



Testimony of Janis Herschkowitz, CEO, PRL Inc.

On Behalf of the American Foundry Society

Tangled in Red Tape: New Challenges for Small Manufacturers U.S. House of Representatives House Small Business Committee

March 18, 2015

Chairman Chabot, Ranking Member Velázquez and members of the Committee, thank you for the opportunity to testify before you today to discuss significant concerns regarding growing regulatory burdens and a mounting wave of upcoming regulations that will face my company and the U.S. metalcasting industry. As you know, the burden of regulation falls disproportionately on manufacturers, particularly on small manufacturers because compliance costs typically are not affected by economies of scale.

My name is Janis Herschkowitz, President and CEO of PRL Inc. PRL is a holding company for three subsidiaries, which includes a foundry, an upgrading facility and two machine shops. I am a second generation Pennsylvania small business metalcaster employing over 150 team members in Lebanon County, Pennsylvania. My mom, sister, and I are the sole owners of our business.

Metal castings have applications in virtually every capital and consumer good and are truly the foundation for all other manufacturing. I am testifying on behalf of the American Foundry Society (AFS), our industry's major trade and technical association, which is comprised of more than 7,500 individual members in every state in the country. Our industry is dominated by small businesses, with over 80 percent of U.S. metalcasters employing 100 workers or less. In fact, many are still family-owned, like mine, and oftentimes, simply don't have the sales revenue or resources to implement a whole host of new regulations.

My family moved to the States from Bolivia in 1971 for political reasons to live the American dream. In 1972, my father purchased a small company with 13 employees whose primary function was to x-ray and upgrade castings for the nuclear power industry. He expanded the core of his business and purchased two machine shops. Following his death in 1989, I became President and went on to open a new company, which was a foundry. This was considered a bold decision at the time, particularly since the number of foundries in the U.S. has been steadily declining. The foundry was the final piece of the puzzle which allowed PRL to provide our customers with full vertical integration capabilities.

Today our foundry pours both ferrous and non-ferrous alloys to produce metal castings ranging in

weight from 10 to 12,000 pounds for the military, nuclear, energy, petro-chemical and commercial sectors.

Due to size limitations, I was unable to bring any of the castings we produce. However, I have several pictures which are attached to my written testimony [Attachment A]. I also brought a small valve block that we machined out of a piece of bar stock for the military. Our companies are proud suppliers of high specification castings for many industries. As an example we manufacture high specification finished machined pump and valve bodies used in nuclear submarines and power plants around the world. We have a highly skilled workforce, and we play a critical role in our nation's defense. Our team's dedication to quality is reflected in our customer base which includes such important suppliers as Northrop-Grumman, Curtiss-Wright, Electric Boat, and PSEG.

Under my leadership PRL has overcome many challenges including opening a foundry, being highly leveraged while losing the majority of our customers due to defense cuts, and surviving the onslaught of foreign out sourcing. I know firsthand the challenges of trying to meet a payroll and the stress of having to borrow money to keep the doors open.

In order to compete in the global marketplace, our companies have continually invested in our employees, and in new equipment and technology. We provide good paying life sustaining jobs and a strong benefit plan to our employees, who are highly skilled in their craft and are the main reason PRL is successful today.

As an increasingly critical and growing supplier for our national defense, we are cautiously looking to expand our operations for the future. The fact is there are very few foundries remaining in the U.S. who are able to meet the high specifications standards required by our nation's military. However, we are reluctant to invest too much in our businesses, given our concerns over new and upcoming costly federal regulations which I highlight below.

We are already trying to cope with a significant increase in health care costs and now we are looking at additional regulations, which if imposed could easily cost us over one and a half million dollars to implement with absolutely no guarantee that it will be effective. Of particular concern is our small foundry which only employs 13 people. The bulk of the regulations would hit our small foundry the hardest, and to put it bluntly as a small business owner we would need to determine if it is even worth the cost of compliance. This is tragic. Our company operates off of a credit line, and in order try to be in compliance we would have to attain a capital equipment loan, which we would much rather invest in purchasing new production equipment, which would create new jobs.

U.S. Foundry Industry is Critical to the U.S. Economy

The U.S. metalcasting industry is the sixth largest industry in America and the second largest supplier of castings in the world, after China. U.S. metalcasters ship cast products valued at more than \$20 billion annually and directly employ over 200,000 people.

Today, there are 1,965 operating casting facilities, which is down from 2,170 five years ago and, 3,200 plants in 1991. This reduction can be attributed to the recession, technological advances, foreign competition and tightening of federal, state and local regulations. Nearly 600 foundries produce iron and steel castings, while another 1,400 make aluminum, brass and bronze castings.

More than 90% of all manufactured goods and capital equipment use metal castings as engineered components or rely on castings for their manufacture. The industry produces both simple and complex components of infinite variety. From key components for aircraft carriers and automobiles

to home appliances and surgical equipment, cast metal products are integral to our economy and our way of life.

The foundry industry is vital to the automotive and transportation sectors. In fact, automobiles, trucks, rail cars, and other transportation equipment utilize 38% of all castings produced in the U.S. These type of castings include engine blocks, crankshafts, camshafts, cylinder heads, brake drums or calipers, intake manifolds, transmission housings, differential casings, U-joints, suspension parts, flywheels, engine mount brackets, front-wheel steering knuckles, hydraulic valves, and a multitude of other castings.

Foundries are also the mainstay of national defense. All sectors of the U.S. military are reliant on metal castings for submarines, jet fighters, ships, tanks, trucks, weapon systems and other vital components.

The industry is widely dispersed throughout the country, with the highest geographic concentration of facilities located in Ohio, Alabama, Pennsylvania, Indiana, Illinois, Michigan, California, Texas, and Wisconsin. In fact, Ohio is the leading metalcasting state in the nation.

Metalcasters are experts in making new, engineered components by re-melting old ones. Discarded appliances, sewer grates, water meters, automobiles, and other metal objects once destined for the landfill are valuable materials to our industry. In fact, our industry uses scrap metal for 85% of its feedstock for iron and steel castings. This practice results in the diversion of 15 to 20 million tons of material from disposal in domestic landfills every year.

Challenges Confronting PRL Inc & US Foundries

Manufacturers rely on a stable, balanced and common-sense regulatory environment to create jobs and fuel economic growth. However, the burden of unnecessarily costly rules weighs heavily on their ability to grow and create jobs. Federal regulation is estimated to cost more than \$2 trillion annually.

The burden of regulation falls disproportionately on small businesses and manufacturers. Dollars spent by manufacturers on regulatory compliance for unnecessarily cumbersome or duplicative regulations are dollars not spent on capital investment or hiring new employees.

Today, the metalcasting industry continues to face major roadblocks – by both the most intense global competition in our history and the increasing costs associated with new and upcoming federal regulations and other actions, including executive orders, by our government. American metalcasters need sound policies in taxation, energy, labor, trade, health care, education, infrastructure and, most certainly, regulation.

Highlighted below are some upcoming regulations that will significantly impact PRL and the foundry industry:

U.S. Department of Labor - Occupational Safety & Health Administration

AFS members, including our company, are highly committed to protecting their employees and developing and implementing sound policies that advance health and safety. AFS provides critical information and tools for its members to continuously improve their safety performance including in-plant consultation and safety courses. AFS publishes over 60 Health and Safety guides specific to the foundry industry. In addition, the association conducts an annual Safety Boot Camp and Environmental, Health and Safety Conference, as well as webinars on a variety of key foundry safety topics.

Our culture is one of "SAFETY FIRST". PRL has a Safety Manager as well as Safety Leaders at each location. They provide safety and health training for all employees on an ongoing bases. We have a safety committee, which is certified by the State of Pennsylvania, with representatives from every level of our organization, recommendations are encouraged and taken seriously, and more experienced workers are tasked with mentoring our younger co-workers. We send our personnel to outside safety conferences, including AFS' Safety Boot Camp, and have a contract with an outside safety consultant who is available 24/7 to answer any questions which may arise. PRL has also brings in outside safety consultants as needed, including experts from Indiana University of Pennsylvania.

However, of significant concern to the foundry industry is the Occupational Safety and Health Administration's (OSHA) proposed crystalline silica rulemaking.¹ In 2013, OSHA proposed a comprehensive and complicated new regulatory structure for the control of crystalline silica. Silica (quartz), one of the most common minerals on earth, has a critical role in a wide spectrum of the economy, including construction, energy, foundries and manufacturing, consumer goods, agriculture, transportation, and technology. The U.S. foundry industry uses and recycles millions of tons of silica sand per year to produce critical metal castings.

The proposed rule is potentially the most far-reaching regulatory initiative ever proposed. It would sharply reduce, by half, the existing permissible exposure limit (PEL) for crystalline silica. Not only will this require most foundries to spend an estimated million dollars on additional dust collection systems, but there is no guarantee that this standard can even be met. In addition to the significantly reduced PEL, OSHA's proposal includes requirements for regulated areas or written access control plans, prohibitions on work practices, medical surveillance, mandates extensive and costly engineering controls respiratory protection, training and hazard communication, and recordkeeping.

Key Foundry Concerns with OSHA's Proposed Silica Rulemaking:

• Prohibits Certain Work Practices Which Contradicts Existing Industry Safety Practices.

- OSHA bans dry sweeping, compressed air and employee rotation as control methods. For many foundries, compressed air is the only feasible method to clean complex castings, particularly when the parts are going to support our nation's defense. Wet vacuuming can damage equipment and create a significant explosion, which risks lives. Every foundry person knows you <u>never</u> introduce water in to a foundry environment, and yet this regulation requires it!
- Dismisses the use of personal protective equipment (PPE) as a primary approach to protecting employees; instead, relies on the outdated "hierarchy of controls" that emphasizes much more costly, disruptive, and often less effective, engineering and work practice controls.

• Underestimates and/or Completely Omits Cost of Equipment & Processes.

A number of pieces of equipment and system costs, such as a new dust collector, which can easily run over \$1 million to install, were not accounted for by OSHA. Other examples include:

- Cleaning— professional cleaning would cost \$1 per square foot of facility, plus \$400 million a year for downtime.
- Ventilation— OSHA calculates annual cost of ventilation at \$5.33 per cubic feet per minute (CFM) vs. the foundry experience of more than \$20 per CFM, and completely omits engineering, air modeling and permitting costs.

¹ U.S. Occupational Safety and Health Administration's proposed rule Occupational Exposure to Respirable Crystalline Silica, Sept. 13, 2013, Docket No. OSHA-2010-0034.

OSHA failed to consider the effects of compliance on current EPA regulations. Many foundries will be forced to redesign and install new ventilation systems. This will trigger a large number of foundries to make changes to their air permits, which can take at least a year to obtain from their states. OSHA's proposal provides just one year to come into compliance with the rule. In the case of PRL, if the permit cannot be attained we could conceivably be forced to shut down and over 150 hardworking co-workers would lose their jobs.

• Is Not Technologically or Economically Feasible.

- Dust control, especially at the low exposure levels OSHA is recommending, is challenging and complex. The sharply reduced PEL presents enormous feasibility challenges. Foundries will have to exhaust **all** feasible engineering and work practice controls to meet the new reduced PEL. There is not a one-size-fits all solution that is guaranteed to work. Some foundries may spend millions of dollars retrofitting and/or rebuilding in order to implement the various types of engineering controls (essentially trial and error) while attempting to comply with the standard. [Currently, protective equipment (e.g., respirators) or other measures may be used to keep workers' exposure below the PEL whenever engineering controls are not feasible.]
- There are certain operations, such as grinding and knock-off/sorting, where no matter how much is spent on controls, consistent compliance will not be achieved.

• Utilizes Outdated SBREFA Report.

OSHA declined to conduct a second small business panel review under the Small Business Regulatory Enforcement Fairness Act (SBREFA), choosing to let stand the outdated 2003 report. Reliance on a report that solicited input on a different proposal a decade ago is simply not adequate outreach to the affected stakeholders. Furthermore, it raises serious concerns that OSHA has not used the best available data or techniques to quantify the costs and/or benefits of the rulemaking. As a member of both AFS and National Federation of Independent Business, I worked hard to get this law passed, and now to see its original intent being totally disregarded is disheartening at best.

• Fails to Examine the Adequacy of the Supply of Occupational Health Professionals.

• There will be a need for a large number of industrial hygienists and labs in order for the impacted sectors to comply with the proposed regulation. There is a significant risk that the lack of available service providers or the resulting escalation in cost of their services will render compliance with the proposed rule within the schedule proposed by OSHA technically and economically infeasible. OSHA's proposal would require employers to achieve complete compliance with the proposed PEL within one year of the effective date of a final rule. Exposure assessment would be required within six months of the effective date despite the fact that OSHA's proposed laboratory testing standards have two years to come into compliance.

• Drastically Understates Costs to Comply—Exceeds 9% of Foundry Industry's Revenue.

- OSHA's estimated cost of the engineering/ancillary costs for the foundry industry is \$43 million. Economic analysts estimate the cost to be more than \$2.2 billion annually. This represents 9.9% of the foundry industry's revenue and 276% of its profits.
- Assumes the cost to comply with a new 50 PEL is the same as it is to reach the current 100 PEL. At these lower levels, it will be even more challenging and costly.
- Economic impact will disproportionately affect small foundries, since the majority of the industry employs less than 100 employees.
- These substantial costs for this rule alone make the foundry industry one of the most heavily impacted industry sectors among all those affected by the rule. As currently proposed, OSHA's rule will likely force some foundries to close, shift production

offshore, and impact the long-term productivity, profitability and competitive structure of the metalcasting industry.

An economic analysis performed by engineering and economic experts estimate that the annual compliance costs of the rule will likely reach over \$5.5 billion for all industry sectors - manufacturing, construction, transportation, defense, and high-tech industries. Before moving to impose billions in costs on critical U.S. economic sectors, which OSHA estimates to employ about two million people, OSHA should significantly revise or abandon this rulemaking in favor of a more logical, data driven approach to OSHA's goals. Significant progress has been made in preventing silica-related diseases under existing regulations, making proposed changes unnecessary.

OSHA has two immediate, effective means, to improve upon current protective practices, which it dismisses in the proposed regulation: (1) providing compliance assistance for current exposure limits, for which OSHA documents a roughly 30% non-compliance rate across all impacted industries; and, (2) supporting new technology and policies favoring effective, comfortable, respirators and clean filtered air helmets, which provide full protection but are not favored by OSHA's outdated "hierarchy of control" policy. Unfortunately, the Agency prejudged this issue by announcing in the Federal Register that it would not consider changing that policy, no matter how effective, efficient and economical the protective devices.²

The Regulatory Flexibility Act (RFA) requires federal agencies take into account the small business economic impact during the rulemaking process. The goal of the RFA was to create a process by which the needs and priorities of small business are better taken into account early in the rulemaking process in an effort to eliminate a one-size-fits-all approach in drafting new regulations. It is clear that OSHA has disregarded the RFA's requirements as Congress intended and issued a one-size-fits-all silica proposal and failed to consider the costs of this comprehensive rulemaking on small business. AFS strongly supports the chairman's bill, the Small Business Regulatory Flexibility Improvements Act of 2015 (HR 527), which would close these RFA loopholes and ensure that all federal agencies appropriately consider the impact of their rules on small businesses.

There are number of other U.S. Department of Labor and OSHA regulations that have been issued recently which I highlight in Attachment B which will impact foundries and other key industry sectors.

U.S. Environmental Protection Agency

We are alarmed by a wave of new regulations that the U.S. Environmental Protection Agency (EPA) is imposing on the utility sector, despite greenhouse-gas emissions falling significantly in the U.S. As an energy-intensive industry, metalcasters are troubled by the increased electricity costs and reliability issues that will likely result from these new regulations.

U.S. foundries cannot produce castings without adequate and affordable supplies of natural gas and electricity. For many metalcasters, energy is a key expense, only behind raw materials and labor in terms of costs of doing business. Melting is the most energy-intensive operation in metal casting operations, accounting for about 55% of the total energy use. Compared to other foundry sectors, energy costs are highest in iron foundries, since the melt temperature is much higher for this metal.

 $^{^{2}}$ 78 FR 56274, 78 : "OSHA would like to draw attention to one possible modification to the proposed rule, involving methods of compliance, that the Agency would not consider to be a legitimate regulatory alternative: To permit the use of respiratory protection as an alternative to engineering and work practice controls as a primary means to achieve the PEL."

Continued access to affordable energy sources help foundries better compete against growing global competition and allow us to keep and create more jobs.

Unfortunately, over the last two years, there are numerous specific examples of regulations and proposed rules by EPA that have a particularly burdensome impact on our industry, with little regard for their impact on job creation and the manufacturing supply chain. There also seems to be no recognition of the cumulative impact of these regulations. I have highlighted just three EPA proposed regulations in my testimony, but have attached a much more detailed list of the regulations developed by EPA in recent years that will directly or indirectly impact the foundry industry, as well as the entire manufacturing sector. [See Attachment B.]

In June of 2013, President Obama issued an executive memorandum directing the EPA to promulgate regulations to limit carbon emissions from both new and existing power plants. The memorandum called for the EPA to propose two regulations: a regulation for new power plants, and a similar regulation for existing power plants.

These proposed regulations are the first among a suite of follow-on rules that would impact many industries twice — both as electricity customers and as industries next in line for subsequent regulations. It is critical that the Obama Administration adopt a more reasonable approach, promoting policies that support a true all-of-the-above energy strategy and allow manufacturers the flexibility to continue unlocking solutions for a sustainable economy and environment.

• EPA's Proposed Rule for New Power Plants

The proposed regulation bans the construction of new coal-fired power plants unless they are equipped with a technology known as carbon capture and sequestration (CCS). CCS is a promising system that would capture, transport and then store carbon underground. However, CCS is prohibitively expensive and not in use at a single commercial-scale power plant in the country. Given this restriction, the practical impact of the EPA's proposed regulation for new power plants will be to block construction of coal-fired power plants in this country. A final regulation is expected this summer.

• EPA's Proposed Clean Power Plan

In June 2014, EPA proposed a new rule to cut carbon dioxide emissions by a total of 30% from existing power plants by 2030 compared with 2005 levels. Unlike the new power plants regulation, the existing power plants regulation will impact plants that are already supplying electricity to homes and businesses throughout the country. The United States relies on fossil fuels for about 68 percent of the electricity that keeps the lights on in our homes and businesses. Quite simply, our country cannot operate without electricity from fossil fuels. Yet, this regulation threatens to shut down many of the plants that produce this low-cost, reliable electricity prices for everyone. Second, the steady stream of electricity that we depend on will be threatened.

Since state laws allow the electric providers to pass all energy and environmental compliance costs through to the consumer, we expect our energy prices to increase substantially. Even a \$0.01/kWh increase in the cost of electricity imposes additional costs of nearly \$9 billion per year on domestic manufacturing facilities. A final regulation is expected to be issued in the summer of 2015 and will require states to issue implementation plans to meet the EPA's requirements by 2016.

These GHG regulations have great potential to be devastating economically, increasing energy costs for every sector of the economy, and driving up the costs of goods and services.

<u>EPA's Ozone National Ambient Air Quality Standards</u>

The other proposed rule I want to mention is EPA's National Ambient Air Quality Standard (NAAQS) for ground-level ozone. In March 2008, the EPA lowered the 8-hour primary NAAQS for ozone to its current level of 75 parts per billion (ppb). In November 2014, the EPA proposed lowering the ozone standard to a range between 65 to 70 ppb. By court order, the Agency must finalize the standard by October 1, 2015.

Key Problems with the Proposed Ozone Rule:

1. Will Affect Much of the Country - Lowering the standard from 75 ppb to a range of 65 to 70 ppb could cause large parts of the country to fall into **nonattainment**. Counties and areas classified as nonattainment can suffer stringent penalties; including: (a) EPA overriding states on permitting decisions; (b) new facilities and major modifications having to install the most effective emission reduction technologies without consideration of cost; and (c) federally supported highway and transportation projects being suspended.

2. Has Significant Economic Consequences - According to a February 2015 economic study undertaken by the National Association of Manufacturers, a **65 ppb** standard could reduce U.S. GDP by **\$140 billion**, result in **1.4 million fewer jobs**, and cost the average U.S. household **\$830 in lost consumption** – each year from 2017 to 2040. That would mean a total of \$1.7 trillion in lost U.S. GDP during that time period.

3. May Be Impossible to Achieve Compliance - According to EPA's Clean Air Scientific Advisory Committee (CASAC), EPA "is not clear as to how background estimates might impact the primary and secondary standards and whether these impacts may differ regionally. Also, EPA does not consider the impact of international border pollution; ozone and other pollutants are transported to the U.S. from other countries, thereby causing states and counties to be nonattainment.

4. Current Standard Not Fully Implemented - EPA's 2008 ozone standard (75 ppb) still has not been fully implemented. States did not even find out which of their counties would be designated as nonattainment under the 2008 standard until April 2012. Additionally, EPA did not finalize the necessary implementation regulations and guidance for the 2008 standard until just recently in February 2015. States are committing time and money to meet the 2008 ozone standard. Yet if EPA moves forward with its proposal to further reduce the ozone standard it fails to give states a chance to meet the current ozone where states already have limited resources for implantation. At this time, AFS believes EPA should retain the current standard. Yet EPA now wants to move the goal posts in the middle of the game.

Regulatory Reform Needed

AFS believes there is an appropriate role for regulation, but regulations promulgated without an analysis of the impact on the economy, in particular small businesses, and the impact on jobs, including how multiple regulations compound those impacts, can have quite the opposite effect. If manufacturing is to continue to make a significant contribution to the economic recovery, including the creation and maintenance of well-paying jobs, it is imperative that we have an accurate understanding of the impact of these proposed regulations. The full regulatory burden on any particular sector can only be known if that cumulative impact is assessed.

The lack of cumulative-impact assessments is a fundamental shortcoming in the way government agencies develop and evaluate proposed rules. That shortcoming creates regulatory tunnel vision. It puts innovation, investment, and jobs at risk.

AFS and its members have a keen interest in getting regulations right. So the compounding effect of those compliance costs diminish the resources available to make meaningful long-term investments that create jobs, promote innovation, and solidify our competitive position.

The Federal regulatory process and analysis of regulations can be improved. We would like to see OMB and the individual agencies update their respective economic impact analysis guidance to require cumulative impact of multiple regulatory actions, particularly on small business. We would like to see agencies identify and catalogue the sectors impacted by a new regulation and even extend that approach into the paperwork burden.

Agencies should seek input from the affected regulated community before developing a proposed regulation. It goes to the win-win that is possible from an early engagement, so that the public, the government, and the regulated community all benefit.

AFS would also like to see Federal agencies consider the regulatory-induced employment changes as either a cost or a benefit in their assessment and not consider them some indirect cost that is not routinely assessed. If our regulatory agencies are capable of assessing the cumulative benefit of their regulatory programs, surely they are capable of assessing the cumulative burden.

Conclusion

PRL understands and supports the need for reasonable regulations to protect the environment, worker safety and health. To continue manufacturing momentum and promote hiring, the nation needs not just improved economic conditions, but also government policies more attuned to the realities of global competition. The key is to find the balance between ensuring a safe and healthy workplace and allowing that workplace to compete in order to be able to continue to provide employment; that is where the current U.S. regulatory process is lacking. My fear for the industry is that we may lack the ability to meet many of these regulations which will force more foundries to shut down. This will not only cost the U.S. jobs, but could threaten our nation's military supplier base, and would ironically cause more pollution in the world!

The cumulative burden of a variety of new and proposed standards is nearing a tipping point. More than ever, it is critically important that we regulate only that which requires regulation, and only after a thorough vetting of potential benefits, impacts and costs of that regulation on businesses, particularly small businesses, as well as the manufacturing supply chain. Pro-growth policies will make our nation a more competitive place to do business.

In this current economy, it is clear that cost-ineffective regulations and increases in taxes dampen economic growth and will continue to hold down job creation. For some foundries, it will be the final stake in their coffin. Thank you again for the opportunity to appear before you today. I would be happy to respond to any questions.

Attachment A – Example of Castings Manufactured by PRL Inc. Attachment B – Key Regulations Impacting the Foundry Industry ATTACHMENT A - EXAMPLES OF CASTINGS MANUFACTURED AT PRL, INC.



INNER CASING COVER FOR SUBMARINE - STAINLESS STEEL –



VERTICAL DIFFUSER FOR THE COOLANT SYSTEM OF A POWER PLANT - CN3MN -



PUMP CASING FOR SUBMARINE - COPPER NICKEL -



STEAM CHAMBER FOR SUBMARINE - STAINLESS STEEL -



VALVE BODY FOR CARRIER - CARBON STEEL -

ATTACHMENT A – Federal Rules Impacting U.S. Foundry Industry

Environmental Protection Agency

These regulations on air emissions and water will severely harm economic growth. Manufacturers need sensible and flexible regulations.

- EPA Utility Maximum Achievable Control Technology (Utility MACT) Rule

This air quality regulation for coal-fueled power plants finalized by the Environmental Protection Agency (EPA) on December 16, 2011. It will place limits on the emissions generated by coal fired electric generating units and will create increases in the price of electricity. The Utility MACT alone, will be one of the most expensive rules the agency has ever issued for the power generating sector, expected by EPA to cost \$10.9 billion in the year 2015; \$10.1 billion in 2020; and \$10 billion in 2030. It will require utilities to install pollution control technology in a very short compliance window. There are widespread concerns that electric reliability could be threatened because the new rule would force the premature retirement of many coal-fired power plants. **Final Rule - 2011**

- EPA Cross State Air Pollution Rule (CSAPR)

Issued on July 7, 2011, the CSAPR sets stringent additional power plant emission limits for 27 states and calls on both states and affected facilities to comply with the new rules by January 1, 2012. Manufacturers are concerned that the new rules will trigger higher energy prices, compromise grid reliability and lead to more job losses, threatening global competitiveness. - EPA's conservative modeling estimates that implementing the rule could cost up to \$800 million annually with \$1.6 billion per year in additional capital investments, for a total of \$2.6 billion per year by 2014. CSAPR Phase 1 implementation is now scheduled for 2015, with Phase 2 beginning in 2017.

- EPA New Source Performance Standards (NSPS) for New Power Plants

In 2014, EPA proposed a greenhouse gas (GHG) regulation for new power plants that would substantially limit the sources of energy available to power U.S. manufacturing. The first in a suite of impending GHG regulations, this rule would effectively ban the construction of new coal-fired power plants in the United States by requiring them to be equipped with carbon capture and sequestration (CCS) systems. While CCS is a very promising technology, it is prohibitively expensive and is not in use at a single commercial-scale power plant in the country. To remain competitive in a global economy, manufacturers need an "all-of-the-above" energy strategy to ensure they have access to affordable and reliable energy. **Final Rule** – **Summer 2015.**

- EPA'S Clean Power Plan Rule

Last June 2014, EPA proposed a greenhouse gas (GHG) regulation for existing power plants that would substantially limit the sources of energy available to power U.S. manufacturing. This rule would increase electricity prices for consumers across the country and ultimately threaten manufacturers' competitiveness. It would substantially reduce use of coal fired generation. Coal fired power is a low cost and reliable source of electricity. Manufacturers ultimately will be hit twice by EPA's greenhouse gas regulations, both as users of the energy being regulated and as industries considered "next in line" to receive similar regulations from EPA for their own plants. The decisions the EPA makes in these regulations—such as mandating technologies that are not yet commercially feasible—will have far-reaching consequences not only on our energy supply but also on the operations of foundries and all manufacturers. **Final Rule – Summer 2015**

- EPA Ozone Rule

EPA has officially proposed revising the current standard from 75 parts per billion (ppb) to the far more stringent 65 ppb, With an estimated cost to the economy of \$140 billion per year, the

proposed revisions to the ozone standard represent one of the most significant threats, not just to our manufacturing sector, but to the economy at large. **Final Rule – October 2015**

- EPA & Corps of Army Engineers - Waters of the U.S.

In April 2014, the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) published a proposed rule expanding the definition of "waters of the United States." The new definition of "waters of the United States" is both ambiguous and expansive, and would have a significant impact on manufacturers' ability to operate, maintain and expand their facilities. This proposed rule would create unnecessary delays and costs for manufacturers of all sizes and in virtually all sectors, and could force manufacturers to have to obtain permits for a wide range of waters that were not previously required, leading to substantially higher permitting costs and lengthy project delays. **Final Rule – 2015.**

U.S. Department of Labor & Occupational Safety and Health Administration

- OSHA: Improve Tracking of Workplace Injuries and Illnesses

On November 8, 2013, OSHA published a proposed rule to amend its current recordkeeping regulations to add requirements for the electronic submission of illness and injury records employers are required to keep under Part 1904. On August 14, 2014, OSHA published a supplemental notice of proposed rulemaking to explore adding provisions that will make it a violation for an employer to discourage employee reporting. **Final Rule - August, 2015**.

- OSHA: Occupational Exposure to Crystalline Silica

On September 12, 2013, the proposed revised silica dust standard was published in the *Federal Register*. Administrative hearings were held beginning on August 18, 2014. All comments, and post-hearing comments have been submitted. **Final Rule – 2016.**

- OSHA: Hazard Communication Global Harmonized System (GHS)

In March 2012, OSHA revised its hazard communication standard to align it with the United Nations'. OSHA has mandated that all affected workers must be trained to read and understand the new safety data sheets and chemical labels. Employers storing, using or handling chemicals must provide workers with compliant GHS training before Dec. 1, 2013. Until the new standard takes effect in 2015, labels and safety data sheets adhering to either the current standards or the new standards will be considered acceptable. Employees need to know how to use the new documentation; however, employers are not required to maintain two sets of labels and safety data sheets for compliance purposes. Employers must update workplace labeling and their hazard communication programs as necessary, including additional employee training for newly identified chemical hazards – June 1, 2016.

- Fair Pay and Safe Workplaces Executive Order

Last July the President issued the "Fair Pay and Safe Workplaces" Executive Order (EO), which could exclude certain contractors and subcontractors from doing business with the Federal government due to allegations of federal and state labor law violations. The Federal Acquisition Regulation (FAR) Council is expected to issue a proposed rule and the Department of Labor (DOL) will issue guidance on the EO this spring. The EO could essentially exclude contractors and/or their subcontractors from doing business with the government even if there is a mere allegation that a company has violated a labor law. This could affect the status of hundreds of contractors and in turn, who they do business with, when performing work for the federal government. **Final Rule – 2015.**