

Clean Water & Drinking Water State Revolving Funds

American Iron and Steel Requirement

2019 Annual Report



A MESSAGE FROM THE OFFICE DIRECTORS

We are pleased to share the 2019 State Revolving Fund (SRF) American Iron and Steel (AIS) Annual Report. Since enactment of the AIS requirement in 2014, several thousand critical water infrastructure projects have successfully implemented the requirement and brought business to domestic manufacturers.

During State Fiscal Year (SFY) 2019, our Clean Water and Drinking Water SRF AIS Teams conducted 102 educational site visits to communities with ongoing SRF projects and discussed the AIS requirement at 12 training events and conferences around the country. This oversight of the requirement and the SRF programs ensures that domestic products are being used in SRF projects.

We appreciate everyone's dedication to implementing the AIS requirement and continued commitment to domestic manufacturing and American jobs.

Sincerely,



Jennifer L. McLain, Director

Office of Ground Water and Drinking Water



Andrew D. Sawyers, Director

Office of Wastewater Management

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

A. Background

The Clean Water and Drinking Water State Revolving Fund (SRF) programs were established in 1987 and 1996, respectively. Each of the 50 states and Puerto Rico operates its own SRF program. They receive annual capitalization grants from EPA, which they use to provide low interest loans and other types of assistance for clean water and drinking water infrastructure projects.

The AIS domestic preference requirement was first introduced to the SRF programs in 2014. Later that same year, the AIS requirement was made permanent for the Clean Water State Revolving Fund (CWSRF)

via amendments to the Clean Water Act. In 2018, the AIS requirement was extended for the Drinking Water State Revolving Fund (DWSRF) through 2023.

The AIS requirement states that SRF assistance recipients must use iron and steel products that are produced in the United States for the construction, alteration, maintenance, or repair projects of public water system or treatment works.

Exhibit 1 shows a timeline of the legal authorities of the AIS requirement for the SRF programs through Federal Fiscal Year (FFY) 2023.

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

2014 Congress passed the Consolidated Appropriations Act (CAA) of 2014, which included the AIS requirement for SRF funded projects through September 30, 2014

2014 Congress passed the Water Resources and Reform Development Act (WRRDA) of 2014, which made the AIS requirement permanent for the CWSRF

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 DWSRF programs through April 28, 2017

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

2018 Congress passed the America's Water Infrastructure Act of 2018 (AWIA), which extended 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 defined as any item listed below, primarily made of iron or steel, and permanently incorporated into a public water system or treatment works project:

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



Primarily Iron or Steel and Permanently Incorporated Definitions

Under the AIS requirement, a product is considered to be primarily iron or steel if it is made 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 or steel internal workings of the fire hydrant (i.e., stem, coupling, valve, seals, etc.). Any additional machining or other work and assembly of the internal workings into the hydrant body would not be included in this cost calculation since those are considered labor costs.



If a product is listed above, is made primarily of iron or steel (i.e., meets the greater than 50% threshold), **and** is permanently incorporated into the project, then the product must be produced in the United States or otherwise covered by a waiver (discussed further in Section II). For a product to be produced in the United States, all manufacturing processes (excluding the application of external coatings) must take place domestically. In 2014 and 2015, EPA 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: Highwood, Montana (CWSRF)

The Town of Highwood, Montana, received a \$230,000 CWSRF loan for the Highwood Wastewater Treatment Facility Improvements Project to replace lagoon liners in two of three cells in their lagoon system. The project also replaced non-functioning valves and removed accumulated lagoon sludge. With forward thinking, the town was able to procure domestic valves early in order to avoid the long lead times and potential construction delays. The construction start date was August 2019 with an anticipated completion date of November 2019, and by July 2019 the valves were already on site.



II. Compliance with the AIS Requirement

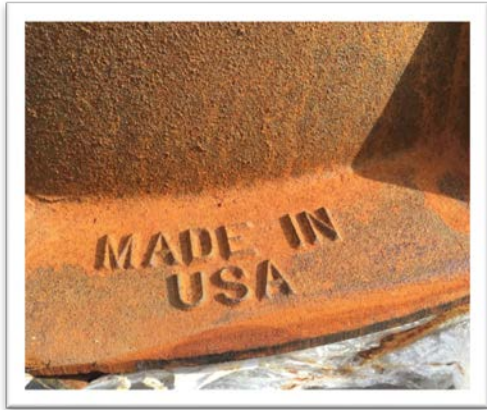
A. First and Foremost, Buy Domestic

SRF assistance recipients should procure domestic iron and steel products to ensure compliance with the AIS requirement. A state or assistance recipient can contact EPA if they are having difficulty locating a domestic product, and EPA can help with product availability 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 establish accountability and enable assistance recipients to demonstrate compliance with AIS. A proper certification letter should assert that all manufacturing processes for purchased iron or steel products were performed domestically. EPA highly recommends that each certification letter contains the five following key elements:

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



C. Waivers

EPA has the authority to waive the AIS requirement when (1) applying the requirement is inconsistent with the public interest, (2) iron and steel products are not produced domestically in sufficient and reasonably available quantities or of a satisfactory quality; or (3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25%. There are two main types of waivers: national and project specific.

National Waivers

EPA has issued five national waivers to date: *De Minimis*; Minor Components in Iron and Steel Products (with Cost Ceiling); Plans and Specs; Pig Iron and Direct Reduced Iron; and the now-expired Short-Term Stainless-Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles. The non-expired national waivers are available for use by assistance recipients or manufacturers and therefore do not require any approval by EPA prior to use.

For example, the *de minimis* waiver is a versatile waiver that allows an assistance recipient to use up to 5% of their total materials cost for non-domestic or unknown origin iron and steel products, with certain conditions. No single item can cost more than 1% of the total materials cost. The assistance recipient should keep a record of which items are included on their *de minimis* list.

The Short-Term Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles waiver has expired. The final temporary renewal of this waiver was approved August 24, 2018, and the waiver expired February 24, 2020. It will not be renewed. Products purchased by assistance recipients prior to the expiration date are still covered by this waiver.

The exact language in the law and its applicability, and the current approved national waivers can be found on EPA's dedicated [AIS Website](#).

Project-Specific Waivers

Project-specific waivers are for the use of a specified non-domestic iron or steel product for a specific project. An assistance recipient may request a waiver from EPA through their state SRF program. Waiver requests must be approved by 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, 2019, EPA approved 23 project-specific waivers for DWSRF projects, with 6 being approved in SFY 2019, as well as 59 project-specific waivers for CWSRF projects, with 14 being approved in SFY 2019.

All approved and not approved project-specific waiver requests can be found on EPA's dedicated [AIS Website](#).

Best Practice: Connecticut DWSRF

The Connecticut DWSRF program has developed a *de minimis* waiver [tracking form](#) where the assistance recipient can easily track items as the project progresses. It also indicates that the final amount must be on their "final utilization and certification form".

D. Noncompliance

An SRF 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 potential noncompliance is discovered, the state SRF program is responsible for working with the assistance recipient on corrective measures (i.e., seeing if the product could be covered by a national waiver or replacing the product with a domestic alternative). EPA is available to assist the state SRF program with assessing appropriate enforcement action if the assistance recipient fails to complete the corrective measures. To date, there have been minimal cases of noncompliance across the country on SRF projects.



Program Highlight: The State of Iowa

The Iowa SRF program has been extremely involved with the AIS requirement since the 2014 enactment. Iowa was the first state to receive statewide AIS training and has since held a second training. Iowa frequently utilizes other forms of AIS assistance, including sending questions to the AIS inbox and submitting product research requests to EPA when SRF project managers cannot easily find domestic iron or steel products.

Project Highlight: Sugar City, Idaho

The City of Sugar City, Idaho, received DWSRF assistance for their \$4.2 million Water System Improvements Project. This project consisted of construction of a new well and booster pump station, installation of a new water storage tank, and installation of a new water transmission main. It was divided in 4 phases: schedules I, II, IIIA and IIIB. AIS implementation required a great level of coordination between the engineering consultant and the different construction contractors and subcontractors for each schedule. *De minimis* products were identified and a tracking list was available for review.

Project Highlight: Calcasieu Parish, Louisiana (DWSRF)

The Calcasieu Parish in Louisiana used DWSRF assistance to construct a new booster station to increase pressure and chlorine residual, replace 6-inch water mains with 8- to 12-inch water mains, and improve the production and treatment facilities. The iron and steel products observed at an EPA site visit in June 2019 had their respective AIS certification letter with all the recommended elements. The consulting engineer attended an online AIS training webinar which facilitated the correct implementation of the AIS requirement.

III. Oversight of the AIS Requirement

A. Project Site Visits

As a part of EPA’s oversight of the AIS requirement, EPA conducts informal project site visits. EPA tries to visit every state every three to four years. These visits assess consistency of AIS implementation and initiate one-on-one discussions with assistance recipients to reiterate the AIS requirement, conduct preliminary reviews of project AIS documentation and materials, and identify potential areas of noncompliance for projects to address prior to substantial completion. Following each site visit, EPA provides observations and recommendations for improving AIS documentation.

Exhibits 2 and 3 highlight the DWSRF and CWSRF site visit locations in SFY 2019 compared to all projects that received assistance that year. As of June 30, 2019, EPA conducted a total of 102 DWSRF and CWSRF site visits. Projects are selected to vary in size, cost, and type. The DWSRF projects visited in SFY 2019 ranged in total project cost from approximately \$380,040 to \$149 million and served populations of 150 people to over 280,000 people. The CWSRF projects visited in SFY 2019 ranged in total project cost from approximately \$230,000 to \$76,000,000 and served populations of 171 people to 510,000 people.

Exhibit 2: Drinking Water AIS Project Site Visit Map for State Fiscal Year 2019

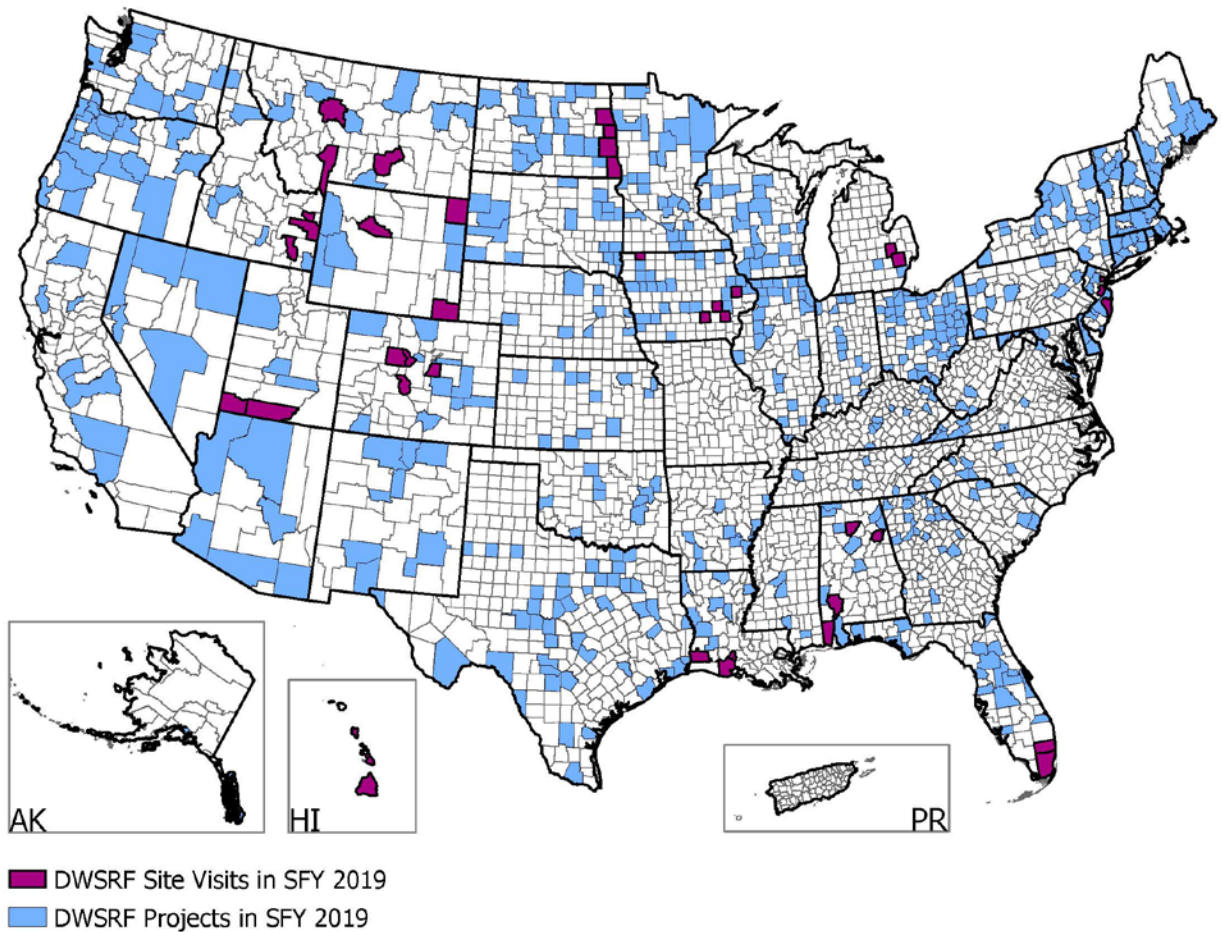
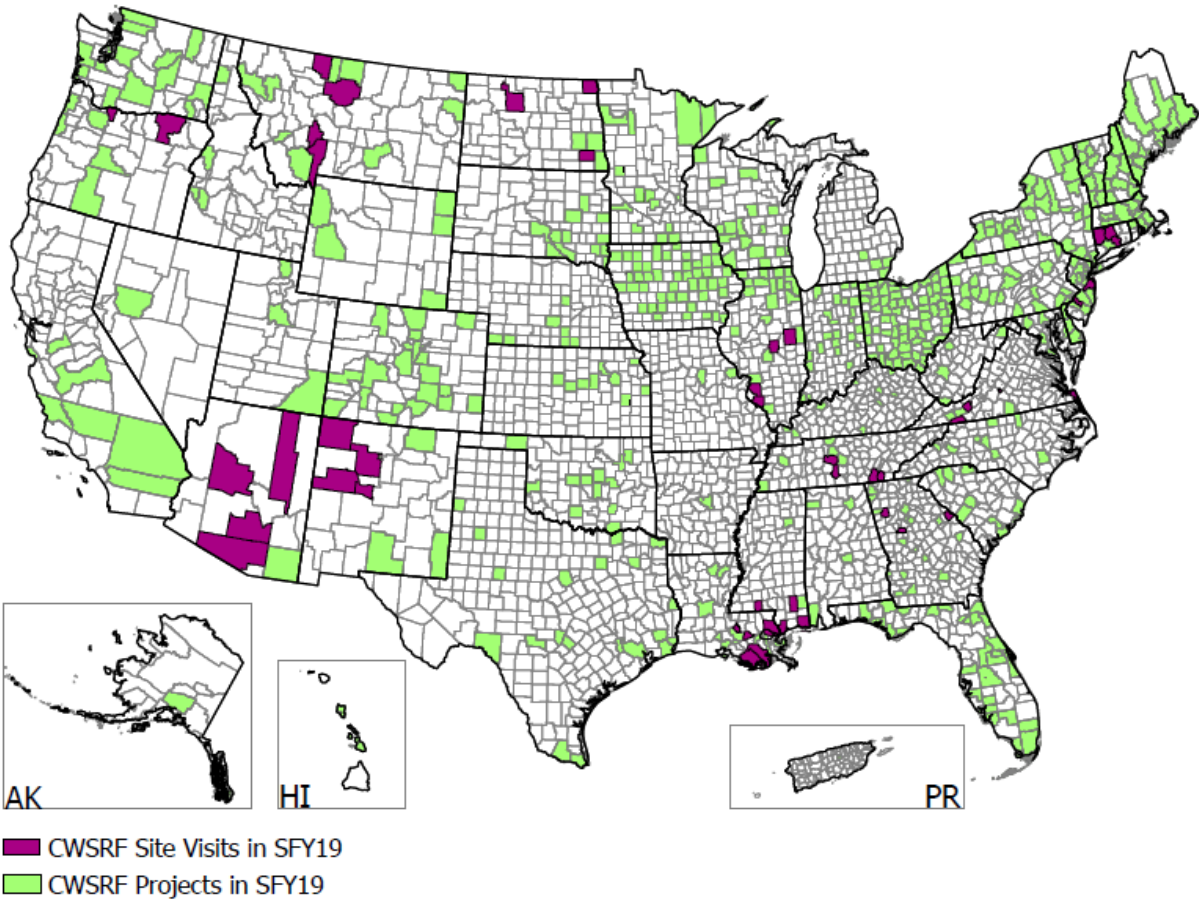


Exhibit 3: Clean Water AIS Project Site Visit Map for State Fiscal Year 2019



B. Trainings

EPA conducts trainings and outreach activities to engage various groups through in-depth discussions on the AIS requirement and implementation. The trainings are attended by assistance recipients, state program staff, consulting engineers, general construction contractors, suppliers, and manufacturers. EPA tailors the information presented based on the target audience. During SFY 2019, EPA participated in 12 training and outreach events, including manufacturer meetings, state trainings, and national conference presentations. EPA offers these trainings on an ongoing basis upon request.



C. EPA-USDA Partnership

The AIS requirement was introduced to the United States Department of Agriculture (USDA) Rural Utilities Service Water and Environmental Programs (USDA-RUS WEP) in May 2017. Since then, EPA has led monthly coordination meetings to assist the USDA with development of their AIS requirement. Both statutes are essentially the same, and the agencies are committed to implementing each respective AIS program consistently for the benefit of the regulated community.

In August 2017, the USDA-RUS WEP programs released a [guidance bulletin](#), detailing their AIS implementation. For co-funded projects, the AIS certification letters can mention one agency or the other and the letter is acceptable for documenting compliance for both programs. The USDA has joined EPA on multiple occasions for informal project site visits to observe how EPA conducts these visits.

Implementing Continuous Improvements

EPA's Lean Management System (ELMS) consists of tools and behaviors which assist organizations with sustaining lean activities and ultimately leads to an efficient organization. ELMS consists of six elements: **(1)** Problem Solving, **(2)** Leader Behaviors, **(3)** Standard Work, **(4)** Business Reviews, **(5)** Cascading Measures, and **(6)** Visual Management. ELMS is a complement to lean activities and is seen as a constant driver towards excellence.

The AIS Team at EPA Headquarters has undertaken an ELMS process to improve the waiver request tracking process and response time. Timely response on waiver requests is often critical to the success of a project. The ELMS process has allowed EPA to process and make its determination on waiver requests with much greater efficiency.

The Future Looks Bright

Since 2014, EPA has provided billions of dollars to states under the SRF programs for drinking water infrastructure system upgrades and water quality improvement projects in thousands of communities across the United States. With the successful implementation of the AIS requirement to date, an overwhelming majority of these SRF projects have installed domestic iron and steel products. This use of domestic products protects American manufacturing jobs and creates local construction jobs, while protecting water quality and public health. Based on this impressive track record, these efforts will continue to promote domestic manufacturing and provide oversight to ensure appropriate application of the AIS requirement.



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

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