American Foundry Society
Comments on the U.S. Environmental Protection Agency
Evaluation of Existing Regulations Pursuant to Executive Order 13777, Enforcing the Regulatory Agenda
Docket ID No. EPA-HQ-OA-2017-0190

May 15, 2017

The American Foundry Society (AFS) hereby submits the following comments on the U.S. Environmental Protection Agency (EPA) Evaluation of Existing Regulations Pursuant to Executive Order 13777, Enforcing the Regulatory Agenda. AFS urges EPA to consider these comments on burdensome regulations, and make appropriate recommendations to repeal, replace, or modify them to ensure the metalcasting industry continues to protect human health and the environment and to be globally competitive.

I. INDUSTRY OVERVIEW

AFS is the major trade and technical association for the North American metalcasting industry. AFS has more than 8,000 members representing nearly 2,000 metalcasting firms, their suppliers, and customers. The organization exists to provide knowledge and services that strengthen the metalcasting industry for the ultimate benefit of its customers and society. AFS seeks to advance the sciences related to the manufacture and utilization of metalcasting through research, education, and dissemination of technology. AFS also provides leadership in the areas of environmental, safety and industrial hygiene, government affairs, marketing, management, and human resources for the metalcasting industry.

The U.S. metalcasting industry is the second largest supplier of castings in the world, after China. Metal castings are integral to virtually all U.S. manufacturing activities. In the U.S., castings are used to produce 90 percent of all manufactured durable goods and

nearly all manufacturing machinery. The industry is composed of 1,956 facilities manufacturing castings made from iron, steel, and aluminum alloys that have thousands of applications. In addition to the automotive, construction, and defense industries, other major sectors supplied by the metalcasting industry include agriculture, aerospace, energy exploration and conversion, oil and gas, mining, railroad, municipal/water infrastructure, transportation, and health care.

The American metalcasting industry provides employment for over 200,000 men and women directly and supports thousands of other jobs indirectly. The industry supports a payroll of more than $8 billion and sales of more than $20 billion annually. Metalcasting facilities are found in every state, and the industry is made up of predominately small businesses. Approximately 80 percent of domestic metalcasters have fewer than 100 employees.

II. REGULATORY IMPACT OVER THE PAST THIRTY YEARS

According to the Manufacturers Alliance for Productivity and Innovation (MAPI), since 1981 federal agencies have promulgated approximately 2,300 manufacturing-related regulations. This equates to 1.5 regulations every week for 30 years. About one half of the 2,300 federal rules impacting manufacturing were issued by the U.S. Environmental Protection Agency (EPA). Over the last 15 years, the compliance costs associated with these EPA rules are $177 billion, which is more than all other federal agencies combined over that same period.

These federal rules have imposed a significant regulatory burden on U.S. manufacturing without any formal assessment of the cumulative cost to industry. EPA was not required to conduct a cost-benefit analysis for over 90 percent of its rules, because they were not designated as "significant" (a significant rule is defined as a rule that has an impact of $100 million or greater on the U.S. economy). Accordingly, the cumulative impacts of these EPA rules (that separately make a small incremental addition to the regulatory

burdens on U.S. manufacturing) have been layered over 30 years to result in a significant impact.

Provided below are some specific regulations that need to be reviewed, revised, replaced, or eliminated to remove unnecessary burdens on the U.S. metalcasting industry.

III. SPECIFIC REGULATIONS IMPACTING THE METALCASTING INDUSTRY

EPA Greenhouse Gas (GHG) Emissions from Electric Generating Utilities

In 2015, the U.S. Environmental Protection Agency (EPA) finalized new rules designed to limit GHG reductions from both existing and new power plants. The rule for existing plants mandates a 32 percent reduction in CO_2 emissions from the electric power sector by 2030, compared to 2005 levels. The final rule for newly constructed power plants will effectively require use of carbon capture and sequestration (CCS) technology to achieve these emissions goals, even though these control technologies have not yet been demonstrated to be commercially viable.

Metalcasting is one of the most energy-intensive industries in the U.S. As a significant energy consumer, the GHG rules could substantially increase energy costs for metalcasters and potentially disrupt the reliability of the energy grid. EPA should withdraw the rule and develop a more cost effective, reliable, and feasible approach to reduce CO_2 emissions to an appropriate level. A number of leading metalcasting producing states rely heavily depend on utilities where coal is used to generate electricity. EPA regulations that disproportionately impact coal-generated electricity put the affordability and reliability of electricity for foundries at risk.

Residual Risk and Technology Review (RTR) for Iron and Steel Foundry NESHAP for Major Sources

Air emissions from iron and steel foundry major sources are subject to the national emissions standards for hazardous air pollutants (NESHAP). EPA must conduct a

residual risk and technology review (RTR) for all NESHAPs eight years after promulgation. The RTR of the iron and steel foundry NESHAP is now due. Recently, EPA has issued more stringent and revised NESHAPs for several industry source categories, even though the RTR process determined that the risks associated with the controlled emissions from these sources were acceptable and that no new control technologies were identified. This regulatory overreach is not consistent with the letter and intent of the Clean Air Act (CAA), but nonetheless has been upheld by federal appeals courts applying the Chevron doctrine giving great deference to the actions of federal agencies, including EPA. AFS urges the EPA to implement the RTR process for iron and steel foundries that is consistent with the letter and intent of the CAA.

Stormwater Management

Metalcasters operate under a multi-sector general permit (MSGP), as is the case for most industrial stormwater dischargers, and must implement best management practices (BMPs) to meet stormwater benchmark concentration levels. If a benchmark level is exceeded, facilities must review their BMPs and determine if additional BMPs must be implemented, or if other corrective measures are needed.

Many of the benchmark concentration levels for metals have been set so low that it may not be possible for metalcasting operations to meet the benchmarks. In fact, many are so low that nearly all residential and commercial stormwater discharges would exceed them. As a result, many metalcasting operations could face unnecessary enforcement issues, even though their stormwater discharges are effectively controlled with BMPs.

Cost of Typical BMPs

As discussed above, facilities would need to implement one or more BMPs to control stormwater discharges to meet benchmarks. Typical BMPs to reduce suspended solids and metals levels in runoff and their associated capital and annual costs are identified below:

- Inlet protection such as catch basin inserts or filter socks ($6,000 to $10,000/yr);
- Vegetated bioswale or buffer strips ($30,0000 to $50,000, plus $1,000/yr);
- Detention ponds ($150,000 to $200,000, plus $5,000 to $10,000/yr);
- Filter systems ($100,000 to $750,000, plus $10,000 to $20,000/yr);
- Hydrodynamic separators ($75,000 to $300,000, plus $5,000 to $10,000/yr);
- Regular sweeping ($20,000 to $25,000/yr);
- General housekeeping and weekly inspections (as much as $50,000/yr); and
- Inside or covered storage (wood frame building, 3,200 SF at $60,000 to 80,000).

The decisions on which BMPs to implement at a foundry will depend on the specific conditions and needs at each individual facility. If additional BMPs are still not achieving benchmarks (and if EPA required strict compliance or identified possible stream impairment), then end-of-pipe, mechanical/chemical stormwater treatment may be required. While this may appear to be an extreme option, it may be necessary if the facility must meet numeric limits as part of the MSGP or it may be forced to secure an individual facility permit outside the MSGP and thus meet new numeric limits set at or near benchmark values. EPA needs to provide for flexibility in and for enforcing benchmarks as permit levels. If left unchecked this permit process will be never-ending, extremely burdensome, and very expensive for our industry.

Startup, Shutdown, and Malfunction (SSM) Provisions

The CAA provides for some affirmative defenses for facilities that may exceed air emission limits during temporary periods of startup, shutdown, and malfunction (SSM). The U.S. Court of Appeals for the D.C. Circuit vacated the rule that allows facilities to exceed applicable hazardous air pollutant emissions standards during periods of startup, shutdown, and equipment malfunctions (SSM). EPA is also in the process of removing these SSM provisions as part of its residual risk and technology reviews (RTRs) for NESHAPs.

In June 2015, EPA issued a final rule requiring states to revise their state implementation plans (SIPs) to control excess air emissions during periods of SSM and submit revised

plans that address new SSM provisions to EPA for approval by November 22, 2016 (SIP Call Rule). This rule has been challenged in federal court. States and industry groups claim that: 1) EPA does not have the authority to ban affirmative defense for SSM; 2) it is not practical for facilities to comply with emissions standards during periods of SSM; and 3) it will lead to unnecessary violations for emissions over which facilities have no control.

The problem for metalcasting facilities is that even with the best control technologies, emissions may exceed the regulatory standard temporarily during these periods of startup, shutdown, and malfunction, despite the fact that facilities may have a plan in place to minimize emissions during these occurrences. Without some relief, facilities will be subject to enforcement actions that are beyond their control and state regulatory authorities may be faced with an unnecessary and unwanted administrative burden of enforcing such events.

National Ambient Air Quality Standards (NAAQS) for Fine Particulate Matter ($PM_{2.5}$) Air Emissions

In December 2012, EPA finalized its update to the $PM_{2.5}$ rule. The recent changes to the $PM_{2.5}$ standards were set so low that many areas in the country, including some rural areas with no industrial operations, have background $PM_{2.5}$ levels that are at, or near the NAAQS for $PM_{2.5}$. As a result, some foundries are unable to obtain air permits to build new, state-of-the-art metalcasting operations or to expand or update their existing facilities because such activities may contribute $PM_{2.5}$ emissions to an area that would then exceed the NAAQS.

$PM_{2.5}$ air emissions are reduced at metalcasting facilities with the use of baghouses and other pollution control devices. In most cases, more than 99 percent of the fine particulates are captured and not emitted into the environment. Major flexibility is needed for metalcasters in implementing the $PM_{2.5}$ NAAQS, especially as it relates to completing any air dispersion modeling.

Ozone NAAQS Revision from October 2015

This rule set a very stringent emission standard for ozone emissions from all stationary sources in the U.S. This standard is just now starting to be implemented, and is expected to result in significant costs for communities. AFS is concerned that metalcasters will not be able to expand without a reduction of emission or shut down of operations from other businesses in the area. With the revised NAAQS, plans for expansion may be delayed or shelved.

On March 28, 2017 President Trump issued an Executive Order directing EPA to review for possible reconsideration any rule that could "potentially burden the development or use of domestically produced energy sources, with particular attention to oil, natural gas, coal, and nuclear energy sources." EPA is currently evaluating whether the 2015 ozone standard is potentially subject to the review process set forth in this Executive Order.

On April 11, 2017 the D.C. Circuit indefinitely delayed the legal challenge while EPA reconsiders the 2015 ozone standard. EPA should defer implementation of the new Ozone NAAQS standard by at least two years, perhaps more, to allow states and impacted sources more time to prepare to meet the new standard and have a smooth transition from efforts associated with meeting the 2008 Ozone standard.

Waters of the United States

This rule redefines the scope of the Clean Water Act (CWA) to state which waters (such as cooling ponds, catch basins) need to meet CWA standards to protect aquatic life. It is currently stayed while going through litigation, so it is not being implemented. If implemented, it would force foundries to meet CWA standards at waters on their facilities that are currently unregulated.

President Trump signed, Presidential Executive Order on Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the "Waters of the United States" Rule on February 28, 2017. The order directed EPA and the Corps to review the rule and issue a notice and comment for a proposed rule rescinding or revising the rule. With this new

rulemaking EPA should revise this rule to ensure that waters of the U.S. are defined appropriately to not broaden CWA jurisdiction and unnecessarily burden the metalcasting industry.

Definition of Solid Waste – Regulating the Recycling of Valuable Secondary Materials

On January 13, 2015, the U.S. Environmental Protection Agency (EPA) Administrator published the final revisions to the Definition of Solid Waste rule. The primary purpose of the revisions was to close perceived regulatory gaps in the 2008 definition of solid waste rule that allowed the recycling of hazardous secondary materials without onerous regulatory controls. The 2008 rule allowed that if secondary materials were recycled, they were not wastes. The new revisions provide that the recycling of secondary materials can occur only if specific regulatory requirements applicable to waste management are met.

The biggest change in the 2014 revisions is that EPA has withdrawn the "transfer-based" exclusion and replaced it with the "verified recycler" exclusion. Now, off site, third-party facilities that receive secondary materials for recycling must have a RCRA permit. In addition, generators must: 1) notify EPA or authorized state, 2) ensure that materials are contained, 3) maintain records of shipments of materials off site, and 4) meet emergency response and preparedness requirements. While the new revisions provide safeguards for the recycling of secondary materials, they make it more difficult and more expensive to recycle many secondary materials. EPA should revise the definition of solid waste regulations to facilitate the recycling and reuse of valuable secondary materials. This makes good economic sense as well as being protective of the environment and human health.

Chemical Data Reporting Rule

In August 2011, EPA updated the Inventory Update Reporting (IUR) rule and changed the name to the Chemical Data Reporting (CDR) rule. 76 Fed. Reg. 50816 (August 16, 2011). Facilities in the metalcasting industry need to review the chemicals used at the

plant and the applicable regulatory criteria to determine if reportable chemical substances are "manufactured" in amounts that exceed the production thresholds.

Manufacturers and importers of chemical substances that are listed on the TSCA Inventory must submit a CDR report if the chemical substance is:

- manufactured or imported for commercial purposes;
- manufactured or imported above production thresholds; and
- not otherwise exempt from reporting in the rule.

The term, "manufacture," is broadly defined in the rule to mean "manufacture, produce, or import, for commercial purposes. Manufacture includes the extraction, for commercial purposes, of a component chemical substance from a previously existing chemical substance or complex combination of chemical substances." 40 CFR § 711.3. The term, "manufacture for commercial purpose" also applies to "chemicals that are produced coincidentally during manufacture, processing, use or disposal of another substance or mixture, including both by-products that are separated and impurities that remain in a substance or mixture." 40 CFR § 704.3. Many facilities may be subject to the CDR rule as a result of recycling, reprocessing, or reusing a reportable chemical substance.

The CDR rule includes specific provisions for by-products, mixtures, and impurities of chemical substances to determine if they meet the criteria for manufacturing. Metal-bearing compounds, solvents, and other reportable chemical substances that are recycled, reprocessed, or reused may trigger the reporting requirements. For instance, some by-products may be reportable if they are sent off site for recycling or reuse, but would not be reportable if disposed.

This reporting requirement provides a disincentive to recycling and reclamation of valuable secondary materials. In addition, the information that facilities must report pursuant to this rule is duplicative of other information that EPA requires, such as the Toxic Release Inventory (TRI), and in the case of many foundries only requires reporting a very benign by-product (*i.e.*, slag). EPA should consider eliminating this burdensome regulation as there are no environmental benefits.

EPA Spill Prevention Control and Countermeasure (SPCC) - 40 CFR Part 112

The EPA SPCC rule established requirements for facilities to prevent a discharge of oil into navigable waters or adjoining shorelines. It was designed primarily to cover onshore and offshore oil drilling and production facilities, oil refining or storage facilities, and other oil-intensive industries with a high probability of significant damage should an oil release occur. Current SPCC regulations require a comprehensive, detailed plan developed and certified by an engineer, dedication of adequate resources and manpower to react to an unforeseen spill, storage tank testing and evaluation for integrity, and many other elements. While metalcasters and manufacturers do use oils for machining and lubrication, they do not generate nearly the same amounts that are present in the oil production, refining, storage, and distribution sectors. While there is a "streamlined" process for smaller facilities with less than 10,000 gallons of onsite oil storage, many small- and medium-sized manufacturers miss that cutoff, and are essentially held to the same standard as large multi-national corporations and other major producers. The agency should offer more flexibility for smaller scale manufacturing facilities, with multiple lubricant-containing machines, that are above the 10,000-gallon threshold.

IV. CONCLUSION

AFS appreciates the opportunity to provide these comments on EPA's process to evaluate existing regulations. If you have any questions or would like additional information about the comments, please contact Christian Richter or Jeff Hannapel with our AFS Washington office at crichter@thepolicygroup.com or jhannapel@thepolicygroup.com. We look forward to working with you on this process to reduce regulatory burdens impacting the metalcasting industry and domestic manufacturers.