

Project Description (Question 6)

Project Background

During a large storm event in late September 2019, approximately 5 inches of rain fell in the Grand Forks area according to the National Weather Service. The heavy rains overwhelmed the drainage system at the Burlington Northern Santa Fe (BNSF) Railroad overhead structure on Interstate 29 (I-29) near reference point 141 and water pooled in the low areas. The existing lift station, which only had one of its two pumps operable during the storm event, could not keep up with the inflow. Eventually water levels rose to the point that the road was inundated, and both the northbound and southbound lanes of I-29 had to be closed. Interstate traffic was detoured through Grand Forks until the issue was corrected the following day with the use of portable temporary pumps.

In addition to the flooding, the storm event had negative impacts on the embankments adjacent to the interstate. The embankments in the northwest, southwest, and southeast quadrants of I-29/BNSF overpass had experienced some sloughing in the past. In the days and weeks after the storm event, the slope in the northwest quadrant in particular began to slide with increased intensity.

Purpose of Project

The purpose of the project is to repair landslides and correct flooding issues that have occurred at a low point on I-29 under the BNSF railroad structure near reference point 141 in Grand Forks. Specific to the flooding issues, stormwater improvements are needed to keep all driving lanes on I-29 clear of standing water during a 50-year storm event, in compliance with North Dakota Administrative Code (Article 89-14, Chapter 01) and the Code of Federal Regulations, Title 23 (Highways), Part 650, Subpart A, Section 650.115. In addition to meeting the state and federal requirements presented here, it is in the public interest to keep the driving lanes of the interstate open for safety and for limiting detours through Grand Forks. To accomplish these objectives, improvements to the lift station, as well other drainage improvements, are required.

Description of Drainage Improvements

Hydrologic evaluation of the site determined that the existing lift station was undersized, and reports from NDDOT staff indicated that there were issues with the reliability of the existing pumps. To correct these two items, an emergency repair project is being undertaken to replace the existing lift station with a new lift station designed to accommodate the 50-year design

rainfall event. The station will house three pumps. Two primary pumps will be used during rainfall events, and one smaller pump will be used to pump persistent groundwater seepage that infiltrates to the lift station. New electrical infrastructure will be installed to support the new lift station. In addition to replacing the lift station, improvements will be made to create more water storage around the low spot of the interstate and improve drainage to the proposed lift station. New, larger forcemains will also be installed to transport the larger water volume away from the low point. Implementation of these improvements, primarily the increased reliability and capacity of the lift station, will benefit the public by keeping I-29 open to traffic during rainfall and snowmelt events for years to come.

Listing of Materials, Technical Specifications, and Quantity (Question 10)

5,000 gpm submersible pumps: Two (2) 5,000 gallon per minute (gpm) pumps at 52 ft of total dynamic head (tdh), overhead closed coupled submersible pumps/motor: 3-phase, 480 V, 60 Hz, explosion protection to NEC Class1, Div1, Gr. C, D T3.

500 gpm submersible pump: One (1) 500 gpm pump at 83 ft of tdh, overhead closed coupled submersible pump/motor: 3-phase, 480 V, 60 Hz, explosion protection to NEC Class1, Div1, Gr. C, D T3.

PSC Code for both types of pumps: PSC-H143

NAICS Code for both types of pumps: 237110 Water and Sewer Line Related Structures Construction

The estimated cost for the three pumps is \$400,000. The country of origin of the pumps is unknown at this time, until a specific pump is selected. The lift station was designed based on Flygt pumps, which are produced in Sweden, but there are other manufacturers that produce pumps that would meet the technical requirements for the project. Pumps meeting the technical requirements for the project are produced in Sweden, Germany, Japan, Denmark, and Scotland. Some pumps meeting the technical requirements for the project are assembled in the United States, but include foreign iron and steel components, and thus do not meet FHWA's Buy America requirements for iron and steel.

NDDOT is seeking a waiver of FHWA's Buy America requirements for iron and steel included in 23 USC 313. FHWA's long standing waiver for Manufactured Products requires that all iron and steel incorporated into a project meet those requirements, regardless of whether or not those materials would be included in an item otherwise deemed a "manufactured product". Pumps meeting the requirements for the project contain motors produced outside the United States and those motors contain iron and steel components that do not meet the standard of 23 USC 313. While this waiver is requesting relief from the requirements of 23 USC 313, the application is made following the waiver requirements specified in the BABA Act.

Technical Specification (Question 10.1)

MATERIALS

A. Storm Water Pumps

1. Duty Pumps and Motors

- a. Provide two new electric motor driven submersible pumps and motors as shown on the Plans with the necessary characteristics and properly selected to meet the following requirements:
 - (1) Submersible with Permanent-set Discharge Elbow
 - (2) Submersible pump designed for solids-bearing stormwater
 - (3) 3-ph, 480 V, 60 Hz
 - (4) Impeller non-clog design, solids passing size of 3 inches
 - (5) Primary design point: 5,000 gpm @ 52 feet of total dynamic head (TDH)
 - (6) Secondary check point: approximately 4,200 gpm @ 63 feet of TDH
 - (7) Constantly increasing head characteristics from design condition to shutoff head
 - (8) Motors capable of driving the pump through the full operating range without overloading at any point on the pump curve.
 - (9) Inverter-rated motors intended to run on variable frequency drives.
 - (10) Integral pump cable with power and motor sensor conductors.
 - (11) Cooled by pumped liquid; capable of running dry without damage to any part of the pump while out of pumped liquid for extended periods.

2. Dewatering Pump and Motor

- a. Provide one new electric motor driven submersible pump and motor as shown on the Plans with the necessary characteristics and properly selected to meet the following requirements:
 - (1) Submersible with Permanent-set Discharge Elbow
 - (2) Submersible pump designed for solids-bearing stormwater
 - (3) 3-ph, 480 V, 60 Hz
 - (4) Impeller solids passing size of 3 inches
 - (5) Primary design point: 500 gpm @ 83 feet of TDH
 - (6) Constantly increasing head characteristics from design condition to shutoff head
 - (7) Motors capable of driving the pump through the full operating range without overloading at any point on the pump curve.
 - (8) Integral pump cable with power and motor sensor conductors.

- (9) Cooled by pumped liquid; capable of running dry without damage to any part of the pump while out of pumped liquid for extended periods.

3. Pump Suppliers

- a. For reference, the lift station design has been based on Flygt's NP 3315 LT 3~ 627 submersible pump for the duty pumps, and Flygt's NP 3153 HT 3~ 462 submersible pump for the dewatering pump.

4. Motors

- a. Bear the nameplate of manufacturer, with current and operating characteristics noted below.
- b. Guaranteed to operate continuously at full-rated load and speed.
- c. Operate up to an ambient temperature of 40° C.
- d. The pump shall not overload the motor at any operating range of head on curve of the pump.
- e. Service factor minimum: 1.15
- f. Provide moisture resistant insulation with the motor windings.
- g. Insulation Class H
- h. Capable of 15 starts per hour.
- i. Provide a moisture detection system to detect water intrusion into the stator chamber and into the junction chamber.
- j. Provide manufacturer pump protection control module for pump overtemperature and seal fail monitoring.

5. Suitability

- a. All parts of this pumping unit must be designed for the service required without vibration or cavitation of the impeller. Provide new equipment and the standard product with component parts fabricated on a principal of interchangeability to facilitate ready replacement. Provide the minimum clearances shown on the Plans when installed in the space provided. Supply all necessary wrenches or specialty needed tools.

Pump Manufacturer Summary Table (Question 11.1.1)

Manufacturer	Overhead Submersible Centrifugal	Automatic Coupled with Rails	Meets Conditions	Recommended	Meets BABA	Source Country	Comments	Contact Information	Website
Flygt	Yes	Yes	Yes	Yes	No	Sweden		Steven Forsythe, SForsythe@electricpump.com, 612-840-9499	
Hydromatic	Yes	Yes	Yes	Yes	No	Assembled in the United States	Pumps are assembeled in the US (Ashland Ohio), and for smaller pumps (less than 6" discharge), castings are poured at a US foundry. However, pumps include foreign iron and steel components. Approximately 55% of components for smaller pumps come from US, approximately 52% for larger pumps.	Dave Redlin, Dave@dpc.us.com, 605-886-4672	https://www.pentair.com/en-us/brands/hydromatic.html
KSB Pumps	Yes	Yes	Yes	Yes	No	Germany			https://www.ksb.com/en-global/centrifugal-pump-lexicon/article/submersible-pump-1118066
Keen Pumps	Yes	Yes	Yes	Yes	No	Assembled in the United States	Randal Recker responded 6/21/23 indicating that their pumps do not currently meet BABA requirements.	Randal Recker, Randal@keenpump.com	https://www.keenpump.com/products/14-submersible-solids-handling-pumps/k14vk
ABS Pumps	Yes	Yes	Yes	Yes	No	Germany			https://www.sulzer.com/en/shared/products/submersible-sewage-pump-type-abs-xfp
Pentair (Aurora)	Yes	No	No	No	No	Assembled in the United States	Pumps are assembeled in the US (Ashland Ohio), and for smaller pumps (less than 6" discharge), castings are poured at a US foundry. However, pumps include foreign iron and steel components. Approximately 55% of components for smaller pumps come from US, approximately 52% for larger pumps.	Bryan Goehring_Bgoehring@wwgoetsch.com_952-374-6472, Ray Hobson_ray.hobson@pentair.com	https://www.pentair.com/en-us/products/business-industry/water-supply-pumps/end-suction-pumps/aurora-3800-series-single-stage-end-suction-centrifugal-pumps.html
Barnes Pumps	Yes	Yes	Yes	Yes	emailed	Unknown	Initial response from Myron at Pump Systems indicated that some of their pumps are BABA compliant. Followed up multiple times about BABA compliant pumps that would meet the requirements for this project, but did not receive a response.	Myron Hintz_Myron@pumpsystems.com_701-225-0320	https://www.cranepumps.com/Products/Details/sh-non-clog-pump-2
Chicago Pump (Yeomans?)	n/a	n/a	n/a	n/a	n/a	n/a	Acquired by Grundfos.	n/a	
Deming	Yes	No	No	No	No	Assembled in the United States	Pumps are assembled in the United States with foreign parts.	Steven Forsythe _SForsythe@electricpump.com _ 612-840-9499	https://www.pumppproducts.com/media/amasty/amfile/attach/8n9k8aKuHL5pmbVVR3sWoRCKTo1H4ilk.pdf
Ebara International	Yes	Yes	Yes	No	No	Japan	Some of their pumps are assembled in the United States with foreign parts.		https://www.pumpsebara.com/product/dmleu/
Essco	No	No	No	No	n/a	n/a	Pumps are assembled in the United States with foreign parts.		https://www.esscopumps.com/
F.E. Myers	Yes	Yes	Yes	Yes	No	Assembled in the United States	Pumps are assembeled in the US (Ashland Ohio), and for smaller pumps (less than 6" discharge), castings are poured at a US foundry. However, pumps include foreign iron and steel components. Approximately 55% of components for smaller pumps come from US, approximately 52% for larger pumps.	Bryan Goehring_Bgoehring@wwgoetsch.com_952-374-6472, sandy.salmons@pentair.com	https://www.pentair.com/en-us/products/business-industry/water-disposal-pumps/submersible-pumps/myers-12vl-12vlx-12-inch-solids-handling-pumps.html?queryID=275ac4eafa9f401e2da41eee4600fe2e&objectID=https://www.pentair.com/en-us/products/business-industry/water-disposal-pumps/submersible-pumps/myers-12vl-12vlx-12-inch-solids-handling-pumps.html&indexName=prod_pentair_products
Flowserve	Yes	Yes	Yes	Yes	No	Sweden		PSI Engineering_psi@psinngineering.com_952-237-5877	https://www.flowserve.com/en/products/products-catalog/pumps/overhung-pumps/solids-handling-pumps-msx/
Galigher/Weir	Yes	No	No	No	n/a	n/a	Pumps are primarily heavy duty slurry and dredge pumps, they do not appear to fit our project needs.		https://www.global.weir/product-catalogue/pumps/submersible-pumps/submersible-slurry-pumps
Godwin	Yes	No	No	No	No	United Kingdom	Godwin pumps are part of the Xylem brand, appear to be strictly for low flow and dewatering applications.		https://www.xylem.com/en-gr/products--services/pumps-packaged-pump-systems/pumps/submersible-pumps/submersible-dewatering-pumps/gsp-series/godwin-gsp10-77da3f50/
Gorman-Rupp ¹	Yes	Yes	Yes	Yes	No	Assembled in the United States	They confirmed that more than 55% of their submersible pump components are sourced in the US, however they do not produce pumps that are large enough to meet the capacity needs of the duty pumps for the I-29 project. At the required head, they indicated that their largest pump could operate in the 1400-1500 gpm range, while we have specified two pumps operating at 5000 gpm for the project.	Crane Engineering, Burnsville Mn	https://www.grpumps.com/product/pump/SF-Series-Infinity
Goulds	Yes	Yes	Yes	Yes	emailed	Pending	In initial inquiry, they indicated that some of their pumps meet BABA requirements, put in an inquiry for project specific pumps they indicated they could not supply pumps that meet the project requirements and be BABA compliant.	Eric Black_eric@adelmann.com_612-259-0682	https://www.gouldspumps.com/en-US/Products/HSUL/
Grindex	Yes	Unknown	Unknown	Unknown	No	Sweden	Pumps do not appear to accommodate flows greater than 700 gpm.		https://www.grindex.com/en-us/products/drainage-pumps/major-n--h/specifications/?facetids=1273
Grundfos	Yes	Yes	Yes	Yes	No	Denmark		Joe Masterson_jmasterson@grundfos.com	https://product-selection.grundfos.com/us/categories/pumps/submersible-groundwater-pumps
Marlow Pumps?	n/a	n/a	n/a	n/a	n/a	n/a	Pump brand appears to have been discontinued.		https://www.xylem.com/en-us/brands/goulds-water-technology/products/all-products/marlow-series--530-series-swimming-pool-pumps/

Pump Manufacturer Summary Table (Question 11.1.1)

Manufacturer	Overhead Submersible Centrifugal	Automatic Coupled with Rails	Meets Conditions	Recommended	Meets BABA	Source Country	Comments	Contact Information	Website
MWI Pumps	Yes	Yes	No	No	Yes	United States	In an email response on 8/18/23 Bill Miller indicated that their pumps are BABA compliant, but they do not produce pumps for a Total Dynamic Head (TDH) great than 50 feet, and thus their pumps will not work for this project.	Bill Miller_billm@mwipumps.com_954-682-2062	https://mwipumps.com/
Nagle Pumps	Yes	Yes	Yes	Yes	emailed	Pending	Contacted multiple times, did not receive response.	Nagle Pumps Inc_Sales@naglepumps.com_708-754-2940	https://www.naglepumps.com/vertical-submersible-pumps/
Paco Pumps	Yes	Yes	Yes	Yes	No	Denmark	Now a part of Grundfos.	Joe Masterson_jmasterson@grundfos.com	
Precision Powered Products ²	No	No	No	No	Yes	United States	Precision Powered Products offers vertical turbine pumps that meet BABA requirements. However they also indicated that the vertical pump type is recommended for clean water (not stormwater) and has minimal capacity for passing solids suspended in stormwater.	Itamar Vandelli, itamar@p-p-p.com	https://precisionpowered.com/
Pumpex	n/a	n/a	n/a	n/a	n/a	Sweden	Sulzer acquired company and began phasing out Pumpex Brand in 2016.		
Sykes Pumps	No	No	No	No	n/a	n/a	Sykes pumps do not meet project needs.		https://sykesgroup.com/product-category/pumps/
Vaughan ¹	Yes	Yes	Yes	Yes	No	Assembled in the United States	Pumps are assembled in US, but motors include foreign iron and steel.	Brad Beerbower_brad.beerbower@chopperpumps.com_360-249-4042	https://www.chopperpumps.com/products/chopper-pumps/
Wemco/Weir	Yes	Yes	Yes	No	No	Scotland			https://www.trilliumflow.com/brands/wemco/
Zoeller	Yes	No	No	No	n/a	n/a	Appear to be for low flows.		https://www.zoellerpumps.com/product/160-series-sump-and-effluent-pumps/

Notes

1) Gorman-Rupp and Vaughan both said that 55% of the pump components could be sourced domestically, meeting the requirements under BABA for a Manufactured Product. However, FHWA's Manufactured Products waiver requires that 100% of the iron and steel used in Manufactured Products be of domestic origin, and this cannot be met at this time. Additionally, Gorman-Rupp indicated that they do not produce pumps large enough to meet the capacity needs of the duty pumps for the I-29 project.

2) Precision Powered Products said that their vertical turbine pumps meet BABA requirements with all iron and steel components being sourced in the USA. However they also indicated that the vertical pump type is recommended for clean water (not stormwater) and has minimal capacity for passing solids suspended in stormwater. They indicated they could provide pumps that meet the project need but would not have all iron and steel components being sourced in the USA (similar to other manufacturers).

Relevant Approved Build America Buy America Waivers

EPA

- De Minimis general applicability waiver, when products of iron and steel comprise no more than 5 percent of the total project cost, approved October 21, 2022. [US EPA BABA De Minimis Waiver](#)
- Minor (ferrous) components of iron and steel products general applicability waiver, approved April 11, 2023. [Public Interest: Minor Components of Iron and Steel Products Waiver for Build America, Buy America Act \(epa.gov\)](#)
- WIFIA Program waiver for projects in design planning, approved June 22, 2022. [EPA - WIFIA Public Interest Waiver - Design Planning_22JUN2022.pdf](#)

USDA

- USDA waiver for de minimis, small projects, and minor ferrous components, approved September 13, 2022. [USDA Public Interest Waivers, Components of Build America, Buy America Provisions](#)

FHWA

[Buy America Waivers Processed - Buy America - Contract Administration - Construction - Federal Highway Administration \(dot.gov\)](#)

- 4 submersible water pumps; Michigan; March 19, 2007; \$880,000; Not available domestically
- 5 submersible water pumps; Illinois; May 3, 2012; \$190,000; Not available domestically
- 6 submersible water pumps; Michigan; May 16, 2012; \$367,000; Not available domestically
- 1 submersible water pump; North Dakota; June 15, 2016; \$11,000; Not available domestically



April 12, 2022

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. 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; 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 assemble 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. In addition, costs and pricing are often confidential business information and are not publicly shared.



AQUA-AEROBIC SYSTEMS, INC.
A wastewater company



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.