Webinar Logistics

- 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 to the state for dissemination after the webcast.

Training Objectives

- Provide Brief History of AIS
- Explain AIS Requirements
  - Roles and Responsibilities
  - Project Coverage
  - Product Coverage
- Discuss National Waivers
- Describe Waiver Process for Project-Specific Requests
- Explain How to Document Compliance
- Explain EPA Informal Site Visits
Clean Water & Drinking Water SRFs

January 17, 2014 - Consolidated Appropriations Act of 2014 (P.L. 113-76) was enacted and included AIS requirements for SRF projects through the end of fiscal year 2014.

Clean Water SRF
- June 10, 2014 - Water Resources Reform and Development Act (WRRDA) amended the Clean Water Act (CWA) to include permanent AIS requirements for CWSRF projects.
- CWA Section 608 contains the same AIS language taken from the Consolidated Appropriations Act of 2014.
- All CWSRF projects must comply with Section 608 of the CWA for implementation of the permanent AIS requirements.

Drinking Water SRF
- On March 23, 2018, the president signed Public Law 115-141, the "Consolidated Appropriations Act, 2018" which continues the AIS requirements for DWSRF projects through September 30, 2018.

Since FY14, AIS requirements have continued for the DWSRF through a series of continuing resolutions and annual appropriation bills.

Consolidated Appropriations Act of 2014 (P.L. 113-76)

- The "American Iron and Steel" provision for CWSRF and DWSRF programs 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.
AIS Implementation

- **March 20, 2014** - EPA released an implementation memorandum to assist SRF recipients in complying with the Act
  - Subsequent Q&A documents have been published on our AIS website
  - (Or just Google “SRF AIS”)

AIS Website Demo

State Revolving Fund American Iron and Steel (AIS) Requirement

The American Iron and Steel (AIS) provision requires Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) assistance recipients to use iron and steel products that are produced in the United States. This requirement applies to projects for the construction, alteration, or maintenance, or repair of a public water system or treatment works.

The AIS provision is a permanent requirement for all CWSRF projects. The Consolidated and Further Continuing Appropriations Act of 2015 requires the use of AIS products in DWSRF projects through September 30, 2016. For details, see legal authority below.

The appropriation language sets forth certain circumstances under which EPA may waive American Iron and Steel requirements. For details, see Waiver Process.

AIS Guidance, Questions and Answers, and Training

- **AIS Guidance and Questions and Answers** describe how EPA implements the AIS requirement. The guidance addresses the types of projects that must comply with the AIS requirement, the types of products covered by the AIS requirement, and compliance. The guidance provides a step-by-step process for assessing waivers and the circumstances under which waivers may be granted.
- **AIS Training Materials** discuss how to implement the requirement, project coverage, the waiver request process, and the national waivers.
Roles and Responsibilities

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

* A supplier/distributor is likely to be involved in product procurement as well and may be an additional line of communication between contractor and manufacturer.
Roles and Responsibilities – State and Assistance Recipient

- Assistance agreements and construction contract language should highlight that AIS compliance is required.
- Should highlight what products are required to comply, and what is required to document compliance.
- If needed, please contact EPA for sample AIS language to add to contract documents.

Roles and Responsibilities - Contractor

- Contractors should seek certification letters as early as possible in the construction and bid process.
- Contractors should clearly indicate that products have to meet the AIS requirements when ordering from suppliers/distributors and manufacturers.
Roles and Responsibilities - Manufacturer

- Original manufacturers of iron and steel goods are responsible for readily supplying AIS certification letters for those goods:
  - Directly to the assistance recipient
  - Indirectly via supplier/distributor
- Key components of an AIS certification letter will be discussed later in this training
What Projects Are Covered By AIS?

- All treatment works projects funded by a CWSRF assistance agreement
- All public water system projects funded by a DWSRF assistance agreement
- Projects with an assistance agreement signed on or after January 17, 2014
- Additionally, the AIS requirement applies to all parts of the project, no matter the source of funding
Multi-Phased Projects

- IF the construction necessary to complete the individual phases are closely related in purpose, place, and time,
- THEN a multi-phased project can be considered a single project when evaluating potential AIS exemptions.

Splitting Funds or Projects

- Any project funded by an SRF loan must comply with AIS requirements.
- A project has a distinct purpose, time, and place. Intentional splitting of projects into separate and smaller contracts or assistance agreements will not avoid AIS coverage on a portion of a larger project.
- Projects with a distinct purpose, time, and place are evaluated separately for AIS requirements.
**POP QUIZ!**

Is this product subject to AIS?

- **Valves**
  - Yes!
- **Pipe supports and hangers**
  - Yes!
- **Manhole covers**
  - Yes!
- **Pumps**
  - No!
- **Instrumentation**
  - No!
- **Structural Steel**
  - Yes, of course!!
- **Guardrails, stairs, walkways**
  - Yes. More on construction materials in a bit.

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**Listed Iron and Steel Products**

- 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?

- Only the listed products made primarily of iron or steel and 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, unless otherwise exempt.

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 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.
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.

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 allows the use of products made from non-domestic pig iron and directly reduced iron in SRF-funded projects *(discussed later in this presentation)*

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 of buildings (such as treatment plants, pump stations, etc.)
  - 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: 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.
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

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.
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

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.
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 products with a distinct purpose.
- Assemblies with primary components that are not listed as covered iron and steel products do not need to be made in the U.S. or composed of all U.S. parts.

Appurtenances

- Appurtenances are items that are used for re-assembling after shipping and connecting the assembly to the rest of the treatment system.
- If an assembly is exempt from AIS requirements, those appurtenances shipped as part of the assembly are also exempt.
- Items that are not purchased as part of the assembly (i.e., purchased separately), are not considered appurtenances to an assembly that may be subject to this exemption.
PRODUCT COVERAGE
QUESTIONS AND ANSWERS

WAIVERS
First and Foremost...

- Assistance recipients should procure domestic iron and steel products.
- A state or assistance recipient can contact EPA if they are having trouble finding a product and EPA can provide assistance.

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%.
Types of Waivers: National

- 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

- 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 (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
  - Waiver expired in February 2018; currently under management review for extension

- 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

Types of Waivers: Project/Product Specific

- A recipient may apply (through the state) for a project specific waiver, which applies to a particular product.
- These waivers apply for the use of the specified product for the proposed project.
- Any other project funded by either the DWSRF or CWSRF that wishes to use the same product must apply for a separate waiver.
Cost-Based Waivers:
- Community must show that a project cost increased more than 25%.
- This is a very high threshold to meet.
- Under ARRA, no cost waivers were approved.

Availability Waivers (most common):
- “Sufficient and reasonably available quantities and of a satisfactory quality”
- Available Quantity
  - The quantity of iron or steel products is not available or will not be available at the time needed and place needed, and in the proper form or specification as specified in the project plans and design.
- Satisfactory Quality
  - The quality of iron or steel products, as specified in the project plans and design.
Project/Product Specific Examples

- Jacksonville, Illinois
  - Uni-flange adaptors
- Santa Barbara, California
  - 3-inch to 24-inch butterfly valves
- Old Bridge MUA, New Jersey
  - Dual-wall stainless steel piping

Types of Waivers: Public Interest

- EPA has the authority to issue public interest waivers.
- Evaluation of a public interest waiver request are more complicated so they may take more time for a decision to be made.
- These waiver requests have a higher bar, especially after the signing of Executive Order 13788 (April 2017).
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 Process

- After receiving the request for waiver by email, the State SRF will review the application for the waiver and determine whether the necessary information has been included.
- Once the waiver application is complete, the State designee will forward the application to EPA.
Waiver Requests

- Assistance recipient may receive a waiver at any point before, during, or after the bid process if 1 of the 3 conditions are met.

- Proper and sufficient documentation must be provided:
  - When product is needed
  - Excerpt from project specifications (very important!)
  - More information is available in the March 2014 implementation memo

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
Waiver Requests (Continued)

- **Evaluation by EPA: The 3-Step Process**
  - **Posting** – Once the application for waiver of AIS requirements has been received, EPA HQ will publish the request on its website for 15 days to receive informal comment.
  - **Evaluation** – EPA HQ will then determine whether the application properly documents and justifies the statutory basis for the waiver – that it is quantitatively and qualitatively sufficient – and determine whether or not to grant the waiver.
  - **Signature** – Signature of waiver approval by the Administrator or another agency official with delegated authority

- As soon as the waiver is signed (or denied), EPA will notify the SRF State program, and post the signed waiver (or waiver outcome) on the website.
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. On company letterhead.
  - Reference AIS requirements. Especially if reference other domestic preference laws.

Certification Letter Review and Assistance

- 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 (XXXXXXXXXX)

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 Letters Examples

AIS elements:

- Project reference
- Specific list of products
- Location of manufacturing (city and state)
- Signature of a company representative
- AIS reference
Certification Letters Examples

Manufacturers Certification

This certification applies to the following products that have been manufactured in the United States, at Taborine Iron Co., located at Nine Lakes, Az.

- Rigid Stainless Steel Conduit, Koppers, Elbow, and Couplings

It is hereby certified that the above referenced products:

1. Meet the provisions of the American Recovery and Reinvestment Act (ARRA)
2. Meet or exceed the OSHA Standard for Electrical Rigid Steel Conduit - Aluminum, Bronze, and Stainless Steel requirements, and are listed with the Underwriters Laboratories Inc., UL 1281-79
3. Meet or exceed the American National Standard Institute (ANSI) C88J Standard
4. Meet or exceed Federal Specifications B322
5. Meet or exceed ASTM Specification E82
6. Meet or exceed CSA Standard C22.2 No. 142

Under the penalty of perjury, I declare that I have examined this certification statement, and to the best of my knowledge and belief, the facts presented are true, correct and complete.

All the best,

[Signature]

Jorgen Madsen
President & CEO
Taborine Iron Co.

Certification Letters Examples

AIS elements:
- Project reference
- Specific list of products
- Location of manufacturing (city and state)
- Signature of a company representative
- AIS reference
Dear Valued Partner:

We hereby certify that the iron used to make the construction castings manufactured by MMS for the above referenced project is in full compliance with ASTM A48, Class 35B and AASHTO M105 for gray iron castings and ASTM A536, Grade 70-50-05 for ductile iron castings. Thank you for specifying and using products manufactured by Minas Morgul Steel, Inc.

The above listed castings are melted and manufactured 100% in the United States of America at our foundries in Moria, OK and Isengard, Ml. These castings comply with the applicable provisions of the Code of Federal Regulations 23 CFR 635.410 BUY AMERICA Requirements.

We also certify that the above listed products supplied to the subject project are in full compliance with the American Iron and Steel (AIS) requirement as mandated in EPA’s State Revolving Fund Programs.

Meriadoc Brandybuck
Product Quality Manager
Minas Morgul Steel, Inc.

AIS elements:
- Project reference
- Specific list of products
- Location of manufacturing (city and state)
- Signature of a company representative
- AIS reference

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

Short answer: No!
Documenting Compliance (Continued)

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

Non-Compliance

- Steps to take if a non-compliant product is permanently installed on a project site:
  - State should notify assistance recipient of potential non-compliance
  - Evaluate alternatives – can the product be covered by a waiver?
  - If assistance recipient does not take corrective action, State should issue a non-compliance letter and notify EPA
  - EPA is available to assist the State in developing non-compliance letters and can provide example letters
Informal Site Visits

Overview
- EPA plans to visit at least one project in every state every three years.
- To date, EPA has visited over 250 projects in almost every state.
- 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.

Overview (Continued)
- Generally, the visits consist of an educational portion where EPA explains the AIS requirements.
- Issues specific to the state and project are addressed and EPA will review project documents.
- Compliance is discussed, and certification letters (if any are on file) will be reviewed.
Informal Site Visits

Overview (Continued)
- If possible, EPA staff will view any active construction or stockpiled materials and take photos of iron and steel products discussed.
- A draft report will be compiled and sent to the state after the visit.

Most Common Observations:
- Inadequate certification letters
- Missing letters
- Not using national 'de minimis' waiver for incidental items
THANK YOU!

AIS Questions:
- SRF_AIS@epa.gov

EPA AIS website: