

Management Implication Report: Clean Water State Revolving Fund American Iron and Steel Requirement

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OFFICE OF INSPECTOR GENERAL
U.S. ENVIRONMENTAL PROTECTION AGENCY

June 26, 2024

MEMORANDUM

SUBJECT: Management Implication Report: Clean Water State Revolving Fund American Iron and Steel Requirement

FROM: Nicolas Evans, Acting Assistant Inspector General
Office of Investigations 

TO: Bruno Pigott, Acting Assistant Administrator
Office of Water

Purpose: The U.S. Environmental Protection Agency Office of Inspector General Office of Investigations has identified a concern regarding the Clean Water State Revolving Fund, or CWSRF, American Iron and Steel, or AIS, requirement for funding recipients. Pursuant to the AIS requirement, state revolving fund recipients must use iron and steel products that are produced in the United States for construction, alteration, maintenance, or repair of a public water system or treatment works. CWSRF fund recipients and American manufacturers need clear and precise guidance for defining applicable products for projects that require adherence to AIS requirement.

Background: The Office of Investigations initiated an investigation in June 2021 based on concerns from the EPA Office of Wastewater Management that Grandview, Washington, acquired construction materials for a CWSRF project that may have been falsely advertised on a Canadian manufacturing company's website as following AIS requirements. The Canadian company at issue manufactures precast lined sanitary sewer and utility products that protect concrete from hydrogen sulfide gases associated with sewer system applications. The company manufactured and supplied polyvinyl chloride, or PVC, hybrid manholes, which were permanently installed into Grandview's CWSRF sanitary sewer trunk main replacement project. The prefabricated manholes consist of PVC, precast concrete, steel rebar, and steel joint fasteners. The Canadian company certified to the State of Washington that its PVC hybrid manholes complied with AIS requirements as mandated for state revolving fund programs.

The AIS requirement for CWSRF is codified in section 608 of the Clean Water Act, 33 U.S.C. § 1388(a), and states that "[f]unds made available from a State water pollution control revolving fund established under this subchapter may not be used for a project for the construction, alteration, maintenance, or repair of treatment works unless all of the iron and steel products used in the project are produced in the United States." As provided in 33 U.S.C. § 1388(b), the phrase "iron and steel products" means

“products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, construction materials.”

In addition, EPA Memorandum *Implementation of American Iron and Steel Provisions of P.L. 113-76, Consolidated Appropriations Act*, dated March 20, 2014, provides guidance for the Agency’s implementation of AIS requirements for both Clean Water and Drinking Water State Revolving Fund projects. As provided in the guidance, the phrase “primarily iron or steel” means that the product “must be made of greater than 50% iron or steel, measured by cost.” The guidance further states that the measured cost should be based on material costs. Waivers of the AIS 50-percent requirements are permitted in limited circumstances, including when the iron and steel products available in the United States are not of satisfactory quality or the project cost would increase by more than 25 percent if the iron and steel products are produced in the United States.

The statutory definition provides that reinforced precast concrete is subject to AIS requirements. The EPA’s March 2014 guidance interpreted that to mean that the reinforced precast concrete does not have to meet the 50-percent or greater iron or steel requirement, but the reinforcing bar and wire within the precast concrete must be produced in the United States and adhere to AIS standards. While the cement and raw materials used in the concrete production does not have to be domestic, the casting of the concrete product must take place in the United States.

Concern Identified: The Office of Investigations determined that Grandview made every effort to comply with the AIS requirements; however, there is a question as to whether the Canadian company’s manhole products complied with AIS requirements. The manholes were manufactured, cast, and assembled in Canada. Additionally, the concrete and steel were around 26 percent of the overall material cost of the manhole, less than the 50-percent AIS requirement.

The Washington State Department of Ecology, which is Washington’s environmental protection agency, stated that the manholes Grandview acquired were mostly PVC and fiberglass and that the base was cast concrete for stability purposes. Accordingly, it stated that it did not have AIS compliance concerns because the manholes were a “manufactured product that contains less than 50% iron and steel components by material cost.”

One EPA physical scientist from the Office of Wastewater Management, who is a subject-matter expert on AIS requirements, originally disagreed with the Department of Ecology. The scientist said that “[b]ecause this product is substantially made of precast concrete elements ... and would not function without these, we [the EPA] deem it a precast concrete structure. The introduction of a PVC riser does not negate the [AIS] requirements that the precast concrete portions of the product be domestically manufactured.”

Another EPA AIS subject-matter expert, [REDACTED], believed that the manholes fell into a “grey area” because of the inclusion of a large PVC component within the overall product. More specifically, the product could be considered in the assembly category and not an iron and steel product subject to AIS requirements. The expert further noted that the product was a “rare item” that EPA AIS subject-matter experts had not seen before.

Ultimately, the EPA AIS experts determined that it was “not unreasonable” for the Washington State Department of Ecology to have a different opinion from the EPA on this specific item. The EPA Office of Water determined that the difference of opinion regarding the PVC hybrid precast manholes was acceptable, and as such, it will not be issuing a noncompliance determination for this item and project.

Based on the foregoing, we have identified a concern regarding the ambiguity of AIS requirements for PVC components being used in CWSRF projects. My office is notifying you of this issue so that the Agency may take whatever steps it deems appropriate, to include updating the March 2014 memorandum to provide guidance for implementation of AIS requirements when PVC is used in manufactured products. If you decide it is appropriate for your office to take or plan to take action to address this matter, the OIG would appreciate notification of that action.

Should you have any questions regarding this report, please contact Special Agent [REDACTED] at [REDACTED] or via email at [REDACTED] or me at [REDACTED] or evans.nicolas@epa.gov.

cc: Sean W. O’Donnell, Inspector General
Nicole N. Murley, Deputy Inspector General
Jennifer McLain, Director, Office of Ground Water and Drinking Water, Office of Water



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U.S. Environmental Protection Agency

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