"America First but Steels are Coming from Overseas!"
Compliance Lessons Learned from Recent Projects

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Agenda

• US Steel Facts
• Overview of AIS
• Overview of PA Steel Products Procurement Act
• Lessons Learned – GHJSA Hazleton Incinerator System
• Lessons Learned – PWD DAF System
• Recommendations
  – Local Utilities
  – Engineering Consultants
  – Contractors/ Manufacturers
US Steel Facts

Metric Tons of Steel Produced

- 1973: 229 million metric tons
- 2018: 95 million metric tons

US Steel as % of World Steel Production

- 1945: Steel 72%, Pig Iron 2.4%
- 2014: Steel 67%, Pig Iron 5.3%
What is AIS?

- The "American Iron and Steel (AIS)" 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 (Consolidated Appropriations Act of 2014 P.L. 113-76).
- June 10, 2014 – AIS made permanent for Clean Water State Revolving Fund (CWSRF)
- October 23, 2014 – AIS extended through September 2023 for Drinking Water State Revolving Fund (DWSRF)
- WIFIA, USDA RUS
Is this product applicable to AIS Compliance?

• **Yes, if a Product is...**
  - Primarily iron or steel, and
  - AIS Listed Product, and
  - Permanently incorporated in project

• **AIS Listed Products**
  - Structural Steel
  - Municipal Castings
  - Reinforced Precast Concrete
  - Construction Materials

• **Exceptions**
  - Raw materials
  - Non-iron/steel components
  - Not a Listed Product
  - Mechanical/electrical equipment (if not a listed product)
  - Appurtenances of assemblies (non-covered primary component)
AIS Certification and Waiver

• **AIS Certification**
  – Letter asserting all manufacturing processes occurred in the U.S.
  – Step Certification
  – Product manufacturer provides certification
  – Supplier provides to purchaser
  – Buy American Cert. NOT Accepted

• **AIS Waiver**
  – National Waivers (5 to date)
  – Project/Product Specific Waiver

• **EPA AIS resources**
What is the PA Steel Products Procurement Act?

• The *Pennsylvania Steel Products Procurement Act (PA Steel Act)* requires that every public agency shall require that every contract document for the construction, reconstruction, alteration, repair, improvement or maintenance of public works contain a provision that, if any steel products are to be used or supplied in the performance of the contract, only steel products as herein defined shall be used or supplied in the performance of the contract or any subcontracts thereunder.
PA Steel Act Requirements

- **Who is Responsible for Enforcement?**
  - Public Agency
  - Responsibilities include:
    - Inclusion in contract documents
    - Enforcing
    - Interpreting
    - Compliance Documentation

- **What is considered a Steel Product?**
  - Products processed in the United States from steel
  - Cast Iron Products
  - Machinery & Equipment
PA Steel Act Requirements

- **What is included in Machinery & Equipment?**
  - SIC 25 (furniture & fixtures)
  - SIC 35 (machinery, except electrical)
  - SIC 37 (transportation equipment)
  - SIC to NAICS Code [https://www.naics.com/search](https://www.naics.com/search)

- **How is compliance achieved?**
  - US Steel Product, or
  - 75% of the cost of product *materials* have been mined, produced or manufactured in the US, or
  - Meets one of two Exemptions
    - Public Agency Waiver
PA Steel Act Requirements

- **What can I use for Compliance Documentation?**
  - **DGS forms:**
    - **ST-1** (100% US Steel)
    - **ST-2** (Non-Identifiable, Non-Structural Steel)
    - **ST-3** (75% US Manufactured Steel – by material $)
    - **ST-4** (Not Domestically Manufactured)
Lessons Learned – GHJSA Incinerator System

Greater Hazleton Joint Sewer Authority
8.9 mgd WWTP
Lessons Learned – GHJSA Incinerator System

**Project Overview**

- 15 dry ton/day fluidized bed incinerator (FBI) – pre-purchased
- Ash Handling
- Sludge Dewatering
- Plant Water Mods
- 40’ x 60’ Building
- PA Steel Act

*Image from IDI (now SUEZ)*
Lessons Learned – GHJSA Incinerator System
Lessons Learned – GHJSA Incinerator System

**PA Steel Act Compliance - Centrifuge**

- **Design Phase:**
  - Supplier – product “meets requirements”
  - 3 named manufacturers & Or Equal
- **Bid Phase:**
  - Supplier Questions
  - Low Bidder selected 1st named
- **Construction Phase:**
  - Submittals - Waiver needed
- **Resolution:**
  - Public Agency issued waiver
Lessons Learned – GHJSA Incinerator System

**PA Steel Act Compliance - Sludge Cake Discharge Isolation Valves**
- Valves to have electronic actuators
- Control Valves are on the DGS List of Exemptions

**PA Steel Act Compliance – Magnetic Flow Meter**
- Letter from Manufacturer stating SIC Classification of 38 (Instruments) – not one of the PA Steel Act machinery & equipment categories

Images from www.scvvalve.com
Lessons Learned – Philadelphia Water Department (PWD) Dissolved Air Flotation Thickener (DAFT) System Upgrade

**Project Overview**
- 200 mgd WW Control Treatment Plant
- DAFT performance improvements
- Replace various components of 30-year old system
Lessons Learned – DAFT System

- **Design Phase:**
  - Contract Documents included PA Steel Act Requirements

- **Bid Phase:**
  - Contractor subcontracting majority

- **Construction/Submittal Phase:**
  - Vendor stated product does not comply
  - Claimed PSA requirements are between the general contractor and owner
Suggestions – Local Utilities

**Design Phase**
- Confirm Requirements
  - State Regulations
  - Funding
- Inform Engineer
- Compliance is **NOT** the same for each Steel Requirement!

**Bid Phase**
- Contract Documents
- PreBid Meeting Agenda

**Construction Phase**
- Documentation (Initial)
- DEP/EPA site visit
- Public Agency Waivers
- Documentation (Final)
- Keep 7 years after loan amortization (AIS)
Suggestions – Engineering Consultants

**Design Phase**
- When to check compliance
- Watch “Meets Requirements”
- Contract Documents
  - Requirements
  - Exemption Lists
  - Subcontractors
- Lists/Notes of Products requiring Waivers for future projects

**Bid Phase**
- Pre-Bid Mtg
- Bidder-anticipated waivers
- Expected documentation
- Submittal approval
- Schedule of Values
- Notify engineering staff for construction phase

**Construction Phase**
- PreCon Mtg
- Documentation
  - AIS –Ltrs, De Minimis, waivers
  - PA Steel Act – certifications, exemption list, ST forms
- DEP or EPA site visit
- PA Steel Act ST-4 form
- Final Documentation
Suggestions – Vendors/Manufacturers & Contractors

Vendors/Manufacturers

- Check Funding Source
- State Requirements
- Check existing Exemption Lists/Waivers
- Identify Necessary Waivers Early

Contractors

- Funding Source
- State Requirements
- Subcontractors/Vendors/Manufacturers
- Compliance Documentation
- Identify Necessary Waivers Early
Any Questions??

Thank you

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