



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUN 3 - 2015

OFFICE OF  
WATER

**DECISION MEMORANDUM**

**SUBJECT:** Northeast Ohio Regional Sewer District Waiver Request for Steel Fiber Reinforcement– Not Approved

**TO:** Jonathan Bernstein, P.E.  
Project Engineer  
Ohio EPA – Division of Environmental and Financial Assistance

**FROM:** Raffael Stein   
Division Director  
Municipal Support Division

The Clean Water Act includes an “American Iron and Steel” requirement in section 608 that requires Clean Water State Revolving Fund assistance recipients to use iron and steel products that are produced in the United States, or otherwise obtain a waiver. Section 608 also sets forth the circumstances under which EPA may waive the AIS requirement. This memo documents EPA’s response to an availability waiver request for steel fiber reinforcement used in the production of precast segmental tunnel liners from the state of Ohio on behalf of the Northeast Ohio Regional Sewer District. The EPA is not approving NEORSDD’s waiver request because it lacks sufficient justification to grant a waiver of the AIS requirements based on availability.

Background: On March 23, 2015 Ohio submitted a product waiver request on behalf of NEORSDD for the use of non-domestic steel fiber reinforcement in the production of precast segmental tunnel liners as part of NEORSDD’s Dugway Storage Tunnel project. The project specifications require high tensile strength, Type 1 drawn steel fiber reinforcement. The applicant was unable to identify a manufacturer that could produce the specified product domestically. The specifications require a “hooked end” characteristic to the steel fiber.

Rationale: The EPA conducted market research on the supply and availability of steel fiber reinforcement. As part of its market research, the EPA reached out to domestic manufacturers of steel fiber reinforcement. Representatives from two domestic manufacturers asserted that their steel fiber reinforcement meets or exceeds the performance parameters of the specified product, but their products do not have the “hooked end” characteristic specified. The domestic manufacturers expressed concern that “hooked end” aspect of the specification was restrictive but not relevant to the performance of the product.

Through solicitation of public comments, a domestic manufacturer (one of those contacted by EPA during market research) notified the EPA that they produce a comparable product and they have the manufacturing capacity to supply the volume of steel fiber reinforcement required by the project. However, as EPA learned during market research, the commenter supplies “twisted” shape rather than “hooked end” steel fiber reinforcement. The commenter claimed that their product met the high tensile strength requirements for Type 1 drawn steel fiber reinforcement through stress testing results.

The EPA provided information about the alternate products to NEORSD. NEORSD indicated to EPA and Ohio EPA that they did not intend to use the alternate products for their project. The EPA requested that NEORSD provide an explanation as to why the alternate products would not be acceptable, specifically requesting that NEORSD supply a rationale why they required the “hooked end” characteristic for the steel reinforcement. The EPA was unable to positively determine, based on the response provided by NEORSD, that the non-domestic steel fiber reinforcement was required for the project. Based on the results of the market research, public comment solicitation and information provided by the applicant, the EPA has determined that it does not have sufficient information necessary to grant a waiver of the AIS requirements, based on availability, to NEORSD for steel fiber reinforcement. Therefore, the EPA is not approving this availability waiver request.