



Clean Water
State Revolving Fund



State Revolving Fund American Iron and Steel Requirements

Refresher Webinar Training

Thursday December 15, 2016

1pm ET – 4pm ET

Focus on: Manufacturers, Suppliers,
Engineers and Construction
Managers

Presented by:
U.S. EPA
This presentation is for informational purposes only. The views expressed here are intended to explain EPA policy, and they do not supersede any applicable laws, regulations, guidance, or policy.

Office of Wastewater Management & Office of Ground
Water and Drinking Water

Purpose of Training

- ◉ Review AIS background (history and current policy)
- ◉ Discuss details of the requirement & roles
- ◉ Manufacturer AIS certification letter requirements
- ◉ Discuss detailed product coverage information
- ◉ Answer questions about the requirements

Webcast Logistics

- Presentation by EPA staff including:
 - Tim Connor, Chemical Engineer, CWSRF
 - Kiri Anderer, Environmental Engineer, DWSRF
 - Eliot Sherman, Physical Scientist, CWSRF

- Q&As will be addressed at several points.
 - Please submit questions via Q&A chat pod. Questions can be submitted at any time.

- Slides will be provided after the webcast on EPA's dedicated AIS website.

Agenda

- ◉ Webinar Purpose
- ◉ AIS Background – History & Current Status
- ◉ Product Coverage Overview
- ◉ Summary of Roles (States/Borrowers/Reps/EPA)
- ◉ Waivers Overview

SHORT BREAK

- ◉ AIS Certification & Documenting Compliance
- ◉ Detailed Product Coverage
- ◉ Informal Site Visits
- ◉ Final Q&A



Refresher Webinar Purpose

- Today's webinar is aimed at discussing the manufacturer, supplier and consultants role in the SRF/AIS process.
- Your role is a very important stage in the AIS compliance process
- EPA will hold additional webinars in the future focused more closely on state and assistant recipient AIS issues.

Further Information

- EPA's AIS website:
 - <http://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement>
 - Find it with this search: AIS+EPA

- General AIS Questions:
 - SRF_AIS@epa.gov

Background – What is AIS?

- In January of 2014 Congress passed a bill with American Iron and Steel (AIS) requirements for DWSRF and CWSRF programs.
 - Consolidated Appropriations Act of 2014 (P.L. 113-76).
- The "American Iron and Steel" provision requires assistance recipients to use iron and steel products that are produced in the United States for the construction, alteration, maintenance, or repair of a public water system or treatment works

Current Authorizations

- ◎ Permanent for CWSRF
 - Water Resources Reform and Development Act (June 2014) amended Clean Water Act

- ◎ Year to Year for DWSRF
 - Continuing Resolution
 - Water Infrastructure Improvements for the Nation Act (December 2016)



Clean Water
State Revolving Fund

PRODUCT COVERAGE SUMMARY



What Is An Iron Or Steel Product?

- 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*



**discussed in more detail later in this presentation*

What Is An Iron Or Steel Product?

○ “Primarily” Iron or Steel

- Listed products must be made of greater than 50% iron or steel, measured by cost.
- The cost should be based on the material costs only (not labor, overhead, shipping, etc).
- If one of the listed products is not made primarily of iron or steel, United States (U.S.) provenance is not required.



What Is An Iron Or Steel Product? (Continued)

- Only the listed products made primarily of iron or steel, **permanently incorporated** into the project must be produced in the U.S.
- Example:
 - trench boxes, scaffolding or equipment, which are removed from the project site upon completion of the project, are not required to be made of U.S. Iron or Steel.
- If only used for construction purposes, but left in place, then the product still has to be domestic



What Does “Produced In The United States” Mean?

- All manufacturing processes must take place in the U.S., with the exception of:
 - metallurgical processes involving refinement of steel additives, and;
 - Coating process applied to external surface of iron/steel components

- All manufacturing processes includes processes such as melting, refining, forming, rolling, drawing, finishing, fabricating

- Non-iron or steel components of an iron and steel product do not have to come from the U.S.

What Does “Produced In The United States” Mean? (Continued)

○ Raw materials

- Raw materials, such as iron ore, limestone and iron and steel scrap, do not have to come from the U.S.
- National waiver for pig iron and direct reduced iron excludes products made from non-domestic pig iron and direct reduced iron from the requirements *(discussed later in this presentation)*



Clean Water
State Revolving Fund

AIS PROCESS ROLES



Roles and Responsibilities

- ◉ Manufacturer – provides product certifications to assistance recipient (covered in more detail later)
- ◉ Contractor – procures U.S. made products and obtains certifications from manufacturers
- ◉ Assistance Recipient – obtains certifications and maintains documents in project files
- ◉ State – conducts inspections and examines documentation for incorporated products

Roles and Responsibilities (continued)

- Original manufacturers of iron and steel goods should have available and be able to readily supply AIS certification letters to suppliers, contractors, engineers or directly to AIS projects
 - Letters will be covered in more detail later

- Sales representatives should have updated copies of certification letters and if necessary, fill out specific project and order details

Roles and Responsibilities (continued)

- ⦿ Contractors should seek certification letters as early as possible in the construction and bid process.
- ⦿ State contract language may require AIS certifications during the submittal process



Clean Water
State Revolving Fund

WAIVERS



Waiver Authority

- The statute permits EPA to issue waivers for a case or category of cases where EPA finds:
 - That applying these requirements would be inconsistent with the public interest
 - OR
 - Iron and steel products are not produced in the U.S. in sufficient and reasonably available quantities and of a satisfactory quality
 - OR
 - Inclusion of iron and steel products produced in the U.S. will increase the cost of the overall project by more than 25%.

Waiver Process

Borrower feels a waiver is needed and puts together a request

Borrower emails the request to the State SRF program

State SRF reviews request for waiver & determines if all information was provided

State SRF forwards the application to EPA Headquarters

EPA Headquarters posts the request on its website for 15 days

EPA Headquarters evaluates request and public comments

EPA Headquarters will approve or disapprove the request

EPA will notify the State SRF program and post the waiver decision online.

Waiver Requests (Continued)

- Assistance recipients are strongly encouraged to hold pre-bid conferences with potential bidders. A pre-bid conference can help to:
 - Identify iron and steel products needed to complete the project
 - Identify the need to seek a waiver prior to bid, and can help to inform the recipient on compliance actions



Clean Water
State Revolving Fund

NATIONAL WAIVERS



National Waivers

- ◉ EPA has the authority to issue waivers that are national in scope
- ◉ National waivers may be for availability of specific products or in the public's interest
- ◉ Five national waivers approved to date

Approved National Waivers (Continued)

◉ De Minimis Waiver

- Public Interest
- For projects, not products
- Allows a small percentage of incidental products of unknown or non-domestic origin
 - 5% total material cost
 - 1% max for any single item
- Users of the de minimis waiver should maintain documentation of all the de minimis items in a project
 - Recommended minimum documentation: tabular list of de minimis items with units and price, with summation.

Approved National Waivers

- ◉ National Product Waiver for Minor Components in Iron and Steel Products (with Cost Ceiling)
 - Public Interest
 - For products, not projects (different than national de minimis)
 - Up to 5% of material cost of the product may include non-domestic, minor components
 - For example: a valve with stainless steel pins and springs could make use of the waiver.
 - Manufacturers should be prepared to provide documentation when requested by recipients

Approved National Waivers (Continued)

- Product Waiver for Pig Iron and Direct Reduced Iron
 - Availability

 - Permits the use of pig iron and direct reduced iron manufactured outside the U.S. to be used in the manufacturing process for iron and steel products

Approved National Waivers (Continued)

- Short-Term Product Waiver for Stainless Steel Nuts and Bolts Used in Pipe Couplings, Restraints, Joints, Flanges, and Saddles
 - Availability
 - Allows for the use of non-domestic stainless steel nuts and bolts in certain products commonly used in CW and DWSRF projects
 - Current waiver expires February 18, 2017
 - EPA is in the process of re-evaluating the national market for availability and is on track to re-address the waiver by expiration



Clean Water
State Revolving Fund

WAIVERS QUESTIONS AND ANSWERS





Clean Water
State Revolving Fund

DOCUMENTING AIS COMPLIANCE



Documenting Compliance

◎ Certification Letter

- Final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor provides a certification asserting that all manufacturing processes occurred in the U.S.

◎ Step Certification Process

- Each handler (supplier, fabricator, manufacturer, processor, etc) of the iron and steel products certifies that their step in the process was performed domestically

Documenting Compliance (Continued)

- Five items in a certification letter:
 - **What is the product?** The letter should list the specific product(s) delivered to the project site.
 - **Where was it made?** The letter should include the location(s) of the foundry/mill/factory where the product was manufactured (City and State).
 - **To whom was it delivered?** The letter should include the name of the project and jurisdiction where the product was delivered.
 - **Signature** of company representative.
 - **Reference AIS requirements**

Cert letter review & help by EPA

- Please submit an email to the EPA AIS Team with the subject line 'Cert Letter Review'
- *SRF_AIS@epa.gov*



Sample Step Certification Letter

The following information is provided as a sample letter of **step** certification for AIS compliance. Documentation must be provided on company letterhead.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. XXXX
2. XXXX
3. XXXX

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

Certification Letter Example



633 Chestnut Street Suite 1200
Chattanooga, TN 37450

Certification of Compliance with American Iron and Steel (AIS) Provisions

November 12, 2014

Subject: ██████████ Construction, Custer Avenue, Lyons, IL

I, ██████████ certify that the following gate valves provided to the ██████████ project in Lyons, IL are in compliance with the American Iron and Steel requirement as mandated in the Environmental Protection Agency's State Revolving Fund Programs and as interpreted by the EPA.

Items, Products and/or Materials:

1. A-2360-19, FL x MJ Resilient Wedge Gate Valve, 6" qty. 1, 8" qty. 1
2. A-2360-23, MJ x MJ Resilient Wedge Gate Valve, 8" qty. 5

The products that are the subject of this certificate were manufactured in Chattanooga, TN.

All gate valve components are cast, machined, assembled and tested in the United States with the exception of fasteners, stem material and two small castings (stuffing box/op nut) which account for less than 10% of the manufacturing cost.

If any of the above compliance statements change while providing material to this project, we will promptly notify the prime contractor or the engineer.

VP Product Management & Marketing

Project name/location

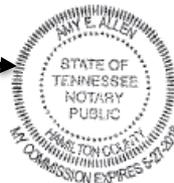
Specific items for project

Where the items were manufactured

Signature

Reference to AIS requirements

Bonus Points for Notary. Not required



Notarized By: *Amy E. Allen*
My Commission Expires: 5/27/18

Certification Letter Example

[Redacted]

Project name/location

11-13-14

SOUTH WESTWOOD
STORM SEWER
VILL OF ELMWOOD PARK

*Reference to AIS requirements, missing.

Gentleman:

THIS LETTER WILL CERTIFY THAT THE FOLLOWING LISTED CASTINGS MANUFACTURED AND FURNISHED BY [Redacted] DO CONFORM TO A.A.S.H.T.O. M-105, FOR CLASS 35 OR BETTER GRAY IRON. THESE MATERIALS ALSO MEET THE ILLINOIS DEPT. OF TRANSPORTATION (I.D.O.T.) STANDARDS FOR CONSTRUCTION CASTINGS ALONG WITH THE CITY OF CHICAGO DEPARTMENT OF TRANSPORTATION (C. D. O. T.) STANDARDS. ALL CASTINGS ARE MADE IN THE USA. [Redacted]

*Where the items were manufactured. Need City and State.

QUANTITY	ITEM	DESCRIPTION
29	R-1713	FRAMES
29	R-1772	LIDS
6	R-3278-A	FRAMES & GRATES

Specific items for project

[Redacted]
Debbie Wilson
[Redacted]

Signature

SALES OFFICES AND DISTRIBUTION YARDS IN PRINCIPAL CITIES THROUGHOUT THE U.S.A.
[Redacted]

Certification Letter Example



Certificate of Product Compliance

Project name/location

Specific items for project

Where the items were manufactured. Needs City and State*

Reference to AIS requirements, missing (wrong Act)*

Signature

██████████
 CUSTER AVENUE WATERMAIN
 LYONS, IL
 244128 (6564218)

- 6" ██████████ BCL/AC WITH ACCESSORIES (60 feet)
- 8" ██████████ BCL/AC WITH ACCESSORIES (2020 feet)
- 12" ██████████ BCL/AC WITH ACCESSORIES (40 feet)

We hereby certify material furnished by ██████████ either for your stock or for direct shipment to your customer, are manufactured and tested in accordance with the following standards, and meet or exceed the requirements and recommendation therein.

DUCTILE IRON PIPE (*)	ANSI / AWWA C151 / A21.51	OF LATEST REVISION
RUBBER – GASKET	ANSI / AWWA C111 / A21.11	OF LATEST REVISION
TYTON AND MECH. JOINTS	ANSI / AWWA C111 / A21.11	OF LATEST REVISION
CEMENT MORTAR LINING(**)	ANSI / AWWA C104 / A21.4	OF LATEST REVISION
DUCTILE IRON FITTINGS	ANSI / AWWA C110 / A21.10 OR ANSI / AWWA C153 / A21.53	OF LATEST REVISION
FLANGED DUCTILE IRON PIPE	ANSI / AWWA C115 / A21.15	OF LATEST REVISION
FUSION BONDED EPOXY COATING	ANSI / AWWA C116 / A21.16	OF LATEST REVISION
ASPHALTIC SEAL COAT	NSF / ANSI 61	OF LATEST REVISION

██████████

(**)]NSF/ANSI Standard 61 (NSF 61) approved
 (**)]Includes single lined (ACL/AC) and double lined (BCL/AC)

Any materials included but not covered by the above specifications will be per manufacturer's standard.

██████████ manufactured in the following elastomer compounds: Styrene Butadiene- (SBR), Acrylonitrile Butadiene- (NBR) and Ethylene Propylene Diene Monomer- (EPDM) meet the dimensional specifications and tolerances a ██████████ pipe gaskets and are pressure rated in accordance with the performance requirements of ANSI/AWWA C111/A21.11 *Rubber-Gaskets Joints for Ductile-Iron Pressure Pipe and Fittings*.

██████████ EPOXY linings furnished with our products conform to ██████████ submittal BRC ██████████ Epoxy Lined Ductile Iron & Fittings for Force Mains and Gravity Sewer Lines). ██████████ certifies that our applicator met the requirements of the specifications.

██████████ certifies that all ██████████ ductile iron pipe, LESS ACCESSORIES, is manufactured in the United States, and thereby meets the requirements of the "Buy America Act".

Ductile Iron Pipe, Fittings, Restraints and Fabricated Products

██████████
 ██████████
 ██████████

Certification Letter Example



September 19, 2016

[Redacted]
[Redacted]
[Redacted]
[Redacted]

Subject: American Iron and Steel Certification
Project: Brashears WWTF
Contractor: [Redacted]

Project name/location

To Whom It May Concern:

[Redacted] Manufacturing Enterprises, Inc. certifies that all cast iron poured from our foundry conforms to ASTM A48 Class 30A gray iron (30,000 PSI Tensile Strength) or better. This would include all [Redacted] municipal casting products and specifically the [Redacted] Valve Box Ring & Sewer Lid (part code [Redacted]) and the [Redacted] Ring & Cover [Redacted].

Specific items for project

These castings are domestically manufactured in Sweetwater, Tennessee and are in full compliance with the American Iron & Steel requirement as mandated in the EPA's State Revolving Fund Programs. Approximately 100% of the iron used to make our cast iron is from recycled scrap metal.

Where the items were manufactured

Thanks for your time and attention [Redacted]. If you have any questions or concerns, please contact [Redacted].

Reference to AIS requirements

Sincerely,
[Redacted Signature]

Signature

[Redacted]
National Sales Manager
Municipal Castings Division

Certification Letter Example

[Redacted]
[Redacted]
[Redacted]

[Redacted]
[Redacted]

June 9, 2016

To Whom It May Concern:

Re: American Iron and Steel Step Certification for Brashear WWTF Rehabilitation
Brashear, Missouri
[Redacted]

Project name/location

Reference to AIS requirements

Specific items for project

I, [Redacted], certify that the melting, casting, and processing to include the application of lining and coating for the manufacture of the **8-inch [Redacted] ductile iron pipe with double thickness cement-mortar lining with asphalt seal coat ("BCL") and asphalt coating ("AC")** provided, or to be provided, to the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's States Revolving Fund Programs.

The complete manufacturing of these products took place, or will take place, at the following location(s):

- [Redacted]
[Redacted]
Bessemer, Alabama 35020
- [Redacted]
[Redacted]
Lynchburg, Virginia 24504-1446

Where the items were manufactured

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Sincerely,

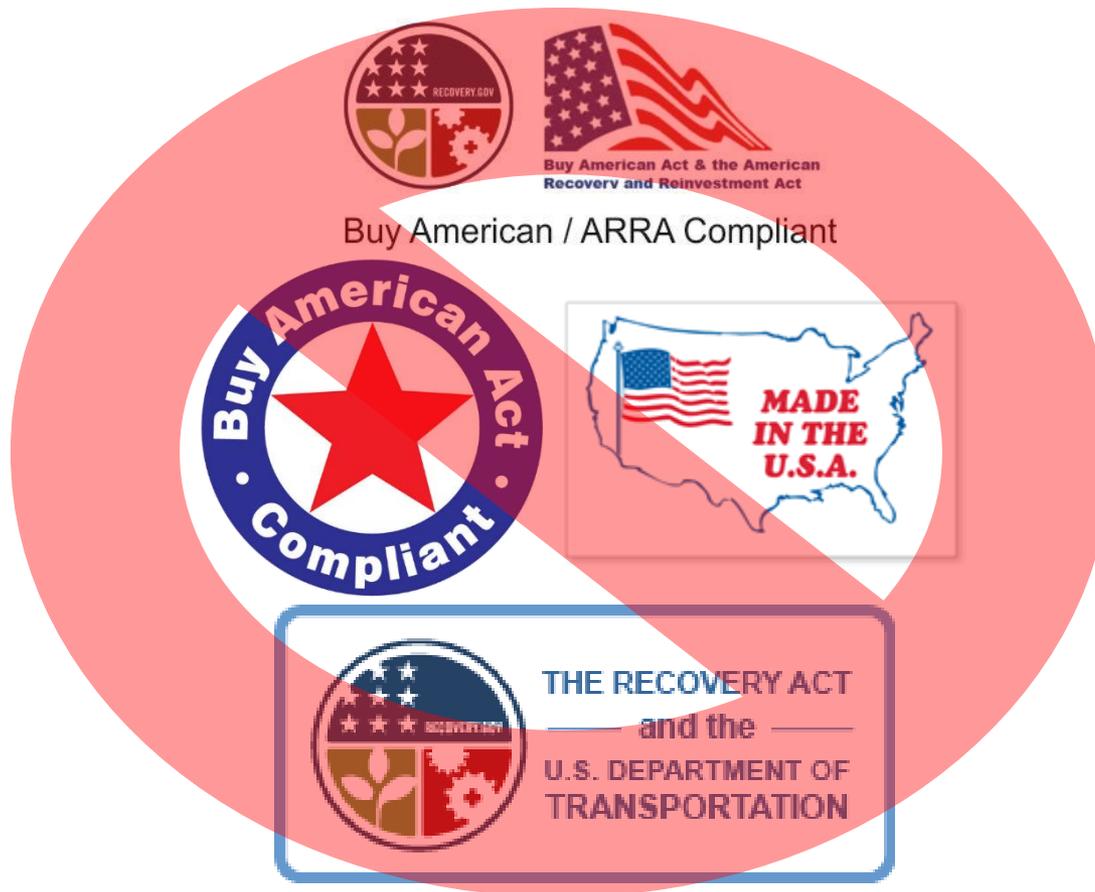
Signature

[Redacted]

[Redacted]
Senior Sales Engineer

Do Other 'Buy American' Letters Work for EPA's AIS Requirement?

- Short answer: No!



Documenting Compliance (Continued)

- Common certification letter & compliance mistakes include:
 - Not updating old ARRA (2009) or DOT form letters
 - Not filling out specific project and product information
 - Having suppliers draft cert letters for goods they did not originally manufacture
 - Having suppliers or customers rely on 'made in the USA' stampings or stickers as proof of AIS compliance
 - Misinforming suppliers or consultants on AIS certification requirements (trade agreements, etc.)



Clean Water
State Revolving Fund

DOCUMENTING COMPLIANCE QUESTIONS AND ANSWERS





Clean Water
State Revolving Fund

DETAILED PRODUCT COVERAGES



Definition: Municipal Castings

- Access Hatches;
- Ballast Screen;
- Benches (Iron or Steel);
- Bollards;
- Cast Bases;
- Cast Iron Hinged Hatches, Square and Rectangular;
- Cast Iron Riser Rings;
- Catch Basin Inlet;
- Cleanout/Monument Boxes;
- Construction Covers and Frames;
- Curb and Corner Guards;
- Curb Openings;
- Detectable Warning Plates;
- Downspout Shoes (Boot, Inlet);
- Drainage Grates, Frames and Curb Inlets;
- Inlets;
- Junction Boxes;
- Lampposts;
- Manhole Covers, Rings and Frames, Risers;
- Meter Boxes;
- Service Boxes;
- Steel Hinged Hatches, Square and Rectangular;
- Steel Riser Rings;
- Trash receptacles;
- Tree Grates;
- Tree Guards;
- Trench Grates; and
- Valve Boxes, Covers and Risers.

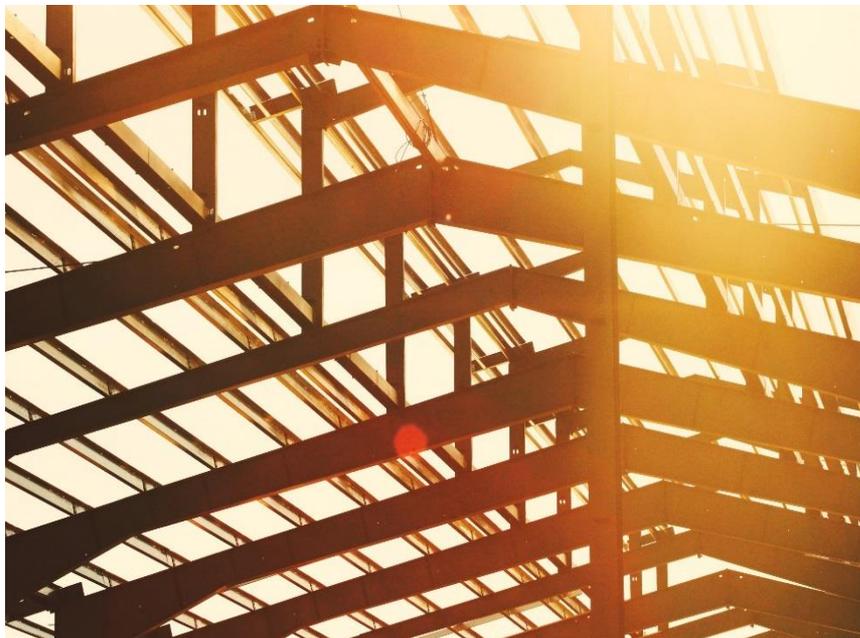
What Is Steel?

- ◉ Steel is an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements
- ◉ The definition of steel covers carbon steel, alloy steel, stainless steel, tool steel and other specialty steels
- ◉ Coiled steel is an Intermediate product used in the production of steel products and must come from a U.S. source (or otherwise subject to a waiver)

Definition: Structural Steel

- Rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in construction such as ships and buildings

- Such shapes are designated as:
 - Wide-flange shapes, standard I-beams, channels, angles, tees and zees
 - Other shapes include H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.



Definition: Construction Materials

- Articles, materials, or supplies made primarily of iron and steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems

- Examples:
 - Concrete reinforcing bar, rebar, wire rod
 - Fasteners
 - Framing, joists, trusses
 - Decking, grating, railings, stairs, ladders
 - Fencing, doors

Definition: Non-Construction Materials

- Non-Construction materials (that do not fall into another listed category of covered items) do not need to be of domestic origin
- Mechanical and electrical components, equipment and systems
 - Mechanical equipment is typically that which has motorized parts and/or is powered by a motor
 - Electrical equipment is typically any machine powered by electricity and includes components that are part of the electrical distribution system
- Examples:
 - Pumps, motors, VFDs, valve actuators
 - Flow meters, sensors, SCADA
 - Disinfection systems, membrane filtration systems

Construction Materials (continued)

- EPA's AIS guidance includes a set of example items that it considers construction materials composed primarily of iron and steel and covered by the Act.
- This example list in the guidance is not an all-inclusive list of potential construction materials.



Definition: Reinforced Precast Concrete

- ◉ While reinforced precast concrete may not be at least 50% iron or steel, in this particular case, the reinforcing bar and wire must be produced in the U.S.
- ◉ The casting of the concrete product must take place in the U.S. The cement and other raw materials used in concrete production are not required to be of domestic origin
- ◉ If the reinforced concrete is cast at the construction site, the reinforcing bar and wire are considered to be a construction material and must be produced in the U.S.
- ◉ PCCP and other similar concrete cylinder pipes fall into this category

Cost Calculation Example: Fire Hydrant

- 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 of those parts
- The other material costs would likely include non-iron and steel internal workings of the fire hydrant (e.g., stem, coupling, valve, seals, etc.)
 - The assembly of the internal workings into the hydrant body would not be included in this cost calculation



Non-Listed Product

- If a product is not listed in the statute but is composed of more than 50% iron or steel it does not have to be produced in the U.S.

International Trade Agreements

- Manufacturers should not claim that their goods meet the AIS requirements due to existing international trade agreements

- Assistance recipients must comply with international trade agreements which they are a party to.
 - The vast majority of assistance recipients are not party to any international trade agreements.

Assemblies

- AIS requirements only apply to final products, as delivered to the work site and incorporated into the project
- Assemblies, such as a pumping assembly or a reverse osmosis packaged plant, are distinct products not listed and do not need to be made in the U.S. or composed of all U.S. parts
- If a listed iron and steel product is used as a part for an assembled product that is nondomestic, the components, even if specifically listed in the Act, do not have to be domestically produced

Appurtenances

- If products come from one manufacturer and are shipped together as a system, then this is generally considered a 'packaged system' and those items used to connect the system are appurtenances.
- However, if the borrower or contractor must purchase items to connect the system (valves, piping, etc.) separately from another manufacturer, then these items would need to be domestic, or otherwise obtain a waiver.



Clean Water
State Revolving Fund

PRODUCT COVERAGE QUESTIONS AND ANSWERS





Clean Water
State Revolving Fund

INFORMAL SITE VISITS



Informal Site Visits

Overview

- EPA is aiming to visit at least one project in every state.
- To date, EPA has visited 199 projects in 42 states.
- Projects have varied in size and scope, and have been both DWSRF and CWSRF.
- Visits have been helpful even to projects early in construction.
- Feedback from states and municipalities has been very positive.





Clean Water
State Revolving Fund



State Revolving Fund American Iron and Steel Requirements

THANK YOU!

AIS Questions:

- SRF_AIS@epa.gov

EPA AIS website:

<http://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement>