



Drinking Water State Revolving Fund American Iron and Steel Requirement

2018 Annual Report Addendum



I. Overview of the American Iron and Steel (AIS) Requirement

A. History of the AIS Requirement

Congress first introduced a domestic procurement preference for the State Revolving Fund (SRF) programs under the American Recovery and Reinvestment Act (ARRA) of 2009, which provided the SRF programs an additional \$6 billion in funding. ARRA included a "Buy American" provision that required Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) assistance recipients of these ARRA funds to use domestic iron, steel, and manufactured goods.

In 2014, Congress introduced a new domestic procurement preference for the SRF programs under the Consolidated Appropriations Act (CAA) of 2014 (P.L. 113-76), which included the "American Iron and Steel (AIS)" requirement. The AIS requirement states that CWSRF and DWSRF assistance recipients must use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of public water

system or treatment works if the project is funded through an assistance agreement executed beginning January 17, 2014, through the end of Federal Fiscal Year (FFY) 2014. Since the enactment of the CAA of 2014, the AIS requirement has been included for DWSRF-funded projects in each subsequent appropriation bills. On October 23, 2018, the President signed the "America's Water Infrastructure Act of 2018" (AWIA). Section 2022 of AWIA amended Section 1452(a)(4)(A) of the Safe Drinking Water Act (SDWA) to extend the AIS requirement for projects receiving financial assistance from the DWSRF through FFY 2023. For details see the memorandum, [Application of American Iron and Steel Requirements for Drinking Water State Revolving Fund Projects for Fiscal Years 2019 Through 2023](#). Exhibit 1 shows a timeline of the legal authorities of the AIS requirement for the DWSRF program through FFY 2018.

Exhibit 1: Timeline of AIS Legal Authority for the DWSRF Programs

2009 Congress passed the ARRA of 2009, which includes the "Buy American" provision and was the first domestic procurement preference for SRF programs

2014 Congress passed the CAA of 2014 which included the AIS requirement for the DWSRF program through September 30, 2014

2014 Congress passed the Consolidated and Further Continuing Appropriations Act of 2015 which included the AIS requirement for SRF programs through September 30, 2015

2015 Congress passed the CAA of 2016 which included the AIS requirement for the DWSRF program through September 30, 2016

2016 Congress passed the Further Continuing and Security Assistance Appropriations Act of 2017, which included the AIS requirement for SRF programs through April 28, 2017

2017 Congress passed the CAA of 2018 and Supplemental Appropriations for Disaster Relief Requirements Act of 2017, which included the AIS requirement for the DWSRF program through

2018 Congress passed the CAA of 2018, which included the AIS requirement for the DWSRF program through September 30, 2018

2018 The President signed the "America's Water Infrastructure Act of 2018" (AWIA), which extends the AIS requirement for the DWSRF program through September 30, 2023

Iron and Steel Products Covered by the AIS Requirement

Under the AIS requirement, an iron or steel product is considered one of the following products that is made primarily of iron or steel and is permanently incorporated into the public water system or treatment works:

- Lined or unlined pipes or fittings;
- Manhole covers;
- Municipal castings;
- Hydrants;
- Tanks;
- Flanges;
- Pipe clamps and restraints;
- Valves;
- Structural steel;
- Reinforced precast concrete; and
- Construction materials.

Primarily Iron or Steel, Permanently Incorporated

Under the AIS requirement, a product is considered to be made primarily of iron and steel if it is made up

of greater than 50% iron or steel, measured by material cost. For example, the iron portion of a fire hydrant would likely be the bonnet, body and shoe, and the cost then would include the pouring and casting to create those components. The other material costs would include non-iron and steel internal workings of the fire hydrant (i.e., stem, coupling, valve, seals, etc). The assembly of the internal workings into the hydrant body would not be included in this cost calculation. If one of the listed products is not made primarily of iron or steel, it does not need to be produced in the United States. However, if a product is listed above, made primarily of iron or steel and permanently incorporated into the project, then the product must be produced in the United States, or otherwise be covered by a waiver (discussed more in the Section II). For a product to be produced in the United States all manufacturing processes, excluding application of external coatings of components, must take place domestically the EPA has published an [implementation memo and a series of question and answer](#) documents that address the types of projects that must comply with the AIS requirement and the types of products covered by the AIS requirement.



Project Highlight: Roswell, NM

The EPA visited the Water Main Replacement Project for the City of Roswell, NM in February 2018. The city of Roswell received \$4.8 million in DWSRF funding for the removal and replacement of portions of 36-inch and 48-inch diameter concrete cylinder water mains installed in the 1960s. Due to corrosive soil areas, the mains were leaking and failing as evidenced by numerous breaks in recent years. The city had previously spent \$2 million in spot repairs. Ductile iron pipe was used for the 36-inch water main

and fiberglass was used for the 48-inch water main. The City disqualified the two lowest bidders on the 36-inch main project because they were not using AIS-compliant pipe. However, the selected contractor on the 36-inch main project was the low bidder on the 48-inch main project. The 36-inch diameter water main was replaced in 2015. The 48-inch diameter water main replacement project started in April 2017 and is now complete.



Project Highlight: Gainesboro, TN

The EPA visited the Town of Gainesboro, TN water line and meter replacement project in February 2018. The project was broken into three contracts under a single \$648 thousand DWSRF loan. The first contract was to replace service lines, the second to replace distribution lines, and the third to install meters. The meters include both zone meters to better track distribution water loss and radio read customer meters. The purpose of this project was to reduce leaks in the distribution system, which were leading to greater than 50 percent unaccounted-for water. At

the time of the site visit, AIS product certifications and documentation were on file for all products incorporated into the project and the certifications were all letters from the manufacturer's representative. Also, the project engineer was tracking *de minimis* items in a clear and comprehensive manner. Following the criteria of the national waiver, the products were low cost and incidental items and were well under five percent of the material costs. Construction for this project began June 2017 and is now complete.



II. Compliance with the AIS Requirement

A. First and Foremost, Buy Domestic

DWSRF assistance recipients should procure domestic iron and steel products to ensure compliance with the AIS requirement. A state or assistance recipient can contact the EPA if they are having difficulty locating a domestic product and the EPA can help with product research.

B. Certification Letters

Manufacturers should provide certification letters to verify that their iron or steel products comply with the AIS requirement. These certification letters also establish accountability and better enable assistance recipients to take enforcement actions against potential violators. A proper certification letter should assert that all manufacturing processes for purchased iron or steel products were domestically-performed. The EPA recommends these letters contain the following five key elements:

- **Products Delivered-** The letter should list the specific iron or steel product(s), including the quantity, delivered to the project site.
- **Location of Manufacturer-** The letter should include the city and state of the manufacturing facility where the product or process took place (not its headquarters), multiple locations are okay as long as all of them are in the U.S.
- **Reference to Specific Project-** The letter should include the name of the project or jurisdiction where the product was delivered.
- **Signature of Company Representative-** The letter should include a signature from a company representative on company letterhead.
- **Reference to the AIS requirement-** The letter should include a reference to the EPA's AIS requirement, especially if the letter also references other domestic preference laws (e.g. ARRA's Buy American requirement or the Buy America Act).

C. Waivers

The EPA has authority to waive the AIS requirement and to issue waivers for a case or category of cases

where EPA finds (1) that applying these requirements would be inconsistent with the public interest; (2) iron and steel products are not produced in the U.S. in sufficient and reasonably available quantities and of a satisfactory quality; or (3) inclusion of iron and steel products produced in the US will increase the cost of the overall project by more than 25 percent. There are two main types of waivers: national and project-specific.

Rise in Domestic Manufacturing

The EPA has seen a steady rise in domestically produced iron and steel products since the inception of the AIS requirements in 2014. Manufacturers have constructed new foundries and continue to invest in their domestic manufacturing capabilities. As a result, products the EPA had previously approved waivers for due to lack of domestic availability are now being readily manufactured in the United States. The EPA will continue to promote domestic manufacturing through the AIS requirements.



National Waivers

National waivers are readily available for use by assistance recipients or manufacturers and, therefore, do not require any approval by the EPA prior to use. As of June 30, 2018, the EPA has issued the following five national waivers:

- **De Minimis Waiver-** a public interest waiver that allows SRF assistance recipients to use a small percentage of incidental iron and steel products of unknown or non-domestic origin in their projects. For more details see the memorandum, [De Minimis Waiver Pursuant to Section 436 of P.L. 113-76, Consolidated Appropriations Act.](#)
- **Plan and Specs Waiver-** a public interest waiver that allows assistance recipients to use non-domestic iron and steel products for eligible projects that had engineering plans and specifications approved by an appropriate state agency prior to and on April 2014. For more details see the memorandum, [Plans and Specifications Waiver of Section 436 of P.L. 113-76, Consolidated Appropriations Act.](#)
- **Minor components in Iron and Steel Products (with Cost Ceiling)-** an availability waiver that allows iron and steel product manufacturers to include a small percentage of non-domestic, minor components in otherwise AIS-compliant products. For more details see the memorandum, [National Product Waiver for Minor Components in Iron and Steel Products \(with Cost Ceiling\).](#)
- **Short-Term Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles-** an availability waiver that allows iron and steel product manufacturers the use of non-domestic stainless-steel nuts and bolts in the specified products that are otherwise AIS-compliant. This waiver has been extended several times since originally approved in 2015. The final extension of this waiver is currently in place until February 24, 2020; upon expiration, the EPA has indicated the waiver will not be renewed. For more details

see the memorandum, [Final Extension of the Short-Term Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints Flanges, and Saddles.](#)

- **Product Waiver for Pig Iron and Direct Reduced Iron** – an availability waiver that allows iron and steel product manufacturers to use non- domestic pig iron and direct reduced iron in otherwise AIS-compliant products. For more details see the memorandum, [National Product Waiver for Pig Iron and Direct Reduced Iron.](#)



Project-Specific Waivers

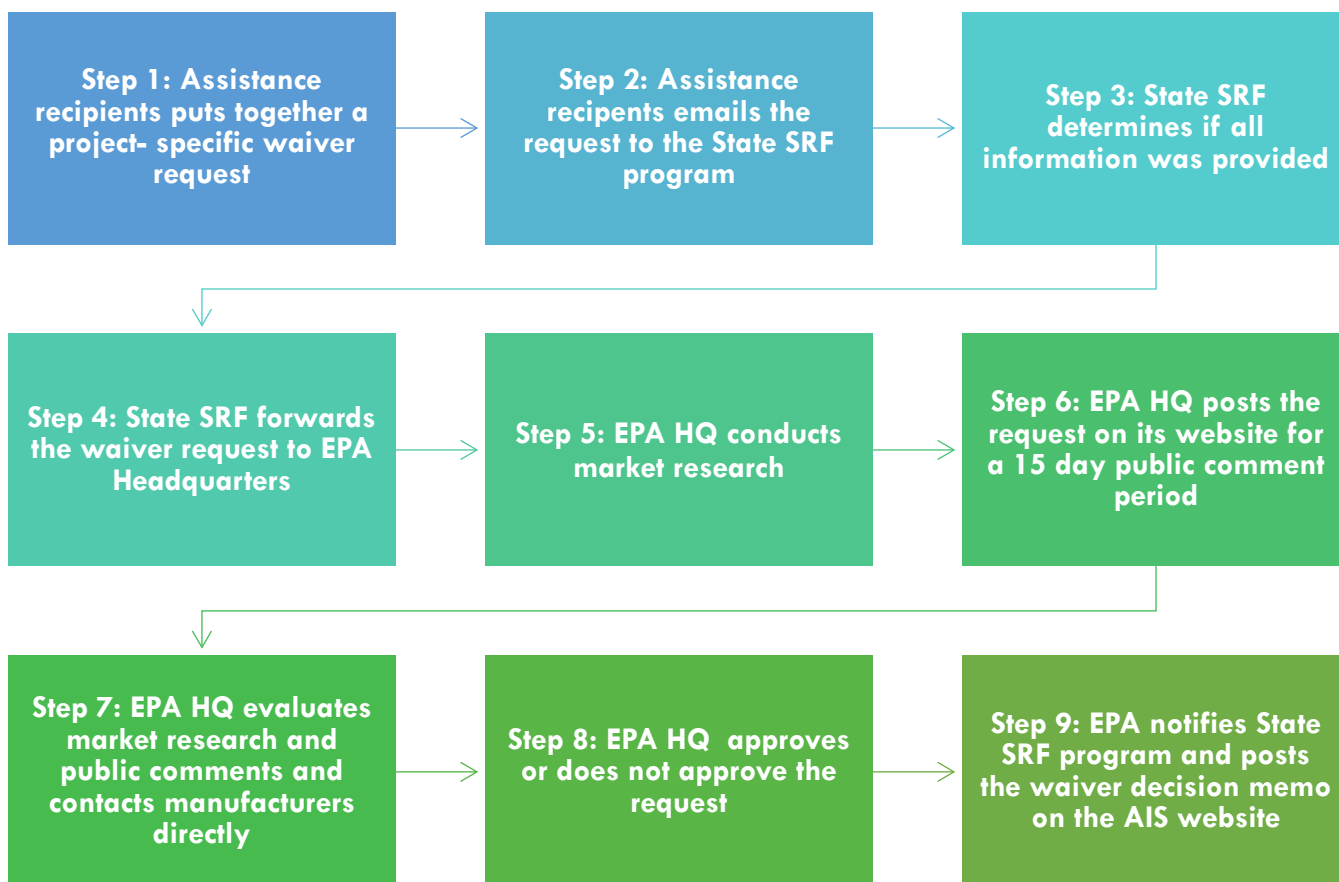
Project-specific waivers are for the use of a specified non-domestic product for a specific project. An assistance recipient may request this waiver from the EPA through their state SRF Program. Exhibit 2 shows the multi-step decision process of a project-specific waiver request. Waiver requests must be approved by the EPA before a non-domestic iron or steel product can be permanently incorporated into an SRF-funded project. Because these waiver requests are both project and product specific, any other assistance recipient that wishes to use a similar product must apply for a separate waiver based on specific project circumstances. As of June 30, 2018, the EPA approved 17 project-specific waivers for DWSRF projects, with 6 being approved in SFY 2018.

All approved and not approved project-specific waiver requests can be found on the [EPA AIS website](#).

D. Noncompliance

A DWSRF assistance recipient is in noncompliance with the AIS requirement if a non-domestic iron or steel product, not covered by an EPA-issued waiver, is permanently incorporated into their project. If there is potential noncompliance, it is the responsibility of the state DWSRF program to work with the assistance recipient on corrective measures (i.e., requesting a project-specific waiver or replacing the product with a practicable domestic alternative). The EPA is available to assist the state SRF program with assessing appropriate enforcement action if the assistance recipient fails to complete the corrective measures.

Exhibit 2: Decision Process for Project-Specific Waiver Request



Project Highlight: Arkansas City, KS

The EPA visited the City of Arkansas City, KS Water Treatment Plant Project in April 2017. A \$22 million assistance agreement for Arkansas City, one of the largest in Kansas at the time, included two projects: 1) Construction of a new 1.5 MG pre-stressed concrete finished water storage tank; and 2) Construction of a new 5.4 MGD reverse osmosis water treatment plant and associated site work, including mechanical, electrical, supervisory control and data acquisition (SCADA) and process systems.

The project includes a significant amount of iron and steel products. The City revised the design during the bid phase to accommodate the lack of a domestic alternative for one of the products needed. A bid addendum was issued to allow alternative materials for restrained joints. This change allowed the City to avoid having to request a product specific waiver to use a non-domestic product. The City was utilizing the national *de minimis* waiver and had a list of the items to-date that were covered by this waiver. At the time of the site visit the new storage tank was complete apart from testing and disinfection to put the tank into service. Construction of the new water treatment plant was underway and is now complete.



Project Highlight: Winnsboro, SC

The EPA visited the Broad River Raw Water Intake in the town of Winnsboro, SC in May 2018. The Town received \$13 million in DWSRF funding to establish a new intake on the Broad River to serve the water treatment plant and includes a new intake and pump station, as well as, a transmission main to transport raw water to the treatment plant. Previously, the water treatment plant relied on a reservoir that was dependent on rainfall. During recent droughts, the reservoir proved inadequate requiring the Town to purchase water from other water systems at a significant cost. The design for the project was completed in Fall 2017 and construction began in December 2017. The project is now complete. The engineer collected the certification letters during the submittal process and will keep copies for at least 3 years, a best practice recommended by the EPA. The engineer will also provide the letters to the Town.



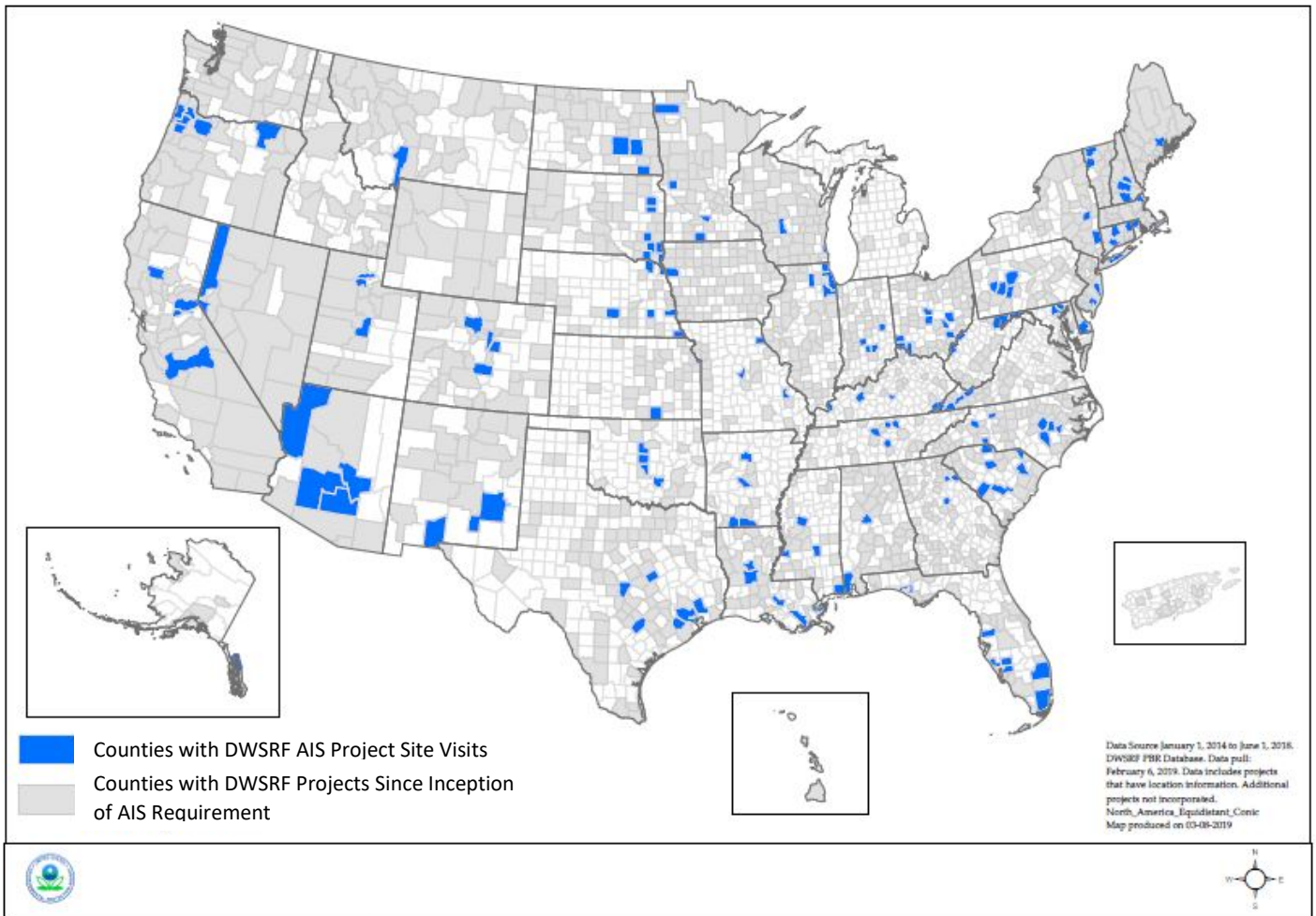
III. Oversight of the AIS Requirement

A. Project Site Visits

As a part of the EPA’s oversight of the AIS requirements, the EPA conducts informal project site visits. These visits assess consistency of AIS implementation and initiate one-on-one discussions with assistance recipients to reiterate AIS requirements, conduct preliminary review of project AIS documentation and materials, and identify potential areas of non-compliance for projects to address prior to substantial completion. Following the site visit, the EPA provides the state SRF program and assistance recipient with observations and recommendations for improving AIS documentation.

Exhibit 3 highlights all of the projects that have been visited since the inception of the AIS requirement in January 2014. As of June 30, 2018, the EPA has conducted a total of 170 site visits at 46 of the 51 DWSRF programs, visiting 57 projects in 15 states during SFY18. These projects range in size, cost, and type. Of the projects visited in SFY18, the lowest total project cost was approximately \$215,000 and the highest was \$196 million; while the smallest population served was one hundred and the largest was one million.

Exhibit 3: Project Site Visit Map Since the Inception of the AIS Requirement (January 2014)



Common Observations

Generally, the EPA has observed domestic products being purchased and installed at DWSRF-funded project sites, and the visits continue to confirm that most products covered by the AIS requirements are readily available from domestic sources. Some common observations include inadequate or missing certification letters and unfamiliarity with or inappropriate use of national AIS waivers, especially the *de minimis* waiver.

B. Trainings

The EPA conducts trainings and outreach activities to engage various groups through in-depth discussions on AIS requirements and implementation. The trainings are attended by SRF assistance recipients, state SRF program staff, consulting engineers, general construction contractors, suppliers, and manufacturers. The EPA tailors the information presented based on the target audience. During SFY18, the EPA participated in 12 training and outreach events, including manufacturer meetings, state trainings, and national conference presentations. The EPA offers these trainings on an ongoing basis upon request.



Looking to the Future

Since 2014, the EPA has provided billions of dollars to states under the Drinking Water State Revolving Fund program for drinking water infrastructure system upgrades in thousands of communities across the United States. With the successful implementation of the AIS requirements to date, an overwhelming majority of these DWSRF projects have installed domestic products, thus protecting American manufacturing jobs, creating local construction jobs, and protecting public health. The EPA will continue to promote domestic manufacturing and conduct robust oversight to ensure appropriate application of the AIS requirements.

For more information about the Drinking Water State Revolving Fund, please contact us at:

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