat yards* .......................................................................... 41  

Chapter V: Recommendations and Conclusion .............................................................................. 44  

*Recommendations* ......................................................................................................................... 44  

*Conclusion* ...................................................................................................................................... 55  

Bibliography ....................................................................................................................................... 59  

Appendix A ......................................................................................................................................... 63  

Appendix B ......................................................................................................................................... 64
OSHA’s impact on Maine’s boat yards:

What regulatory strategies will most effectively eliminate hazards?

By Jeremy A. Pare

ABSTRACT OF DOCTORAL THESIS
Submitted in partial fulfillment of the requirements for the degree of
Doctor of Law & Policy, Northeastern University

Maine’s boat yards are recognized by the Occupational Safety and Health Administration (OSHA) as a high hazard industry, given the many potential threats their employees face on a daily basis. These boat yards are subject to enhanced scrutiny by OSHA, whose inspections seek to enforce their regulations and promote a safe work environment. Maine’s boat yards struggle with OSHA’s regulations because their command-and-control measures leave little room for interpretation and, as evidenced by the yard’s high workers compensation costs and injury rates, they do not effectively protect their workers. The central question raised by this study is whether a change in OSHA’s punitive regulatory strategy can influence the internal self-regulation of boat yards in order to decrease hazards and make them safer for their employees.

While many industrial safety programs have been studied over the past 30 years, both nationally and internationally, boat yards have undergone little scrutiny during this time even though their incident and days away from work rates are consistently high. This thesis, a product of a partnership with the Maine Marine Trades Association, fills this gap by studying the process by which OSHA interacts with Maine’s boat yards to gain insight into ways OSHA can best
work with these entities to improve safety. This case study’s methods include a focus group and interviews which provides evidence that changes within OSHA’s regulatory strategy are necessary in order to decrease the hazards present in Maine’s boat yards. If implemented, these changes will increase cooperative efforts between OSHA and the yards, increase planning efforts, and provide consistent, positive motivation to improve safety programs and decrease injuries.

Specifically, I recommend that OSHA require yards to create site specific injury and illness prevention programs based on effective plans being utilized at yards that are considered by OSHA’s SHARP program to be safe work sites. I also recommend that OSHA should inspect Maine’s boat yards more frequently, and change its inspection process from a purely punitive, standard based strategy to include guidance and conditional and behavioral attributes. My last recommendation is that OSHA should change its means of regulating boat yards by creating a more collaborative environment between the yards and the agency. Through such changes, the agency can effectively improve individual safety programs by encouraging management commitment, eliminating hazards, and identifying the root causes of problems that can lead to unsafe behavior in the yards.
Acknowledgements

This thesis is dedicated to my family, friends, and teachers. Whether alive or no longer with us, you have all had a hand in allowing me to find the strength in myself to grow and mature so as to be able to produce the following document. Without you, I simply could not have gotten this project accomplished.

Special thanks is reserved for my parents who always found the time to ask how my doctoral project was proceeding, and who cared for my children when time was running short on a paper or presentation that was coming due. I love you and appreciate all you have done for me throughout my life. I also wish to thank my sister, whose quite support is a true blessing. Last, but certainly not least, I have to thank my wife and children. Melissa, you have been an inspiration to me as you go to work each week without so much as a mild complaint and take care of the kids while I am busy with work, selectman duties, teaching, or studying, and I thank you and love you with all of my heart. Mason, Ava, and Caleb, you are truly a gift, and I want you to know that I consider myself blessed and will love you and thank you for all that you have given me for all the days of your lives.
Introduction:

The primary goal of federal safety policy is to decrease the number of hazards that America’s workers are subject to on a daily basis. To this end, millions of dollars are spent by the federal government every year, yet the Occupational Safety and Health Administration (OSHA), the regulatory body that regulates safety for the nation, essentially must regulate with standards that are not always applicable to all sites, and a less than optimal number of agency inspectors. The effect of this regulatory state is less than satisfactory as many of the regulated firms have not been visited by OSHA, do not fully know how to deal with the standards on the books, and do not have the resources to fully implement all of the aspects of the standards. According to personal accounts and research from 2010 to 2012, a lack of regulatory certainty defines the general state of affairs at many of the boat builders and repair shops (hereafter boat yards) located in Maine, and thus the number of hazards found at Maine’s boat yards remains high year after year.

The following case study finds potential ways of developing an effective and equitable strategy for regulating occupational health and safety at boat yards in Maine. The current approach employed by OSHA is not stimulating safe, hazard free work environments which were envisioned by the goals of the agency’s enabling statute. An examination of OSHA’s inspection data, for inspections of Maine’s boat yards from 2000 to 2012 and Maine Department of Labor data for injuries incurred to employees at Maine’s boat yards during a similar period, indicates that, despite OSHA’s punitive regulatory program, many safety hazards exist at yards that are not being adequately addressed by employers. These hazards include lack of machine guarding for employees that could lead to severe lacerations or amputations, lack of electrical protections that
could lead to severe burns or electrocution, open floor hatches that could lead to falls from great heights, and inadequate protections for hands, face, and respiratory functions that could lead to long term health problems for the employee.

Theoretical Framework:

The theory that informs this case study is important because the various interests involved in safety regulation, whether they are economic, legal, or political, can lead to the implementation of many regulatory strategies. As promulgated by the 1970 Occupational Safety and Health Act (OSH Act), OSHA’s dominant regulatory strategy utilizes a highly centralized and rule-bound model of social control over America’s businesses and governmental entities; a strategy described by Nonet and Selznick (2001) as autonomous law, but one more widely known by the political and legal community as “command-and-control.” Under such a strategy, decision makers regulate industries based on rules that are fully vetted and formally codified under the administrative procedure rules of the federal government. These rules are then carried out by enforcement agents that inspect facilities and have the authority to levy fines for noncompliance with the rules. Over the last three decades, command-and-control has become, quite simply, the way legal scholars talk about state-based regulation (Short, 2012).

Command-and-control is a particularly important regulatory strategy for OSHA as the agency has only 2,220 inspectors who are responsible for the health and safety of more than 130 million workers in 8 million workplaces across the country (OSHA, 2012). These numbers translate into an average of one compliance officer for every 159,000 workers. The agency looks to the command-and-control strategy primarily to deter firms from disregarding the rules it is
charged with enforcing. The approach, as we shall see in the chapters to come, contrasts sharply with the cooperative partnership approach OSHA has sparingly used in the past even though the authority for such a strategy specifically exists under the OSH Act.

OSHA itself recognizes that an enhanced focus on prevention is needed to reduce workplace hazards (OSHA, 2012). Although the agency has not acted to create such a program to date, OSHA has looked to the results of proactive regulatory programs at the state level, within private industry, and at the international level to gain greater insight into what a more responsive regulatory strategy would mean for America’s workers, who are currently not covered by such programs. OSHA’s focus on deterrence and liability over the years has not allowed the agency to facilitate broad based compliance with its rules. This study argues that a new focus on cooperation may allow firms to more effectively internalize the goals of the agency and maximize social welfare, as such a strategy is expected to decrease the number of hazards that are present in Maine’s boat yards. Given the policy making role Congress contemplated for OSHA in its enabling statute, the agency certainly is entitled to deference regarding the agency’s ability to make such a change in strategy. This deference has been upheld by the courts in a number of cases over the past few decades and was codified with the term “Chevron deference” by the United States Supreme Court. In these terms, it is possible to understand the broader theoretical significance of the regulatory policies to be explored in this study.
The Concern at Maine’s Boat Yards:

Data collected by the Maine Department of Labor (MDOL) since 2000 indicates that injuries caused by workplace hazards are ever present in Maine’s boat yards. These yards have been regulated by OSHA since 1970, yet the data indicate that this agency has not affected the safety effort in the yards to any great extent over the past decade. OSHA’s regulations and current punitive regulatory strategy ultimately determines the boat yard’s safety decisions, and multiple factors contribute to what level of effort is employed by the yards.

The first of these factors is a direct result of OSHA’s individualized industry standards. Because of space limitations on the water front, yards are often forced to have inland buildings separate from their operations on the water. Therefore, the yards are regulated by multiple sets of regulations under OSHA’s general industry (OSHA 1910) and maritime standards (OSHA 1915). In addition, yards are subject to the specific regulations promulgated under direct industry standards as well as by standards that are adopted by OSHA indirectly under its “general duty clause” that requires work sites to identify hazards and eliminate them to provide a universally safe workplace for their employees. These regulations apply differently to electricians, painters, hazardous waste operators, and administrators, amongst others, whose individual jobs call for expertise and imputed knowledge above and beyond employees without these special skills.

Lastly, the fact that OSHA has rarely utilized its random inspection program at the yards over the past decade has lulled yards into a sense that the agency will not visit them. If a yard chooses not to comply with an OSHA standard, or if an aspect of a standard is not clear to the yard and thus not complied with, it may be fined by OSHA. This is a chance many yards are willing to take.
Opportunity Presented:

The research that follows identifies weaknesses in OSHA’s current punitive policy and argues the case for adopting a number of regulatory reforms. The ultimate purpose of this case study is to identify the regulatory strategy that will improve safety results by minimizing the hazards present at Maine’s numerous boat yards and to serve as a guide to policy moving forward. The characteristics that best promote safety results are unknown as boat yards have had very limited study in the United States or internationally, making them ripe for review. Boat yards have been the subject of OSHA local emphasis programs in Maine due to high incident rates in both 2001 and 2011. This designation subjects the yards to both planned OSHA inspections and the opportunity for yards to participate in cooperative programs (OSHA, 2000; OSHA, 2011). With this data in hand, and information from many of the yards that were subject to these programs, this research will provide needed guidance for decreasing safety hazards. The project will hopefully also decrease the need for another OSHA local emphasis program in another decade.

In order to achieve the goals of this study, I began by conducting semi-structured interviews with regulators and trade officials involved in enforcement and policy-making. The interviews were then followed by formal focus groups with boat yards in two geographic regions of Maine. These methods allowed the researcher to understand the current state of regulatory affairs within Maine’s boat yards and evaluate the perceived needs of these yards for reducing hazards more effectively.

This thesis attempts to answer one primary research question: can a change in regulatory strategy influence the internal self-regulation of boat yards in order to reduce present hazards for
their employees? As risks constantly mount to the safety of employees in the private boat building sector (see Table 1), and OSHA consistently targets such facilities, Maine’s boat yards are under rising pressure to protect their employees from hazards present there. These yards are responding to the call for action by starting or expanding safety programs, building safe and effective facilities, or at the opposite extreme, largely ignoring the call for hazard reductions due to the individual circumstances present at the yard. This project responds to these two polarized responses by recommending that OSHA and Maine’s boat yards build upon their current relationship through cooperative programs agreed to and carried out by both parties.
Review of Relevant Literature:

As the purpose of this study is to understand the regulatory strategy that best promotes hazard reduction at Maine’s numerous boat yards, a number of works by authors that have studied safety efforts over the past three decades help to inform this query. Policy studies on regulatory strategy generally conclude that a more collaborative approach will lead to fewer workplace hazards. Studies at the international level, federal programs, and in the private sector have found that minimizing governmental command and control measures while maximizing collaboration has beneficially impacted the effectiveness of safety programs.

There are few direct studies that show the effects of collaborative measures on the boat building and repair industry since collaborative measures have been nearly nonexistent between boat yards and OSHA. Despite this gap in the research, ideas can be formulated from the literature that discuss different models and regulatory programs that best promote hazard reduction from programs all over the world. In the sections below, OSHA’s regulatory model and the resultant effects on Maine’s boat yards will be discussed. This will include a discussion of the Maine “Top 200” cooperative program, past and current punitive local emphasis programs, and Maine’s SHARP cooperative program as administered by the Maine Department of Labor (MDOL) Safety Works group.
OSHA Command-and-Control:

In the four decades since the OSH Act was signed into law by Congress, workplace deaths and reported occupational injuries have dropped by more than 60 percent under its command-and-control regulatory strategy (OSHA, 2012). However, the nation’s work force continues to face an unacceptable number of work-related deaths, injuries, and illnesses, most of them preventable. Over 4,000 people die on the job each year and more than four million workers suffer serious job related injuries due to unabated hazards (OSHA, 2012). These victims disproportionately include Maine’s boat yards. These sites have a total injury and illness incidence rate of 7.8 cases per 100 full time workers (the national average incidence rate for all private-sector industry is 3.6) and a days away from work, restricted and transferred activity (DART) rate of 4.5 cases per 100 full time workers (the national average incidence rate for all private-sector industry is 1.8) (OSHA, 2011).

Health and safety standards that aim to reduce the number of injuries at Maine’s boat yards are governed by institutions at both the state and federal levels. The federal Department of Labor is empowered under the OSH Act to set ex-ante safety standards in the workplace to reduce hazards and to enforce them through punitive inspections. Workers are formally protected at the state level by state-administered schemes allowing them ex-post compensation for workplace injuries that have already occurred. The OSH Act enabled the creation of OSHA and allows the agency to issue standards governing workplace hazards and to enforce these standards through inspections of the workplace. Inspections may actively deter firms from causing harm to workers through employer penalties or serve as an information source for identifying hazards. In 1993, Gray and Scholz found a 22 percent decline in workplace injuries in the few years
following an OSHA inspection in which penalties were imposed, but also found that this effect
decays over time. Such specific deterrence is important, but the fact that a firm’s attentiveness
fades over time raises concerns about the ultimate effectiveness of this regulatory approach. Such
concern is shared by OSHA. Its own inspectors have reported that alterations made following an
inspection are often temporary fixes rather than systemic long term reforms (Simon, 1997). This
has also been shown to be the case among Maine’s boat yards. An analysis of MDOL statistics,
seen in Table 1, indicates that OSHA’s comprehensive punitive inspection program in 2001 had
an impact for a year or two following the inspection, but that this impact faded almost
immediately after that window of time, and did not even translate into a reduction in injury and
illness incident rates below the national average at any point in the past decade.

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
<th>Number of Injuries</th>
<th>Injury rate per 100 full time workers</th>
<th>Workers Compensation Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>1584</td>
<td>102</td>
<td>6.4</td>
<td>$1,294,871.76</td>
</tr>
<tr>
<td>2002</td>
<td>1557</td>
<td>81</td>
<td>5.2</td>
<td>$581,131.31</td>
</tr>
<tr>
<td>2003</td>
<td>1531</td>
<td>81</td>
<td>5.3</td>
<td>$911,129.34</td>
</tr>
<tr>
<td>2004</td>
<td>1533</td>
<td>150</td>
<td>9.8</td>
<td>$1,289,990.57</td>
</tr>
<tr>
<td>2005</td>
<td>1545</td>
<td>164</td>
<td>10.6</td>
<td>$546,830.69</td>
</tr>
<tr>
<td>2006</td>
<td>1554</td>
<td>135</td>
<td>8.7</td>
<td>$688,190.09</td>
</tr>
<tr>
<td>2007</td>
<td>1555</td>
<td>225</td>
<td>14.5</td>
<td>$1,038,032.38</td>
</tr>
<tr>
<td>2008</td>
<td>1532</td>
<td>191</td>
<td>12.5</td>
<td>$888,121.35</td>
</tr>
<tr>
<td>2009</td>
<td>1100</td>
<td>135</td>
<td>12.3</td>
<td>$224,661.34</td>
</tr>
<tr>
<td>2010</td>
<td>1074</td>
<td>96</td>
<td>8.9</td>
<td>$398,242.32</td>
</tr>
<tr>
<td>2011</td>
<td>1128</td>
<td>127</td>
<td>11.3</td>
<td>$180,766.07</td>
</tr>
</tbody>
</table>

Table 1: Number of injuries and workers compensation costs for Maine boat yards from 2001 to

The bureaucratic structure of agencies such as OSHA has raised concerns about the
ability of a centralized authority to regulate a large, diverse, and far flung constituency. A
specific concern is that an agency, such as OSHA, with authorities that are remote from the day-
to-day operations that they govern will have trouble collecting the information they need to
effectively regulate. This information gap forces the agency in question to enact uniform
command-and-control standards that apply across the board, irrespective of individual
circumstances. It also creates incentives for agency staff to apply these standards in a rigid,
legalistic way (Short, 2012). A complaint of OSHA enforcement policies is that the agency relies
too heavily on punishment to induce compliance and often ignores cooperative enforcement
policies (Shapiro, 1997). Ayres and Braithwaite (1992) argue that the more sanctions can be kept
in the background, the more regulation can be transacted through moral suasion, the more
effective regulation will be. The authors state that,

Going in with punishment as a strategy of first choice is counterproductive in a
number of ways. First, punishment is expensive, persuasion is cheap. Second,
punitive enforcement engenders a game of regulatory cat-and-mouse whereby
firms defy the spirit of the law by exploiting loopholes, and the state writes more
and more specific rules to cover the loopholes. (p.26)

The results, the authors suggest, can lead to, “rule making by accretion that gives no coherence
to the rules as a package, and a barren legalism concentrating on specific, simple, visible
violations to the neglect of underlying systemic problems” (p.26). In fact, this neglectful state of
affairs accurately describes the regulatory strategy of OSHA’s inspection program over the past
decade as can be seen by OSHA’s on-line inspection data for boat builders (NAICS 336612).

Thus, following four decades of mostly punitive command-and-control safety regulation
under OSHA, the past ten years has seen a growing interest in the academic and corporate
community to reform OSHA toward a more collaborative, self-regulatory enforcement approach. The benefits and risks of collaborative governance have been analyzed by many researchers over the years including recent works by John Donahue and Richard Zeckhauser (2006) and Orly Lobel (2006). Donahue and Zeckhauser state that the rationales for collaboration include increased legitimacy, information gathering, increased efficiency, and the inability of government to mobilize the resources required to accomplish some mission. According to these authors, the potential agency costs include diluted control, higher spending, reputational vulnerability, and diminished capacity. This is echoed by Jody Freeman (1997) who offers a normative vision of collaborative governance against which to evaluate proposals for reform, she argues that pursuing collaboration requires efforts to transcend debates about controlling agency discretion and to experiment with nontraditional forms of accountability. Ultimately, participation in a collaborative model is defined as enhancing the quality of decisions by improving the information base of rules and providing important feedback on the rules’ effect in practice. Through collaborative problem solving, broad participation, provisional solutions, the sharing of regulatory responsibility across the public-private divide, and a flexible, engaged agency, Freeman states that an efficient and legitimate regulatory governance can be achieved that will produce high-quality solutions.

Freeman also describes how collaborative governance can lead to increased efficiency and improved allocation of scarce resources by moving away from the weaknesses of the current administrative process where the priority is on rule making, meeting referral targets, and collecting fines in an adversarial fashion. This adversarialism fails to encourage creativity, adaptation, and cooperation in solving regulatory problems, and robs the regulatory process of important feedback concerning how well the rules may or may not be working. Collaboration, on
the other hand, seeks to respond to criticisms about the quality, implementability, and legitimacy of the regulatory enterprise by reorienting toward joint problem solving. Thus, by improving the information base of rules and allowing for feedback through a cooperative process, OSHA may become the transformative agency that Maine’s boat yards need it to be.

*International Cooperative Programs:*

The focus on improving safety regulatory programs has been most pronounced in the advanced economies of Australia, the United Kingdom, Denmark, Norway, and Sweden where safety legislation has been on the books for 25 to 35 years. The 1970s brought widespread legislative change in these countries. They moved away from the traditional command-and-control model, which imposed detailed obligations on firms enforced by a state inspectorate, to a more self-regulatory regime, using less direct means to achieve broad social goals (Gunningham, 1998). This has been the case as the countries have recognized a limit to the extent that it is possible to add more and more specific prescriptions without such action resulting in counter-productive regulatory overload. Moreover, countries have come to understand that there is a crisis in the capacity of traditional forms of direct regulation to grapple with, and resolve, social problems of increasing difficulty and sophistication. Traditional regulation is simply seen as unresponsive to the demands of the enterprise, unable to generate sufficient knowledge to function efficiently, and unable to control the adverse safety consequences of commercial organizations. Thus policy makers seek smarter regulation rather than less regulation (Gunningham, 1998).
In a comparison of enforcement strategies found in Australia, the U.K., and the countries of Scandinavia, Kelman (1981) found that U.S. history, and the resultant hostility that business commonly shows toward any state intrusion into its affairs, has led to a punitive, deterrence-oriented, litigious, and confrontationist approach. He states that countries and cultures where such antagonism does not exist to the same degree do not regularly employ such tactics and thus have better results. As an example, in the U.S., safety inspectors who find violations fine employers immediately for non-compliance. In Sweden, penalties are assessed only after persistent failure to correct a violation. American inspections are designed as formal searches for problems at a facility, whereas Swedish inspections are designed more as informal missions to provide advice and secure professional, relaxed relationships with the facility. Given this relationship, employer leaders in Sweden more regularly accept government regulations and employer organizations help seek compliance by member firms. Thus, Sweden’s cooperative regulatory strategy provides valuable insight into what an American system could look like in the future.

This resonates with Gunningham’s (1998) exploration of the legal mechanisms for developing innovative, efficient, and effective regulatory strategies to make organizations more responsive to safety concerns. He writes that safety management systems, developed by businesses, the government, and workers to manage safety compliance, have the greatest potential to engage with, and offer solutions to, a number of the major problems confronting safety policy internationally. Acknowledging the increasing limitations of direct regulation, Gunningham argues that the law has the potential to stimulate modes of self-organization within firms in such a way as to make them self-reflective and to encourage internal self-critical reflection about their safety performance so as to go beyond compliance with the minimum legal
Standards. These system-based approaches can deliver very substantial benefits in terms of improved safety, enhanced profitability, and more efficient use of regulatory resources.

**Domestic Cooperative Programs:**

Safety management systems are not new, nor are they untested at private firms. Most large companies whose safety and health achievements have been recognized through government or industry awards look to their use of safety management systems, also known as injury and illness prevention programs, as their key to success. Convinced of the value, effectiveness, and feasibility of these collaborative programs, many countries around the world now also require employers to implement and maintain them. These countries include Canada, Australia, the 27 European Union member states, Norway, Hong Kong, Japan and Korea (OSHA, 2012).

Injury and illness prevention programs are not new to the safety community in the United States either. OSHA itself has proposed such programs for a number of years and has defined its elements in a 1989 guidance document and a 2012 white paper as, "a proactive process to help employers find and fix workplace hazards before workers are hurt" (OSHA, 2012). In fact, the Agency acknowledges that many workplaces have already adopted such approaches, and has even promoted the adoption of such plans as part of its strategic partnerships with ship builders in the State of Virginia. OSHA states that, “Not only do these employers experience dramatic decreases in workplace injuries, but they often report a transformed workplace culture that can lead to higher productivity and quality, reduced turnover, reduced costs, and greater employee
satisfaction" (OSHA, 2012). OSHA believes that injury and illness prevention programs are based on proven managerial concepts that have already been widely used in industry to bring about improvements in quality control and environmental performance such as Total Quality Management and other Lean Manufacturing techniques.

According to OSHA, the key elements common to successful injury and illness prevention programs are:

A. Management leadership
B. Worker participation
C. Hazard identification and assessment
D. Hazard prevention and control
E. Education and training
F. Program evaluation and improvement with procedures for investigating incidents and communicating results

Each element is important in ensuring the success of the overall program, and all of the elements are interrelated and interdependent. As every business is different and one size does not fit all, employers who implement injury and illness prevention programs will have to adapt these elements to meet the needs of their organizations. This would certainly be the case with Maine’s boat yards.

Numerous studies have examined the effectiveness of injury and illness prevention programs. OSHA says the research demonstrates that such programs are effective in:

- Transforming workplace culture
Leading to reductions in injuries, illnesses and fatalities

Lowering workers' compensation and other costs

In a 2008 RAND Corporation study lead by Hangsheng Liu, the researchers examined the effectiveness of a Pennsylvania voluntary program that provides a 5 percent workers' compensation premium discount to employers that establish joint labor-management safety committees. Once created, these committees are then responsible for implementing several injury and illness prevention program elements, including hazard identification, workplace inspection, and adaptive management. The RAND researchers found that, among program participants, there was a strong association between improved injury and illness experience and the level of compliance with the program requirements (Mendeloff, 2008).

The United States Department of Defense and United States Department of Energy (DOE) have both adopted injury and illness protection plans for protecting workers employed at their military installations and nuclear weapons factories, including DOE’s high hazard establishments. Specifically, DOE’s program, entitled Integrated Safety Management, includes an expectation that the sites will “embrace a strong safety culture where safe performance of work and involvement of workers in all aspects of work performance are core values that are deeply, strongly, and consistently held by managers and workers.” According to DOE, the aspects of this safety culture that impact safety performance are leadership, employee/worker involvement and organizational learning (OSHA, 2012).
At the end of 2012, thirty-four states currently require or encourage employers to implement injury and illness prevention programs. Of these states, 15\textsuperscript{1} of them require a written injury and illness prevention program for certain industries, mostly as a requirement for worker's compensation insurance coverage. Many of those states, like Pennsylvania, offer discounts on workers' compensation premium rates of up to 5 percent for qualifying organizations that adopt and implement written safety and health programs. Some states, like California and Washington, require most workplaces to have a written plan regardless of workers' compensation coverage, and other states only require them for “high hazard” industries like those conducting a lot of electrical or hazardous chemical handling work. Other states only require the written plan for employers with worker's compensation experience modification rates above a threshold that indicates a high-hazard workplace: a standard that could be emulated by OSHA given the Maine boat yard incidence rates. In the states with regulatory requirements for formal safety plans, the rules also direct the regulatory agency or workers' compensation insurer to provide considerable compliance assistance to each employer to help them create and implement the plan (OSHA, 2012).

\textit{OSHA and its Effect on Maine:}

The cooperative regulatory model is not a new concept to government, OSHA, or even to Maine. Implemented as a pilot initiative in the State of Maine, OSHA’s Maine “Top 200” program serves as one example of the cooperative partnership approach. Begun in 1993, OSHA invited the 200 largest workplaces in Maine with the highest lost time due to injury claims to

---

\textsuperscript{1}These states include California, Colorado, Hawaii, Louisiana, Michigan, Minnesota, Mississippi, Montana, North Carolina, Nevada, New Hampshire, New York, Oregon, Utah and Washington.
participate in a cooperative program whereby they would be given assistance in developing effective safety programs and would have low priority for inspection. All but two of the firms chose to participate in the Maine “Top 200” program and each showed great results as employers eliminated hazards at a rate 14 times greater than OSHA had in the past eight years. Three out of five employers experienced a reduction in lost work days (Lobel, 2005). In addition, the resulting partnership was reported to have identified and abated upwards of 100,000 hazards without a fine being employed (Lobel, 2006).

The Maine “Top 200” program results were achieved as the focus of enforcement moved away from measuring an inspector’s effectiveness based on the number of violations found during an inspection toward solving genuine safety problems in the workplace (Watson, 1998). OSHA inspectors participating in the program also often declined to issue citations when they did not believe that a useful purpose would be served by the fine. In lieu of the citation, OSHA provided education to the facilities and encouraged the sharing of information among firms about how to deal with hazards. If one firm came upon a new way to handle a problem, OSHA encouraged it to share its knowledge with other firms that might benefit (Mendeloff, 1996). In addition to the changes within OSHA, substantial progress was made at the facility level as well. Management commitment to safety increased, worker participation was significant, and comprehensive safety and health plans were created that included abatement plans for hazards that could not be immediately corrected (Mendeloff, 1996). Most important to this case study is the program finding that the biggest percentage drop in injuries occurred amongst the 27 firms with less than 200 employees. Small businesses were not specifically analyzed at the time, yet the “Top 200” program provides some insight as to how OSHA can be effective at regulating small firms, such as the boat yards. As OSHA ultimately ended plans to nationalize the Maine
“Top 200” program due to legal challenges and changes in governmental leadership, the State of Maine has stepped in to work with volunteering firms with work forces under 250 employees through a program called Safety Works. Although there is little published data available on how Safety Works is performing toward reducing hazards at these firms, data obtained from fiscal year 2008 to 2012 indicates that the program’s six consultants visit over 500 firms per year and help abate over 3,000 hazards at firms across the state.

The Maine’s Safety Works program is an outreach program of the Maine Department of Labor designed to reduce job-related injuries and illnesses through finding and abating hazards. Safety Works is a voluntary program; it is not a program of OSHA and cannot issue citations or fines like its federal counterpart. The agency’s services are available by request and are free of charge for firms that wish to utilize the agency to train their workers, audit their operations to find compliance deficiencies, or improve their safety management programs that are required by OSHA. In addition to this work, Safety Works has been delegated authority by OSHA to determine whether high performing firms can gain entrance into an OSHA voluntary program called SHARP that benefits the firm by providing for a two year exemption status from OSHA inspections. SHARP status also allows the firm to fly a physical flag indicating to the world that it is a safe company to work for and thus is attractive to future employees and potential customers. Through these duties, Safety Works provides a very valuable service to firms that are willing to voluntarily open their doors to the government. Given that enforcement is not part of their mission statement, Safety Works provides a service for firms to efficiently and effectively manage their safety programs without having to worry about fines for initial noncompliance. Results for the program, taken from a 2010 Safety Works comparative report comparing industry as a whole to ship and boat builders, which is based on OSHA’s Safety and Health Program
Assessment Worksheet (OSHA’s Form 33), indicate that SHARP boat yards have higher safety and health program assessment scores in every facet of their safety program than do that of non-SHARP organizations. Safety Works’ existence is also valuable to this case study as it represents an alternative regulatory strategy that OSHA can look to for guidance in its attempt to decrease hazards found at Maine’s boat yards; a strategy that has been mirrored by many countries in the international community as these entities seek to build relationships and improve outcomes.

Maine’s boat yards have been represented by an industry partner that has been advocating for such cooperative efforts since 1966. The Maine Marine Trades Association (MMTA) has provided the yards with information from OSHA, annual forums where a safety topic is discussed, and opportunities for yards to hear from safety professionals on how they can improve their compliance programs. Although this is the case, MMTA has never formally worked with OSHA to provide their members with an expectation of how OSHA will interact with the yards. This association is staffed by two individuals who work to provide programs as the yards see fit, and incorporate safety as part of their efforts during most training events throughout the State of Maine. Yet a strategic partnership with OSHA has not been developed between the parties as has been the case in Virginia between OSHA and the Virginia Ship Repair Association. Unlike Maine, Virginia’s yards have worked with OSHA for six years to increase health and safety awareness and prevent injuries and illnesses through hazard reduction. The data from this collaboration indicates that their cooperative partnership has met these goals.
Summary:

This literature review has allowed for a greater understanding of the factors that drive large industries, such as shipyards with hundreds to thousands of employees, to reduce hazards at work every day. However, the literature does not provide great detail into how a small boat yard, such as those in Maine, may effectively work with OSHA’s regulatory structure to reduce hazards. Ultimately, multiple regulatory programs may be utilized to improve the safety effort at Maine’s boat yards and reduce hazards. The present case study will employ the input of local stakeholders to gain a clearer perspective of what approach is deemed necessary and acceptable to most effectively induce this effect.
Methods

The central goal in this study is to determine whether a change in OSHA’s punitive regulatory strategy can influence the internal self-regulation of boat yards in order to reduce present hazards for their employees. I chose to use qualitative case study research methods, primarily interviews and focus groups. I am focusing on Maine as a case study to explore the inter-dependent relationship between boat yard safety programs and the regulatory agencies that oversee them. These methods will allow for a broad understanding of the impact of regulatory policies and ultimately will provide recommendations for change. The case study method is being employed in this study because quantitative measures have not been developed for the particular research questions being examined. Moreover, case studies have been recommended by many researchers in this field to better understand the process by which workplace regulations affect, and sometimes improve, outcomes (Levine, 2012; Mendeloff, 2008; Rees, 1985). Use of the case study method for this research is appropriate as the study examines the past and current regulatory programs that are in place to reduce hazards at Maine’s boat yards.

Data Collection:

Interviews

Data was initially obtained from purposefully selected interviews with federal and state safety regulators and high level employees of a workers compensation firm and trade organization that deal directly with Maine’s boat yards. These talks included a high level OSHA employee who was directly involved with the Maine “Top 200” program and OSHA’s current punitive inspection program, a compliance assistance specialist who works with OSHA and Maine’s Safety Works program and is familiar with Maine’s boat building industry and SHARP
companies, a high level manager at the Maine Marine Trades Association, and a high level manager in the Safety and Loss Control department for the workers compensation firm MEMIC. The questions asked of the interviewees allowed for a greater understanding of the effectiveness of OSHA’s regulatory strategies since their work began with the boat yards. I was specifically interested in the Maine “Top 200” experimental partnership program, OSHA’s Local Emphasis Programs of 2000 and 2011, and its cooperative SHARP program.

*Focus Groups*

After conducting the interviews, four focus group sessions were scheduled with groups of Maine’s boat yards and held in Biddeford, Freeport, Rockland, and Rockport, Maine from October 2011 through February 2012. Twenty six individuals participated in the focus groups. The purpose of the focus groups was to develop a more in-depth understanding of OSHA’s interaction with the yards, to determine areas of OSHA’s strategy that need improvement, and to reveal best practices that could lead to such improvement. The focus group participants provided responses from individuals who have both been inspected by OSHA and worked collaboratively with OSHA. The focus groups also included comments from individuals who have worked with other governmental agencies at multiple levels of government. These groups shed light on the possible incentives the yards have for dealing with OSHA and the norms the current punitive process induces.

The focus group participants were selected after a broad invitation was sent to boat yards that are members of the Maine Marine Trades Association in two geographical regions of Maine. Five to eight different participants were present at each gathering, and, after a brief description of the project by the researcher, comments were documented using descriptive and reflective notes.
Although the numbers of participants did vary at each focus group, the questions presented always remained constant to ensure validity and consistency of the data. The focus group locations for this study were chosen purposefully as they represent areas where the individual boat yards have created cooperative groups to discuss safety concerns amongst themselves in a private, non-threatening atmosphere. Areas without these cooperative safety groups were not chosen as part of this case study as attempts at holding sessions in these areas did not lead to participation by more than two boat yards. The chosen locations were convenient for participants and the sessions were held in a private room where everyone was comfortable and could easily engage in conversation. This atmosphere allowed the individuals to talk candidly about their experiences and relationship with OSHA.

I moderated each focus group. This involved posing the questions and serving as note-taker. A formal interview protocol was utilized for the focus groups, as prescribed by Northeastern University’s Institutional Review Board (IRB). The focus group questions were developed from the literature review to ensure that all the study objectives were addressed and covered. The questions were not provided to the respondents prior to the scheduled focus group. However, the respondents were provided with a general description of the study’s topic through the use of a “request to participate in research letter” that was also approved by the IRB.

The purpose of the focus groups was to explore the relationship between OSHA and Maine’s boat yards. The focus group questions were developed to answer each of the five main research questions. These five questions appear below and are subsequently followed up by the focus group questions asked of the respondents that determined answers to these questions.
Research Question 1: Is there enough cooperation between boat yards and OSHA?

Focus group question 1: In your view, should OSHA be more responsive to the specific hazards found in boat yards?

Focus group question 2: In your view, is the OSHA punitive enforcement strategy decreasing safety hazards and motivating safe behavior at your yard? Is this strategy effective?

Focus group question 3: In your view, what are some of the potential positive effects of OSHA moving away from its punitive approach and being more collaboratively involved in your operations?

Focus group question 4: In your view, what are some of the potential negative effects of OSHA moving away from its punitive approach and being more collaboratively involved in your operations?

Research Question 2: Is there a positive relationship between OSHA and the yards?

Focus group question 2: In your view, is the OSHA punitive enforcement strategy decreasing safety hazards and motivating safe behavior at your yard? Is this strategy effective?

Research Question 3: Does OSHA require safety management plans to document efforts?

Focus group question 6: How would you create a team of personnel and plan to effectively address the safety concerns at your boat yard?

Research Question 4: Does OSHA inspect frequently enough?
Focus group question 5: Is your yard open to partnering with OSHA to comply with its many standards or does it shy away from partnering with public regulatory agencies based on the current command-and-control regulatory strategy?

Research Question 5: Do OSHA inspections have proper focus and look for proper measures of safety?

Focus group question 2: In your view, is the OSHA punitive enforcement strategy decreasing safety hazards and motivating safe behavior at your yard? Is this strategy effective?

The structured yet comfortable surroundings that the focus groups were held in allowed me to feel confident that all of the participants were able to answer the focus group questions as fully as possible. The individuals answered each of the focus group questions with either a detailed answer or an answer of yes or no.

Data Analysis:

Continuous analysis of the interview and focus group participants’ answers as data collection proceeded made it possible to track the respondents’ ideas while maintaining confidentiality in the analysis and allowing larger themes to surface. During data analysis, the researcher followed the general methods of Creswell (2009). The field notes were categorically themed in reflective memos, reviewed repeatedly, and organized based on the major ideas that surfaced. In order to determine these themes, the researcher focused on the individual research questions and evaluated the answers provided by the interviewees and focus group members to determine if a
recommendation based on the findings was warranted. The responses to each research question, found in Appendix B, lead to descriptive coding using Microsoft Word to describe relevant features of the answers and was followed by analytic coding using Microsoft Excel.

I initially went through the focus group responses line-by-line to focus on the content of the text in each line and highlight key terms. This effort produced a large number of descriptive codes that had to be sorted to allow me to determine broad analytic themes for use in this study. I came to the themes by using a hierarchy to identify code groups that could be lumped together (see Table 2). This analysis was useful as it allowed me to compare responses between the focus groups and individuals where there were subtle variations in answers and also allowed me to effectively determine the main themes that arose from the data.
Table 2. Themes Identified from Focus Group Coding.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Key Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspections Counterproductive</td>
<td>Punitive</td>
</tr>
<tr>
<td></td>
<td>Police</td>
</tr>
<tr>
<td></td>
<td>Enforcement</td>
</tr>
<tr>
<td>OSHA’s role must change</td>
<td>Guidance</td>
</tr>
<tr>
<td></td>
<td>Inspections</td>
</tr>
<tr>
<td></td>
<td>Culture</td>
</tr>
<tr>
<td>Flexibility needed</td>
<td>Support</td>
</tr>
<tr>
<td></td>
<td>Education</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
</tr>
<tr>
<td>Cooperation wanted</td>
<td>Help</td>
</tr>
<tr>
<td></td>
<td>Awareness</td>
</tr>
<tr>
<td></td>
<td>Partnership</td>
</tr>
<tr>
<td></td>
<td>Collaboration</td>
</tr>
<tr>
<td></td>
<td>Acknowledge</td>
</tr>
</tbody>
</table>

Once the themes were determined, I re-analyzed the data from the perspective of the individual interviews and focus groups. This allowed me to triangulate the individual sources of data to build a coherent justification for the themes and increase validity of the findings. Ultimately, the data collected by this study and the resultant themes suggested recommendations that diverged from the regulatory scheme that is the current norm utilized by OSHA.
Limitations:

The limitations present in this research study revolve around the voluntary nature of the study and the time restrictions of each respondent. The focus groups allowed for as much participation as possible, yet it can be expected that not all pertinent information was provided by each individual due to time constraints, the group nature of the event, and the potential for apprehension amongst the group members due to personal concerns that I was not aware of. In order to allow for as much participation as possible and to capture as much detail as possible, every attempt was made to keep the focus groups to five or six individuals. This also means that there was a limited number of perspectives the study could analyze. As the focus group participants were chosen by the researcher based on their involvement with the safety program at their boat yard, these individuals could also potentially represent ideas that the individual boat yard would not fully endorse. These limited perspectives may not fully represent the perspectives of executive leadership at the yards, yet a verbal survey of job descriptions and years worked at their respective yard by individuals during the focus groups indicated a strong understanding among the groups of how the yards are managed and how OSHA is actually perceived by yard personnel.

On a personal level, I attempted my best to leave my own bias at the door during the focus groups and other research endeavors. As a safety professional with a client list that has included boat yards in the past, it would have been relatively simple to interject my own perspective into the conversation. Instead I allowed the focus groups to provide their thoughts in an open and unimpeded manner. In addition, at the end of the interviews, I summed up the conversation to determine whether my preliminary interpretation of the data was adequate. I also allowed time for examination of conflicting ideas to gain clarity in the variety of opinions
expressed. These steps increased the credibility and dependability of this study’s findings. With this context in hand, the research findings seem to be internally strong and transferable to the larger setting of all Maine boat yards.

Risks to the individual participants have also been considered throughout the study. Initial plans for the focus groups were reviewed through the Northeastern University Institutional Review Board. The focus groups themselves were carried out in controlled environments. Each participant provided their individual consent to be interviewed based on the reading of an unsigned consent form that I verbally provided to the groups.
Results:

The central research question that drives this case study revolves around whether a change in OSHA’s punitive regulatory strategy can influence the internal self-regulation of boat yards in order to reduce the presence of hazards for their employees. The data extrapolated from the interviews and focus groups related to the research question has been organized based on coding to best describe each of the distinctive, repeated themes in turn and to refer to examples from the data to help characterize the theme (King & Horrocks, 2010). The major themes that emerged include 1) that OSHA’s punitive regulatory strategy is counterproductive, 2) that all parties ultimately want a safe workplace and OSHA should play a role in this effort, 3) that more flexibility is needed, and 4) that there is not enough cooperation between the boat yards and OSHA.

OSHA’s punitive regulatory strategy is counterproductive.

Boat yards in Maine were seen by all but one of the compliance experts interviewed as in need of an “honest safety broker” to help them along the path to sustainable safety results. Tangential penalties by OSHA were not seen as an effective or efficient means of incentivizing yards to increase their safety efforts, but merely as a secondary driver given that the yards were often fined for “laundry list” items that were within the confines of the OSH Act’s specific requirements. These items did not take into account greater systemic and behavioral problems at the yards that could result in serious illnesses or injuries and thus were often seen as ineffective.

As part of these interviews, each individual mentioned the “polarization” that accompanies punitive programs and OSHA’s compliance program was seen by all to be no
different in this respect. OSHA leadership viewed its punitive program as necessary to ensure accountability to its standards, and necessary to keep employees safe. However, individuals with MEMIC and Safety Works and those who worked within the agency’s compliance assistance team asserted that Maine’s boat yards need to partner with the agency if the yards are ever going to achieve the safety results desired by OSHA.

OSHA’s compliance effort over the past decade has largely been driven by politics, and this was specifically seen by the interviewees as disruptive to the local emphasis on reducing hazards in Maine’s boat yards. Over time, the interviewees each hoped to see movement toward more collaborative programs between OSHA and all such yards. Yet, according to one of OSHA’s employees, the current political climate between the parties did not seem agreeable to such efforts as attempts at cooperation at the federal level have been thwarted by manufacturing groups such as the US Chamber of Commerce and the Manufacturers Association of Maine. The Maine “Top 200” Program was specifically seen as a laudable effort by OSHA to cooperate with the larger firms in Maine, but could not be sustained as OSHA’s focus continues to be on enforcement through finding fault, leading manufacturers of all sizes to be wary of allowing any agency to inspect its facilities.

All but two of the focus group members felt that OSHA should be more responsive to the specific hazards found in boat yards. One member mentioned that the specificity of the regulations often seems to be an issue with their small yard. There are procedures and systems that may need to be in place for large companies where everyone does not see each other every day, such as lock out tag out, but in this yard, where there is only one person that would ever touch a lockout system, such systems are redundant. It’s an administrative burden for this yard, rather than an effective tool. Another participant stated that they held phone conversations with
an OSHA inspector during a two week period in which they discussed whether they could take one step toward compliance or another and the only answer they would get with each call was that they could not do what they proposed. They did the research, read their guide book, and figured each time that they were falling into the proper parameters that they wanted them to fall in to, and all OSHA had for an answer for them was a consistent “no” with no guidance.

All but three of the focus group participants felt that OSHA’s punitive enforcement strategy is not decreasing safety hazards or motivating safe behavior at their yards. Many of the participants had never had an OSHA inspection and thus were not sure how to leverage OSHA’s existence with their goals to decrease safety incidents in the yards. One participant from a resource constrained yard stated that he wished OSHA would come through the door right now because he did not want to see anyone get hurt and they had been spending the past four years fighting with management over the proper amount of resources to spend on safety compliance. She acknowledged that their safety culture was not good, that it was a never ending battle, and that OSHA was not helping. Another participant stated that his safety culture was strong, yet frustration with OSHA was ever present as the yard knew that a visit from OSHA probably meant a fine of some amount no matter what efforts they took. A third participant mentioned that his yard did not get anything from OSHA,

OSHA does not come in and say ‘we’ve noticed a problem with say x,y, and z; we find that most people are hurt by these types of problems and so we are going to help you with them.’ OSHA does not feel like a public servant. They just set up inspections so you can be trapped.
OSHA’s surprise inspections are not welcome by any of the yards as nothing positive or lasting is seen to come from the inspections. The agency is identified by many of the boat yards as a police force that is not willing to help the yards to any extent, and some of the yards felt that the agency is actually out to catch the sites behaving in an unsafe manner. This distrust, widely identified by the focus groups, is exacerbated by OSHA’s lack of consistent communication with the boat yards as well as the agency’s seeming inability to provide the yards with timely guidance on their questions.

All parties ultimately want a safe workplace and OSHA should play a role in this effort.

All parties ultimately want a safe workplace and felt that OSHA should play a role in this effort. Everyone that participated in this research project indicated their desire to help their respective customers, whether the industry as a whole or a small paint shop, reduce hazards. Many of the yards wish OSHA would work with them instead of against them because a lot of yards are now willing to do it, the owners are willing to do it, and the customers understand that there is extra time and cost involved if they want a product that is built safely. What is needed is a regulatory body that listens and takes input from the yards. OSHA would then be able to take more information from the people doing the work and partner with the yards to create custom management programs that work for all of the parties involved. These custom programs may even lead to a more efficient system as the yards will spend money on their greatest risks and the preventative measures will keep people from being injured, and allowing them to remain on the job.
OSHA was seen as key to this effort. Almost all participants indicated that there is a role for OSHA in managing safety programs throughout the yards because OSHA was seen as a standardizing entity in the industry. Although this was the case, the boat yards spoke of the need for better guidance from the agency as their strategy must move beyond standard setting to providing the yards with an effective means of implementation. Infrequent program inspections are not effective. Given that OSHA has only visited many of the yards once over the past decade, the yards felt this was not a useful use of resources and more frequent, properly focused, inspections are needed. In addition, while punitive enforcement policy was seen by all parties as being needed as a check on bad actors, the fact that OSHA inspections are infrequent at best, and seemingly motivated by the desire to find fault, was seen to decrease their effectiveness at all yards.

*OSHA’s regulatory strategy must be more flexible.*

OSHA’s current focus on punitive inspections that do not provide substantial guidance to the boat yards is seen by the boat yards as counterproductive in today’s business environment. To the contrary, flexible program evaluation was seen to be very important to the focus groups. Flexibility was seen as a key to open doors to increased communication and education about the needs of both parties as well as provide positive motivation to improve safety programs. The yards certainly do not want a punitive OSHA visiting their sites. But almost all of the yards want more attention if the focus of the visits is to help the yards reduce hazards in such a way that is amenable to the yards. All of the boat yards felt that effective program management could be
better achieved by OSHA providing more one-on-one collaborative evaluation and instruction with opportunities for helpful follow-up.

Focus group participants felt OSHA should be doing communications on a regular basis to prevent misinformation and to provide updates in programs. When one member was last inspected by OSHA they were cited for a guard they had placed on a drill press that they were told was fine by Safety Works, yet when OSHA came in, some time after the Safety Works visit, they told the yard that the guidance had changed and the guard they had employed was no longer adequate. This situation should never happen, or should at least not lead to fines for good faith efforts to provide a safe environment.

A couple of participants expressed concern that a non-punitive approach that required employers to ‘find and fix’ all hazards could mean that yards would be responsible for abating all toxic, ergonomic, and other safety hazards that were found by the agency regardless of cost. They also raised the possibility that OSHA would treat large and small yards alike under a non-punitive approach and thus disregard the substantial difference in human and economic resources that the yards may possess. With a flexible regulatory strategy, OSHA can avert these issues and build trust amongst all the yards.

*There is not enough cooperation between the boat yards and OSHA.*

Many of Maine’s boat yards are open to partnering with OSHA to help them improve their safety programs if the partnership commenced in a non-punitive fashion. Many of the boat yards indicated that there are currently no formal cooperative programs in place between the
yards and OSHA. This was seen as problematic given that they had worked hand in hand with Safety Works to improve their yards and this relationship had served to reduce hazards. Yards also believe that increasing communication with OSHA through more random non-punitive inspections and increased education will improve their safety program, and thus are open to allowing OSHA through their doors more frequently. The boat yards believe they have made great progress in their efforts to reduce hazards at their yards, and want to be acknowledged for these efforts whether through formal recognition programs or informal recognition as a best practice facility.

All of the focus group members spoke to the potential positive effects of OSHA moving away from its punitive approach to a more collaborative program. The three yards that were actively working with OSHA were very vocal on this topic. One stated that they had gone from one of the worst yards around to the point where Safety Works will actually send people to the yard to look at what they have done. If the yards approach safety collaboratively, safety compliance will be easier, and when it gets busy at the yards, things will not get as bad as they used to get as all employees have more awareness.

Every member of the focus groups was open to partnering with OSHA if the partnership commences in a non-punitive fashion. Yards believe that increasing communication with OSHA through random but non-punitive inspections and increased education will improve their safety program. The positive effects include having a third party look at the yards for hazard recognition and getting away from the scare tactics in general. It was generally acknowledged that it’s helpful to have individuals recognize and work through your safety issues as a team. Another potentially productive process would be for the yard to systematically find and abate hazards, and then have the yard get a visit to see how they have performed. Such a system would
help foster the behaviors they are looking to sustain. Then, once both parties feel that they are in a good spot, they can schedule visits to see how things are going. Random inspections of a nonpunitive nature would even be viewed as acceptable at this point as long as OSHA documentation of the nonpunitive nature of the visit was presented up front to the site so that the yards can disclose all aspects of their site without fear of a fine.

The need for a change in approach has been stated by every member of the focus groups as well as confirmed by conversations with workers compensation and state safety personnel during the interviews. Every person must understand that they are responsible for safety at their yard, but also know that they have the support of all levels of government to help them in their effort to not get hurt.
Recommendations:

The results of this study indicate that OSHA must change its regulatory strategy to effectively eliminate hazards at Maine’s many boat yards. Four specific recommendations arise from this study and include requiring boat yards to create site specific injury and illness prevention programs, more frequent inspections of yards, OSHA adoption of a regulatory strategy that is less rule-book oriented and more flexible, and the creation of a more positive relationship between OSHA and the boat yards through increased collaboration. These recommendations are severable and do not need to be implemented sequentially to have an impact on hazard reduction in the yards.

*OSHA should require yards to create site specific injury and illness prevention programs to reduce hazards.*

According to the literature review and results from the focus groups, best management practices indicate that a written organization-wide program would reduce hazards at the boat yards. OSHA should specifically develop compliance assistance materials to help the yards develop injury and illness prevention programs. In addition, OSHA inspections should also make themselves available to sit down with each of the yards each year for guidance and assessments so as to ensure that the plans are living, actionable documents. Based on this study, Maine’s boat yards would be a willing partner in OSHA’s endeavor to comprehensively implement injury and illness prevention programs. Participants indicated a strong preference toward more involvement by the Agency as long as initial steps were non-punitive and undeniably beneficial to the yards.
In speaking with the focus groups, a handful of yards have already implemented such a safety management program, would be willing to share outlines of their plans with other yards, and would also be willing to discuss their efforts with other yards in person. One such plan that was shared with me after the focus groups were completed was seen to mirror OSHA’s suggested scope by including management leadership, worker participation, hazard identification and assessment, hazard prevention and control, education and training, and program evaluation and improvement with procedures for investigating incidents and communicating results as basic elements of the plan. As I researched the plan and its implementation more deeply, the program had resulted in a boat yard that realized no injuries for one year after its implementation. Further, as a result of its efforts, the yard earned a special designation with OSHA as a Safety and Health Achievement Recognition Program (SHARP) facility. This designation was one of only three handed out to boat yards in the State of Maine over the past decade.

Three specific elements are seen to be very important to include with an injury and illness prevention program so as to ensure effective engagement at the boat yards. These include:

- Top management commitment and engagement to compliance and beyond compliance efforts. Without a clear commitment by top management, accompanied by involvement from other site leadership, the yards can lose focus and not deliver on the plan. Management engagement should be assured by requiring management to annually sign off on the program.

- Safety committees and coaching. Worker-based safety committees are a valuable tool for increasing employee engagement, and serve as a way for all staff to be coached on safety topics and work together toward facility safety goals.
Continuous improvement. Making a program sustainable is much more difficult than initiating its development. Continuous improvement forces employer involvement, as the plan is not allowed to sit unused on a shelf. This requires continual coaching of staff and continuous review of the plan.

Although injury and illness prevention programs have proven effective, some focus group participants were skeptical about the enforcement possibilities that a new management program would trigger. At a minimum, this approach would subject employers to second guessing by an OSHA inspector as to whether they had satisfied the elements of a program as spelled out by OSHA. At a maximum, this could mean that employers would be subject to double dipping where OSHA would issue two citations for one hazard; one for the hazard and one for the faulty safety and health program that failed to flag it. There is also the possibility that OSHA’s mantra of requiring employers under these programs to ‘find and fix’ all hazards would mean that employers would be responsible for finding and fixing all toxic, thermal, or ergonomic related hazards. These concerns are certainly valid, and OSHA should make it clear to all yards that the current OSHA enforcement standard will apply to the yards only when risks are not abated in a reasonable time frame of 90 to 120 days.

The focus group participants also mentioned the need for OSHA to approach its regulatory programs in different ways for different industries. The participants noted that what is applicable to the marina sector, for example, may have little in common with the needs of Maine’s construction yards. Instead of focusing on the most common or most serious risks across all industries, OSHA should allow the yards to focus on mitigating the greatest risks specific to their industry and workplace. One size will certainly not fit all for an injury and illness prevention program. OSHA should allow management at the yards to determine the most
effective and efficient path forward for each company and not try to write specific rules that will defeat the purpose of the individual plans.

The last major concern raised by the focus groups included consideration of the varying needs of different-sized companies in regard to implementing its regulatory programs. While there is a wide diversity of firms, often it is the larger, high-risk-sector companies that are best prepared and have the most sophisticated risk management systems already in place. It is frequently the smaller institutions that require the most assistance. An injury and illness prevention program will need to be able to address the needs of both types of firms. OSHA must be able to outline broad requirements so that small businesses such as Maine’s boat yards will be able to clearly understand what is and what is not required. Most of Maine’s boat yards do not have seasoned safety and health professionals on staff to provide information to the yard on what is required under the program or what the yard will need to do to be compliant. The importance of flexibility is seen to be vital so that it can readily be configured to apply to both small and large employers. OSHA could facilitate this by allowing Maine’s boat yards to focus on hazards specific to their workplace. In addition, the opportunity cost of time spent developing a program is very important for OSHA to understand. Costs associated with the program, including time for employee training, increased future orientation training, internal inspections, committee meetings, and documentation will not be trivial to the small boat yards and OSHA cannot ignore them. OSHA can stem these concerns if it adopts a program that is based on the safety management programs that are working at other Maine boat yards as well as the advice of Safety Works who has worked with these yards extensively to help create the programs.

For many of Maine’s boat yards, establishing an injury and illness prevention program would initially be daunting. Any program based on formal structures can be difficult to establish in a
small organization because of tight budgets and other resource constrictions. Simple, low-cost approaches have been shown to be effective for other small businesses, such as reproducible templates and forms based on the requirements of the OSHA standard. Injury and illness prevention programs lend themselves to such low-cost approaches because they are highly flexible; the core elements can be implemented at a basic level suitable for the smallest business.

*OSHA should inspect the yards more frequently and recommend work with Safety Works through targeted communications that are not linked to an inspection program.*

The focus group participants indicated that more frequent inspections of the boat yards would be acceptable if they were preceded by non-punitive audits by either OSHA or Maine’s Safety Works program. The non-punitive audits are important to this recommendation as these audits would provide to the yards would allow the sites to feel prepared for a more formal inspection. As one focus group participant stated:

> I believe the process should be systematic where once I finish the Safety Works recommendations I get a return visit to see where I am again. This would help foster the behaviors I am looking to sustain. Then, once both parties feel that they are in a good spot, they schedule visits to see how things are going. Random inspections of a non-punitive nature would be okay at this point as long as documentation of the non-punitive nature was presented up front to the site.
Tri-annual inspections would provide a consistent regulatory atmosphere for the boat yards. This frequency would promote greater management accountability to hazard reduction within the yards and allow OSHA to work with the yards on a more regular basis. While tri-annual inspections should be the norm for Maine’s boat yards, more frequent inspections should be expected by yards with injury rates consistently above the industry average. These sites must be accountable for their lack of safety programming and those yards that invest in hazard reduction should reap the award of fewer inspections by OSHA. Given that some yards would certainly fall into this category early on in any partnership between OSHA and the boat yards, these yards would be required to work with Maine’s Safety Works program with the aim to lessen the hazards present at their sites.

Maine’s Safety Works program is very important to this recommendation. Its purpose would be to provide a non-punitive set of eyes for the boat yards so they may incrementally reduce hazards in an efficient and effective fashion. Safety Work’s increased presence in the yards would also serve to build trust between the parties. This increased presence would allow Safety Works to share best practices between the yards and allow the yards to further reduce hazards beyond mere compliance with OSHA standards.

As has been the case since OSHA’s inception, the agency’s lack of staffing for targeted inspections will prove challenging to fully implement this recommendation. The nine inspectors that make up OSHA’s Maine contingency will be hard pressed to inspect all of Maine’s boat yards every three years. However through such an effort they will help the yards reduce hazards and provide work sites that are safer for their employees. Everyone interviewed for this study indicated that their goal is a safer work site. This strategy will serve to further this goal.
OSHA should look to adopt a regulatory strategy that is less rule-book oriented and more flexible.

OSHA’s current focus on punitive compliance fails to acknowledge the good faith efforts of most safety managers in rolling out their respective safety programs. Participants told multiple stories of an OSHA inspection where a safety infraction was identified and a financial penalty imposed which could have been corrected by the manager on the spot had the issue been identified by the manager or other workers in the boat yard. Such stories of fines that do not serve a useful purpose for the boat yards ultimately require OSHA to spend great amounts of time documenting violations while in the yards rather than cooperating with the yards to work toward solutions that might solve problems at their root cause. These solutions will most often include conditional factors at the sites, such as poor housekeeping, but OSHA should also look to share information on behavioral attributes, such as employee tendencies to not wear proper protective equipment, that, if known by the yard, may help to reduce hazards. This information sharing based on OSHA’s knowledge of successful compliance strategies and the focus group’s general acknowledgement that OSHA is the expert, would increase employee protection immediately. It would also strengthen the yard’s safety management system as a whole by reducing information asymmetries between OSHA and the yards.

OSHA’s Maine “Top 200” program serves as one example of a more flexible, less rule-book based approach. Through this program, employers eliminated hazards at a rate 14 times greater than OSHA had in nearly a decade. Many employers reduced lost work days for their employees and abated upwards of 100,000 hazards without a fine being employed. The Maine “Top 200”
program results were achieved as OSHA moved away from measuring its inspector’s effectiveness based on the number of standards based violations found during an inspection in favor of solving the pressing safety problems found in the workplace whether conditional or behavioral. In order to do this, OSHA inspectors often declined to issue citations when the inspector did not believe that a useful purpose would be served by the fine. In lieu of the citation, OSHA provided education to the facilities to solve their problems and encouraged the sharing of information among firms about how to deal with hazards.

Safety Works could serve as a model for OSHA in moving away from its rule-book oriented structure. Safety Works is recognized as a partner by OSHA, yet the two agencies could not be more different in the way they carry out their programs. OSHA already looks to Safety Works to provide collaborative services to small firms who voluntarily agree to have Safety Works inspect their facilities. Safety Works provides these inspections in a flexible, non-punitive manner while providing firms with information and guidance, which results in fewer hazards present at the yards. Boat yards that work with Safety Works have higher safety and health program assessment scores (OSHA’s Form 33) in every facet of their safety program than do that of organizations that do not work with the agency. Another avenue OSHA could explore is a partnership with workers compensation firms to provide inspections as part of the yard’s injury and illness prevention planning efforts. Inspections and their resultant changes in the yards could be looked at as evidence that the yard is taking its safety program seriously. The inspections could also provide an incentive for yards to work with their workers compensation carrier more frequently to promote safety and raise awareness of safety issues in the yards. Such alternative regulatory strategies are ones that OSHA should look to for guidance in its attempt to decrease hazards found at Maine’s boat yards.
This recommendation is challenging as OSHA has consistently employed a punitive strategy that has focused on ensuring compliance with its standards since the inception of the agency. Although the period from 1993 to 1996 and Maine’s “Top 200” Program showed the potential for more flexibility in OSHA’s enforcement program, these few years have been the only period in recent history that federal OSHA has strayed from its punitive philosophy. Recent local emphasis programs, ongoing by OSHA as of 2013, as well as reports by almost all the participants in this case study, indicate that OSHA’s punitive strategy continues to be the focus of the agency.

*OSHA should look to create a more positive relationship with boat yards through increased collaboration.*

The interviews and focus group data indicate that a more formal agreement between Maine’s boat yards and OSHA would improve relations between the two groups. OSHA should enter into a written agreement with the Maine Marine Trades Association (MMTA), which is currently working on behalf of many of these yards, that formalizes the hazard reduction activities both parties will undertake over the next ten years. Such a strategic partnership agreement would have the benefit of building long term trust among the parties. It would also open lines of communication with the agency for training and information sharing to the individual boat yards and potentially result in a decrease in the yard’s days away from work, restricted and transferred activity (DART) rate.

Currently, the boat yards and OSHA have a confrontational relationship. To overcome this, the parties must formally define their expectations of one another. A series of meetings between
OSHA and the MMTA Directors must be arranged to discuss the needs of each party and come to a formal agreement between the two on activities that will take place over the ten year period of the agreement. A starting point may be to focus on the top five injury events for the boat yards which currently would include ergonomic injuries such as over twisting, repetitive use of tools, and overexertion in lifting, stationary object strikes to the head and body, and falls to the floor.

The resultant partnership can then be introduced to the individual boat yards and ultimately signed at MMTA’s annual meeting with the press involved to document the achievement.

There is precedence for such cooperation. OSHA is currently a party to a partnership with the Virginia Ship Repair Association to accomplish a reduction in hazards found at the yards. The Virginia program has increased the number of ship repair employers with comprehensive safety and health management systems and kept the DART rate below the most recently published national average for the industry. Given that Maine’s boat yards do not generally have comprehensive safety and health management systems and have a DART rate that is higher than the national average, such goals would be appropriate in Maine. OSHA should duplicate this partnership effort at Maine’s boat yards.

Due to the current negative relationship that exists between OSHA and Maine’s boat yards, OSHA should reach out to the MMTA to help facilitate a better relationship between the parties. The MMTA can begin this relationship building by hosting OSHA officials at its annual meeting to discuss issues that the yards are facing. This event would allow OSHA to gain a greater understanding of where the boat yards are struggling to reduce hazards. The event would also allow the boat yards to gain a greater understanding of what OSHA is looking for from the yards, and allow the yards to personalize the agency through conversation outside of their individual sites.
To further relationship building, OSHA should work with the MMTA and Safety Works to set up specialized trainings in the southern, central, and northern areas of the state to allow the yards more face time with the agency. The training topics would focus on specific needs of the region’s yards, such as the top five injuries, and would provide consistent and practical information that the yards can look to implement when back in their individual yards. Once the trainings are complete, OSHA trainers would continue to be available as resources to the yards to answer questions on the topic and aid with hurdles faced by the yards.

Along with training sessions, OSHA should also work with the MMTA and Safety Works to create a communication structure that ensures that the boat yards receive notices from the agency on compliance topics and learning opportunities. OSHA’s sharing of information with the yards in a specific format accessible and understood by the yards and with contact information for resources would enhance relations between the parties. A forum such as an active list-serve, Constant Contact, or video conferencing would serve this purpose quite well. Focus group participants felt that receiving such notices, whether live, in electronic or paper form, would benefit them greatly. This would certainly go a long way toward opening positive lines of communication between OSHA and the boat yards when questions or problems arise. As one focus group member noted:

It seems (OSHA) requires a paper trail from us, but do not offer one to us. It would be nice if Safety Works came out with a newsletter that said here are the issues that we found within your industry, look at your program, see if you have this issue, and give us a call if you need help.
Conclusion:

In terms of OSHA’s recent focus on Maine’s boat yards, the results from participants in this study felt that a different regulatory philosophy was needed if the agency truly wishes to create a place of employment that is free from recognized hazards. OSHA’s traditional enforcement program does little to reduce hazards at the workplaces that are inspected. Rather than rely primarily on compliance officers to detect and abate hazards once every decade, as is the current practice employed by OSHA, OSHA must more frequently enlist firms in a cooperative effort to introduce or improve comprehensive safety and health programs. In addition to increased planning in the yards, this philosophy requires compliance officers to exercise more discretion on when to inspect yards, in judging when sanctions against employers should be employed, and to determine when non-punitive evaluation and guidance would be better suited as a means of reducing hazards.

Enlisting the yards in a cooperative effort would build trust between the agency and Maine’s boat yards, increase the amount of relevant information being provided to the yards, and allow for follow-up to problems the yards are facing. The non-punitive nature of such efforts is strongly desired by Maine’s boat yards as was nearly unanimously voiced during the focus groups. A cooperative program presents a less adversarial approach to the yards and allows for a more open dialogue between the parties involved. During the Maine “Top 200” experimental program, most compliance officers adjusted to the cooperative approach reasonably well. Ultimately, a high level of managerial skill and leadership would be needed to carry out such a cooperative program since the same agency actors would likely carry out both the non-punitive and punitive aspects of the compliance program. If efforts in other parts of the world translate here, such a program would be highly successful for both OSHA and the boat yards.
Returning to the Maine “Top 200” Program for a moment, one practice that OSHA encouraged in Maine was the sharing of information among firms about how to deal with hazards. If one firm came upon a new way to handle a problem, OSHA encouraged it to share its knowledge with other firms that might benefit. This knowledge sharing was seen as very important. Focus group participants spoke of the need for OSHA to be more proactive in its approach to sharing information specifically applicable to certain industries or firm sizes, whether through mandatory in-person training, on-line computer based applications, or newsletters. Participants were also very willing to share best practices with other yards and seemed to be very interested in being acknowledged as safety leaders for small boat building operations on a local and national level. They want to be the best and safest boat yards in the country and, for that matter, the international community. Information sharing to workers and managers alike is one strategy favored by the general economic community to increase safety results. Better information can improve the workings of the market for safety and the preferences of informed workers merit more respect than those of uninformed workers. As hazards become more transparent to workers, they are likely to demand either higher wages or elimination of the hazards. In either of these cases, employers’ incentives to provide safe workplaces will grow if both qualitative and quantitative information sharing is used as a regulatory tool.

To increase external validity and reliability, this study could be expanded in the future to evaluate a larger study population of boat yards and/or individuals in leadership roles at the boat yards so as to gain a greater understanding of the effects of cooperative strategies on worker safety and health. Based on the safety programs in place at the individual boat yards, injury and illness rates and workers compensation costs over a specific period of time would also be useful to evaluate as an additional indicator of boat yard safety trends. These trends could be utilized in
the future to quantitatively realize how collaborative partnerships influence safety results at the individual yards, as well as confirm the results of this qualitative study.

In addition to the above, additional studies could be performed to evaluate the potential effectiveness of market based programs on safety programs. While I have touched upon incentive based regulatory programs such the injury and illness prevention programs, the U.S. Environmental Protection Agency’s former environmental stewardship and Project XL program have shown to be effective models. In addition, the active programs at the Massachusetts Toxics Use Reduction Institute could be looked at for guidance on effective implementation strategies.

While safety results can be achieved with implementation of a more collaborative program between Maine’s boat yards and OSHA, there will be challenges that arise as a result of this change in strategy. OSHA has only 2,220 inspectors that are responsible for the health and safety of more than 130 million workers who are employed at 8 million workplaces across the country. Maine’s staff consists of only nine inspectors. With many industries in Maine receiving attention from these inspectors due to various local emphasis programs and other random inspections, Maine’s nine inspectors are recognizably stretched very thin. Performing more inspections, whether non-punitive or punitive, will be a challenge. Along with this, in order to deal with the many different industries in Maine, inspectors must have a general knowledge of the standards industries must comply with. Maine’s boat yards have their own specific standard that must be followed so gaps in industry knowledge and applicability of the standards to all yards must be analyzed so as to provide the best possible outcomes for both the yards and OSHA’s inspectors. Without this knowledge, behavioral problems within the yards would be very difficult to identify and solve.
Although the above challenges exist, this case study has demonstrated that a change in OSHA’s punitive regulatory strategy can influence the internal self-regulation of Maine’s boat yards in order to reduce the presence of hazards for their employees. In addition, by requiring more planning, supporting a less rule-book approach, and providing more frequent non-punitive inspections, in concert with moving toward a more collaborative strategy with boat yards and their partners, OSHA can even more effectively minimize hazards. This study also suggests that through such changes the agency can improve individual safety programs by encouraging more management commitment and the identification of root causes of problems that management can then utilize to foster safer boat yards throughout Maine.
Bibliography:


OSHA. (2000). Local Emphasis Program for Shipyards and Boatyards. Instruction CPL 2-1.16.

OSHA. (2011). Local Emphasis Program for Ship Building and Repairing and Boat Building and Repairing. CPL 2-1.27.


U.S. GAO. (2004). Workplace Health and Safety: OSHA’s Voluntary Compliance Strategies Show Promising Results, but Should Be Fully Evaluated before They Are Expanded. Washington, DC.


Appendix A: Focus Group protocol.

1) In your view, should OSHA be more responsive to the specific hazards found in boat yards?

2) In your view, is the OSHA punitive enforcement strategy decreasing safety hazards and motivating safe behavior at your yard? Is this strategy effective?

3) In your view, what are some of the potential positive effects of OSHA moving away from its punitive approach and being more collaboratively involved in your operations?

4) In your view, what are some of the potential negative effects of OSHA moving away from its punitive approach and being more collaboratively involved in your operations?

5) Is your yard open to partnering with OSHA to comply with its many standards or does it shy away from partnering with public regulatory agencies based on the current command-and-control regulatory strategy?

6) How would you create a team of personnel and plan to effectively address the safety concerns at your boat yard?

7) In your view, is OSHA needed?

8) After summarizing the discussion, the following question will close the focus group: Is there anything that we missed on this topic that would be important for regulators and or other boat yards to know?
Appendix B: Sample Statements from Focus Group Participants.

A. Our company has grown over the past 15 years. We worked with Safety Works (Maine’s occupational safety administration) twelve years ago, did the recommendations, and felt it was a very good process. The boss has always been supportive of safety, but it is more the logistics in trying to accomplish (safety results) than not wanting to do so; I don’t think it’s ever been a financial pressure. We also have a lot of very skilled workers, most of them have all their digits, their sight, their hearing, and they are very careful about what they do. Sometimes the thought of imposing something on a craftsman that really knows what he is doing is difficult sometimes, but everybody seems to understand (the need). The table saw (regulations) will never be understood and there are some staging problems that we run into that we cannnot solve, and nobody can seemingly solve, but I think by and large one of the larger problems we have is space and keeping space orderly when you have fifty people working in a large shop and that’s a constant problem. I believe our shop, to the extent that I come up with ideas at least, supports (the safety effort), but being a part time (safety manager) is difficult; it’s hard to fit it all in.

B. We have been piece mealing, we want to know if every square inch of our facility will pass. Our culture is not quite there yet, it’s a never ending battle. For the four years I have been doing this, from day one, since I saw where things were started and put into place, it has been difficult to follow through on every thing.
C. I was the yard manager at my site for many years and also did safety, the culture is strong and everyone has a real good attitude, but I know we are going to get hit and the employees feel like, no matter what, we will get hit if (OSHA) comes in, so frustration is ever present amongst the staff as to how far to go with (the program).

D. At the very beginning it starts with the big, bad wolf theory that (OSHA) is going to come find you and every dust mask is (a fine of) $1,200. It starts as fear, just like getting hit at school with a ruler back in the old days, and the perspective that if you do not do it right you are going to pay for it, and then you get to the point where you start digging into it and you get to the point of saying, holy (cow), how am I going to do this, and then you go to somebody like Safety Works or you go to the front office and call your workers compensation people, and then, after they build you up and actually help you, you get to a plateau and say, holy (cow), I can do this! Then when you actually have the inspection, it’s like thank god they actually showed up; you think that you haven’t been waisting eight years of your life, we did okay, but the whole idea that it went from fear tactic, to support group, to your okay now, gives you peace of mind.

E. It starts becoming (a perspective that) we’re fine, (OSHA) is not going to be here, but then all of a sudden (OSHA arrives and the safety manager) is like we told you, and everybody is like oh no, and they were waiting to find out how much we were fined. There are so many people that care about the company and were like, oh my god, I was not doing x,y,z and now I think more people are on board with what we are trying to implement or maintain.
F. My overall thing, now doing this for seven years, is that the coop has been the best sort of forum in terms of providing help. I do not want to see anyone get hurt, I’m responsible to the people at large and also to the people that work there, but, as a part time (safety manager) when OSHA throws its edicts down, and does not continually educate me about them, it is difficult.

G. OSHA is only as good as the paper or email that comes across our desk, we have to create the culture ourselves.

H. We are an up and coming business with an owner who is making a pretty conscience and solid effort to get everything up to snuff; when I started with the business it was all about efficiency, efficiency, efficiency with the thought process that we were small and (OSHA) was not going to come by, and now we are to the point where the business has grown quite drastically in the last few years and it was now time to get compliant. The owner invited Safety Works in, they made suggestions, and we had a substantial list after they left, so we made a solid effort to order the guards for the drill press, the guards for the table saw, and all the other little items that were not in place. The inspection changed the culture for us so we are now trying to take the steps to be as compliant as we possibly can be. The owner sees it as more cost effective than being fined to take proactive steps so we are now taking more time with staging, fit testing, storage for respirators, etc.
I. We have used our workers comp service to help us with our program and have had substantial lists to complete. Luckily there are multiple people, including myself with safety responsibilities, so it’s not that bad. We have alot of old equipment, but safety if well recieved. Looking around the room, I think we can honestly say that everyone is willing to partner with OSHA for help and this includes our yard.

J. After Safety Works leaves, folks on the floor actually want to know how we did. Beyond the safety committee, which I do not like as everyone should be providing input, many other people truly want to know the results.

K. As a result of Safety Works, we implemented a weekly safety audit program ourselves where we highlight a name each week and that person audits an area for safety issues. The larger partnership has lead to micro-partnerships on-site that lead to more sustained results and broader implementation than just from me as the safety manager.

L. We had a visit from OSHA and they looked at and took pictures of every aspect of the shop, the mezzanines, the office, power tools, railings. He (the inspector) asked one of the guys when was the last time you used the drill press and then had him sign an affidavit. Three or four days later we received a letter with our total fine from the visit. Accordingto the letter, it could have been more, and was still was alot for a small busisiness to absorb, but the point here is that the fines were for items we were in the process of correcting given the Safety Works visit (we
had had less than one month before). Through the inspection, we also learned that Safety Works had also missed some items that OSHA found, so this was an additional gap that did not leave a great feeling with us after the fact (as we had worked hard to correct the identified hazards). In terms of culture, the folks on the floor saw the whole thing as a visit from big brother that could have been worse and potentially put us out of business.

M. Positive effects (of cooperative efforts) include having a different eye, having a different voice, having a different viewpoint; getting away from the scare tactics. It’s helpful to have someone recognize and work through your (safety issues).

N. In dealing with Safety Works, they made it pretty clear in their letter that they were there to help you and no fines will come from their being on-site. They are there to protect you from OSHA (even though they are funded by them).

O. The Safety Works program provided awareness for our yard and probably decreased the fine we would have seen had OSHA inspected our yard prior to their collaborative efforts. It also potentially saves money as it provides a preventative measure to keep people from being injured and thus on the job.
P. OSHA to us is a four letter word so, having Safety Works over the past four years, I see the difference cooperation has made in our culture year after year. It makes me proud to see the improvement; we can actually do these things and it makes me happy.

Q. Our yard is currently not working with any cooperative program, but when they were in the yard a number of years ago the biggest positive was opening my eyes to (safety concerns). I have called them a number of times over the years however and the most important part is being able to call without fear of reprisal; you can actually fix stuff without fear that (OSHA) is going to come and whack you.

R. OSHA needs to be more collaborative much like Safety Works. At the same time, Safety Works, because they have worked with us without any fear and know the real issues, needs to take our ideas and collaborate with OSHA on how to improve the regulations. A great example of this revolves around using cranes to do rigging and the use of the hook as an anchorage point. If they will not listen to us on this point, (OSHA) should at least listen to Safety Works as they have trust in them, trust enough to be able to put is in inspection deferral status, to consider and write new laws that make sense for us. The problem is that Safety Works and OSHA do not seem to talk! For the local emphasis program that is currently on the books, Safety Works staff did not even know about it until OSHA started knocking on doors. Whether external communication between OSHA and Safety Works or internal communication amongst Safety Works staff, communication must be improved at this level before we can hope to have a true place in the discussion.
S. It seems (OSHA) requires a paper trail from us, but do not offer one to us. It would be nice if Safety Works came out with a newsletter that said here are the issues that we found within your industry, look at your program, see if you have this issue, and give us a call if you need help.

T. I receive an OSHA Quick Takes newsletter twice per month and I like this type of format. If we could get something similar related to our issues, it would be very helpful. OSHA does partner with other organizations, whether we believe it or not, as we often do not hear about it, and this is the place to learn about such efforts and increase our understanding of the agency and fines they are handing out that may impact our bottom line.

U. There is no on-going dialogue unless I initiate it. I get communications with training dates, but that is the extent of it. We are collectively paying their wages and it would be nice to have communications on what (Safety Works) has learned and can pass along. Perhaps communication with industry and individual yards after consultations regarding similar issues they may face, but it needs to be an on-going program.

V. Safety Works seems to be under staffed. They also need more continuity in staff as some are better than others at (helping). I realize OSHA inspectors will not be consistent in their inspections either, but when we reach out we deserve to be hearing the same message from all Safety Works staff.
W. A monitored chat room on the internet may also be good for instant answers given how busy the inspectors can be. It seems when I call the office that I never get the answer I am looking for. With a chat room, Safety Works could monitor the questions and send out informational pieces on frequently asked questions as needed.

X. Safety Works could utilize the corrections we send in to the issues found during their inspections and, because we do not put names on these forms, (communicate) these to other affected yards as innovative solutions.

Y. The other thing to keep in mind here is that there are sixty other yards who are not sitting in this room. If we have a hard time communicating with OSHA and Safety Works as proactive yards, imagine the communication that is taking place with those yards and the regulators. They are probably scared to reach out, but entities such as Safety Works must talk with them as well as us to (help) bring them along.

Z. I would welcome anyone at any time to help me out, but the punitive nature of OSHA turns my stomach.
AA. I believe the process should be systematic where once I finish the Safety Works recommendations I get a return visit to see where I am again. This would help foster the behaviors I am looking to sustain. Then, once both parties feel that they are in a good spot, they schedule visits to see how things are going. Random inspections of a nonpunitive nature would be okay at this point as long as documentation of the nonpunitive nature was presented up front to the site.

BB. OSHA and Safety Works should be doing communications on a regular basis to prevent misinformation or updates in programs. When I was last inspected by OSHA I was cited for a guard I had placed on a drill press that I was told was fine by Safety Works, yet when OSHA came in, some time after the Safety Works visit, they told me that the guidance had changed and the guard I had employed was no longer adequate. This situation should never happen, or should at least not lead to fines for good faith efforts to provide a safe environment.

CC. OSHA is needed to provide a structure that promotes safety, the black and white law, but the current enforcement system at the federal level is broken and needs an overhaul as the federal/state and federal/industry relationships are (unflexible and) unhealthy.

DD. A tiered system is warranted as the state can truly be more helpful as it knows its industries better than the federal folks ever will be able to. After all, it has been 40 years and we are still not in compliance with seemingly basic ladder standards. This says alot!
EE. The punitive stick is needed, but stewardship, collaboration, and flexibility are also needed. We should look to the international community as well for perspective.

FF. After Safety Works visited us, we did not opt to have them come in again because frankly I wish (OSHA) would show up and see where we are because we have never had a visit; I’m sure it’s coming and I just want to have it done because until you have it done, you don’t really know. My boss says maybe we should call them and invite them, but I really don’t know (if that’s so good) either.

GG. Another safety manager (that was visited by OSHA) recently mentioned that they were really glad that (OSHA) came as he had been preaching the (safety) sermon for eight years and he felt employees thought he was lying to them (that OSHA did inspections). I feel that way as well, it’s like crying wolf, it’s like just get it done already. Some days, after talking to management I say, you know what, I wish (OSHA) would come through that door right now because I do not want to see anyone get hurt.

HH. We do not get anything from (OSHA). They do not come in and say we’ve noticed a problem with say x,y, and z; we find that most people are hurt by these types of problems and so we are going to help you with them. OSHA does not feel like a public servant, it feels like a police force.
II. Everyone should have a direct line to OSHA, such as with email, where I learn about problems that are coming in and I’ll take advantage of them, but they do not do that. They just set up (inspections) so you can be trapped. They would rather catch you for not doing something correctly.

JJ. I was recently looking through the manual of (OSHA) regulations we have, and was like what? What are you talking about? It would be far different if someone would come in and provide you with specifics. Instead you get a regulation that tries to meet all requirements of every industry in the boat building industry. It takes 25 minutes to get anywhere. OSHA should be a service that helps each one of the safety people to stop people from getting hurt or using chemicals that are going to cause problems. They should be helping!

KK. OSHA smacks you across the hand, with the ruler, (like the police officer) but then runs away! You’re left wondering what was that for and then told to figure it out (on your own). It may still be wrong the next time they come! I was on the phone once with an OSHA inspector for two weeks going back and forth with whether I could do (one thing or another) and the only answer I would get with each call was that I could not do what I proposed. I did the research, I read their guide book, twenty times, and figured each time that I was falling into the proper parameters that (they) wanted me to fall in to, and all (OSHA) had for an answer to me was a consistent no with no guidance.
At our site, over the past five years, we have gone from one of the worst around to the point where Safety Works will actually send people to us to look at (and acknowledge) what we have done. I think the collaborative aspect of the local emphasis programs help because they scare people into doing what needs to be done. The this is the way it is, and this is the way it’s going to be so just deal with it attitude is stripped away, and there is someone there to explain (the safety rules) and make people understand them. If you approach it in the right way, (safety) will be easier. Is everyone going to be on board? No, never, people get busy and that’s the way it goes, but, that being said, if the culture is there, when it does get busy, things do not get as bad as they used to get as people have more awareness. I wish that it was OSHA to give us the positive motivation to improve what we are doing instead of the negative motivation. I wish OSHA would work with us instead of against us because the big thing that you see with alot of yards is that we are now willing to do it, the owners are willing to do it, the customers understand that there is extra time and cost involved if they want a product that is built safely, what we need is a regulatory body that is on board with us, that listens to us, and takes input from us, so that the blanket regulations that we all cannot conform to can be understood in a way that the people doing the enforcement can look at a situation in our yard and say you’re not them so this is the way that you have to do it. OSHA needs to be able to take more information from the people doing the work and work with it to create custom programs that work for the yards.
MM. The OSHA programs are very numbers based, incident rates, enforcement actions, etc., but we are not just numbers, this is not just a game, we are the best of the world’s boat builders, so (acknowledge us and) work with us as we are striving to be safety leaders as well.