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Questions / Issues / Recommendations Regarding Buy America Implementation of the Bipartisan Infrastructure Law for the Drinking Water and Wastewater Sector (Water Sector)

The historic enactment of the Bipartisan Infrastructure Law (BIL) provides a significant opportunity to support the modernization of our water infrastructure and improve the delivery of safe, reliable drinking water and clean water services to all Americans. Currently, the water sector must comply with iron and steel requirements on a finite and Congressionally-defined list of products such as valves, pipes, manhole covers, tanks, hydrants, etc. The new law however expands Buy America requirements to all iron and steel products used in the water sector as well as all manufactured products, and an expanded list of construction materials. This represents a significant expansion of applicability that will challenge some aspects of the current supply chain and business models used in the water sector.

Currently, the EPA American Iron and Steel (AIS) requirements do not apply to a wide range of critical water sector infrastructure technologies and components including pumps, motors, gear reducers, drives (including variable frequency drives (VFDs)), electric/pneumatic/manual accessories used to operate valves (such as electric valve actuators), mixers, gates, motorized screens (such as traveling screens), blowers and aeration equipment, compressors, meters, sensors, controls and switches, supervisory control and data acquisition (SCADA), membrane bioreactor systems, membrane filtration systems, filters, clarifiers and clarifier mechanisms, rakes, grinders, disinfection systems, presses (including belt presses), conveyors, laboratory equipment, analytical instrumentation, and dewatering equipment. While some of these products and components may be sourced or manufactured in the U.S., some are not and it is unlikely existing manufacturing operations can be moved to the U.S. by the May 15, 2022 deadline for compliance with the BIL.

Unlike the transportation sectors such as highways, public transportation, airports, aviation, and intercity passenger rail that have been subject to Buy America requirements since the Surface Transportation Assistance Act of 1978 (P.L. 95-599), the water sector has limited experience in complying with these types of requirements. Our infrastructure projects tend to be highly engineered and involve multiple companies and products that are sourced globally as well as domestically. Often utilities standardize on particular products to increase operational efficiency and depend on long-standing maintenance agreements with manufacturers they trust and depend on for the life of a product. The validation process for some products, driven by EPA Water Quality standards, operating permits, and certifications required to meet many specifications, also poses challenges and constraints for manufacturers and communities. It is not a simple process to change supply chains and “swap-out” products.

The Administration's intent is to execute projects on time, on task, and on budget while maximizing the use of U.S. manufactured products and materials pursuant to the law and Executive Order 14005, *Ensuring the Future is Made in All of America By All of America's Workers*. While we recognize and can appreciate this intent, the practical reality is that all three components – on time, on task, and on budget, will be difficult for some manufacturers to achieve without the Administration's willingness to issue short-term national and project waivers; increase iron and steel capacity and ensure fair and equal access across all sectors; and ensure that suppliers do not engage in price escalation and price gouging practices. We also believe that Americans deserve, and our environmental laws mandate, use of the best quality, innovative, and leading-edge technologies. Many of these products are manufactured abroad in countries such as Canada, Germany, Sweden, the U.K., Italy, the Netherlands, Brazil, India, Mexico, Australia, etc. and it would be a disservice to the American people to prevent utilities from accessing the best quality products in the marketplace when suitable domestic products are unavailable.

The Water and Wastewater Equipment Manufacturers Association (WWEMA) has conducted two recent surveys of our manufacturers and present the following findings for your consideration.

Insufficient Foundry and Stainless Steel Capacity. Currently, there is insufficient U.S. foundry and stainless steel capacity to meet current needs, much less meet these new and expanded Buy America requirements. The escalating cost and availability of nickel for stainless steel further exacerbates this issue. Some companies that do have domestic access have had their capacity capped and others have already had capacity withdrawn, citing the need to "save capacity for the Federal Government." The water sector also relies on specialized engineered castings, molds, and machining for many products that are produced to order as projects are bid and won. A number of our members have reached out to U.S. foundries to try and source products here and been told they have no interest in taking on their products. Cost-effective stainless steel nuts and bolts made in the U.S. continues to be a challenge for our sector. We are particularly concerned that small and medium sized U.S. businesses may be at a disadvantage in accessing and maintaining capacity as well as the water sector as a whole which will have to compete with all the other sectors like transportation, broadband, roads, bridges, etc. that have significantly more money and larger buying power. What steps does the Administration plan to take to increase domestic iron and steel capacity, ensure that capacity is fairly distributed across all impacted sectors, ensure product delivery on a timely basis, and ensure that price escalations and price gouging is controlled?

Some Products are Not Currently Available in the U.S. WWEMA has identified the following types of products that are currently not manufactured in the U.S. or in sufficient supply. These are critical components needed to operate our drinking water and wastewater treatment plants or to provide treatment for removal of contaminants to protect public health and the environment. While this is not an exhaustive list, it does highlight many of the types of products that are not made in the U.S. They include: motors, including long-shaft motors; ceramic and polymeric membranes; appropriate quality and priced glass for fiberglass; woven belts for belt press sludge dewatering; engineered stainless steel UV reactor vessels including UV lamps, quartz sleeves and lamp drivers, and hydraulic cylinders; high-speed turbo blowers; actuators; high current/high voltage power supplies, transformers, and converters; programmable logic controllers, human machine interface technologies; circuit breakers, circuit boards, fuses, variable frequency drives, and motor starters; submersible pumps; control panel components; instrumentation; electronics; stainless steel nuts and bolts and fasteners; energy saving monitoring equipment; controllers; gear boxes; rubber products; certain elastomers and paints; drives and reducers; 30" pipe; ion exchange resin; gauges; instruments; basket strainers; flow meters; pressure transmitters; and greensand filter media. Some products such as cartridge and bag filters and granular activated carbon

(used for PFAS removal) have only one U.S. source – thus creating a monopoly which can lead to price manipulation, lack of competition that stifles innovation, and insufficient supply.

Calculating 55% of Domestic Content. How does the component test apply for a product or system that has both iron and/or steel and other materials? For example, say a product/system is made from 80% iron and steel and 20% other material by material cost. Does the 80% iron and steel need to be produced in the U.S.? How is the 55% domestic content of the product determined? If 80% already must comply is the product/system in compliance or is the 55% calculated on the remaining 20%. Conversely, if 20% of the product cost is non-domestic iron or steel but the remaining 80% is manufactured in the U.S., is the product/system in compliance? Can value-added labor and other costs be calculated into the material cost of the product? Many companies have plants here in the U.S. that use U.S. workers to manufacture and produce their products even though not all the materials may not be sourced domestically. Additionally, many of our manufactured products are highly engineered and complex pieces of equipment that rely on many suppliers and supply chains for subcomponents. Please see one example below. This poses a significant challenge to the manufacturer in attempting to calculate and meet the 55% domestic component test. It makes no sense that component pricing can include labor, overhead, commission, freight, and R&D in the purchase price but then the top end manufacturer who has to turn all those disparate parts into a highly complex, engineered piece of equipment can't count their labor and other costs when calculating the 55% domestic content. In addition, costs and pricing are often confidential business information and are not publicly shared.



Ozone Generator

- Generator is one of six assemblies to make up a single ozone system order
- System involves over 50 suppliers
- Each system can have over \$100k in engineering costs
- 806 Unique Part Numbers for generator alone
- 5,739 Items in the assembly
- Some components are not available in the U.S.
 - Transformers
 - Electrodes
 - Fuses
 - Control components
- Many components are specified by others

Build Back Better. One of the goals of the Administration is to “Build Back Better.” This is particularly important for the water sector which has products and technologies that can last 20, 30, 40 or more years before needing to be replaced. As we make this historic investment in our infrastructure, we want to ensure that our water utilities have access to the best available technologies as well as products that improve energy efficiency, reduce carbon emissions, conserve water, remove emerging contaminants, and increase water use efficiency. Access to commercial information technology is also critical to improving knowledge and decision-making on water quality and contaminant removal to protect public health and the environment. The unique opportunity to upgrade the U.S. water infrastructure for

generations to come should be flexible to include technological advances that provide more resilient and cost-effective solutions in the water sector. Building a clean energy future, taking action to address climate change, and ensuring the best available technologies are available to monitor, treat, and transport water will maximize our collective investments.

Potential Short-Term Options

As stated, the Administration's intent is to execute projects on time, on task, and on budget while maximizing the use of U.S. manufactured products and materials. In order to accomplish this in the short-term, a number of options should be considered, including:

- 1) **National Waivers.** National waivers should be considered for specific products that research shows are not currently sourced domestically or are found in insufficient quantity or quality. A national waiver would save time and money on the part of utilities which would not need to submit an individual project waiver request for products known not to be produced domestically.
- 2) **Combine and Process Project Waivers as One Package.** Due to the complex engineered nature of drinking water and wastewater systems, it is likely that for any given infrastructure project there will be several products/systems that cannot meet the new domestic content requirements. These should be packaged into one project-specific waiver and moved through the waiver review process as a package so that once a review is complete, the utility will know the status immediately of all the requests in the package. That way they can move forward expeditiously rather than waiting for individual waivers to come in over time.
- 3) **Recognize Equivalency of WTO, USMCA, and "Friendly" Trading Partners.** Many of the products sourced in the water sector come from countries that are part of the World Trade Organization, have unilateral or multi-lateral trade agreements with the U.S. such as the USMCA, or are otherwise considered "friendly" trading partners. Until such time as U.S. manufacturing can expand to fulfill the needs created by these new domestic content requirements, the ability to source products from these approved countries will ensure projects stay on time, on task, and on budget.
- 4) **Conduct Research on Non-Domestic Products.** While we appreciate the Administration's interest in expanding U.S. manufacturing, not all products are created "equal." For example, many of the resins, plastics, polymers, and other chemicals or materials used in some products moved overseas due to the more stringent environmental regulations in the U.S. which made their production here either cost-prohibitive or impossible. While products that provide high value, are critical to ensuring national security, or otherwise improve the U.S. manufacturing base should be encouraged to locate here or expand current domestic capacity, some Federal assistance may be needed to make this happen, particularly for small and medium-sized businesses.

The membership of WWEMA is comprised of a wide spectrum of companies, from small and mid-sized family-owned businesses up to large multi-national companies. We have some members who can currently source all or the majority of their products domestically and many that depend on a complex supply chain structure that sources components both domestically and globally, to some that source all their products abroad. The goal of all these manufacturers is to supply the highest quality products, at a reasonable and fair price, and in a timely manner to U.S. drinking water and wastewater utilities. While our goals are the same as the Administration's, how we will get there in the short- and long-term will require careful thought and implementation to ensure our utilities have timely access

to the new infrastructure funding in the BIL; that their projects can proceed expeditiously at a reasonable cost, which is particularly critical for small and disadvantaged communities that are a focus of this new funding; that U.S. workers can keep their jobs; and that the U.S. can expand our critical manufacturing base. We stand willing to assist the Administration and the Office of Management and Budget to achieve these goals.