



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

JUL 15 2015

OFFICE OF
WATER

DECISION MEMORANDUM

SUBJECT: Public Interest Waiver of American Iron and Steel Requirements to the Northeast Ohio Regional Sewer District for Steel Fiber Reinforcement

FROM: *for Sheila E. Grace*
Andrew D. Sawyers, Director
Office of Wastewater Management

The EPA is hereby granting a public interest waiver pursuant to the "American Iron and Steel" requirements of the Clean Water Act Section 608 under the authority of Section 608(c)(1) to the Northeast Ohio Regional Sewer District for the purchase of non-domestic steel fiber reinforcement to be used in the production of precast segmental tunnel liners. This waiver permits the use of steel fiber reinforcement manufactured outside of the United States in NEORSD's Dugway Storage Tunnel project. This is a project specific waiver and only applies to the use of the specified product for the proposed project funded by the Clean Water State Revolving Fund. Any other project funded by either the Clean Water or Drinking Water State Revolving Fund that wishes to use the same product must apply for a separate waiver based on the specific project circumstances.

Rationale: According to Section 608 of the Clean Water Act, CWSRF assistance recipients must use specific domestic iron and steel products that are produced in the United States if the project is funded through the SRFs. EPA has the authority to determine whether it is necessary to waive this requirement based on certain circumstances set forth in Section 608(c)(1) of the Clean Water Act. The provision states that, "[the requirements] shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency... finds that - (1) applying [the requirements] would be inconsistent with the public interest."

NEORSD plans to use steel fiber reinforcement in the production of precast segmental tunnel liners as part of the Dugway Storage Tunnel project. The project consists of installing a 24-ft diameter tunnel that will capture and store combined sewer overflows discharging to Lake Erie. The completed tunnel will provide 15,000 feet of tunnel storage at a depth of 200 feet. The project is being completed as part of a consent decree with the EPA and the U.S. Department of Justice in 2011.

NEORSD applied for a public interest waiver from the AIS requirements for the use of a non-domestic brand of steel fiber reinforcement, citing standardization on the non-domestic brand. The Dugway Storage Tunnel will be connected to the recently completed Euclid Creek Tunnel, which is a structurally similar 24-ft diameter, segmentally lined tunnel. The manufacturer of the precast segmental tunnel liners has had experience with the non-domestic brand of steel fiber

reinforcement from the Euclid Creek Storage Tunnel project, and NEORSD claims that this experience will prevent possible errors in the batching and uniform distribution of the steel fibers in the concrete mix. In addition, the manufacturer of the precast segmental tunnel liners uses a custom production facility that has been specifically designed to handle the non-domestic fibers. Using a different brand of steel fiber reinforcement would require the manufacturer to significantly redesign the production facility; modifications to the facility would include changes to parameters such as concrete curing times and form stripping strengths, which would impact the assembly line production cycle. These impacts may result in significant delays, higher costs and may affect the quality of the product.

The EPA conducted market research and solicited public comments on NEORSD's public interest waiver request. EPA's market research indicated that there may be domestic alternatives that functionally meet the technical requirements of the project. While there are domestic alternatives, NEORSD has provided sufficient justification that it has standardized on the non-domestic brand because it has significant experience using this brand of steel fiber reinforcement on the recently constructed Euclid Creek Tunnel project. The Euclid Creek Tunnel is the same diameter and uses the same segmental liner handling and installation process as the Dugway Storage Tunnel. Also, the same manufacturer that supplied the segmental liner for the Euclid Creek Tunnel project will supply the segmental liner for the Dugway Storage Tunnel Project. Use of a brand of steel fiber reinforcement other than the non-domestic brand could potentially result in significant redesign of the manufacturer's production facility for the precast segmental tunnel liners, and this may delay the project schedule and increase costs. The EPA is hereby granting a waiver from the AIS requirements to NEORSD. This waiver permits the purchase of the specified non-domestic steel fiber reinforcement documented in the state of Ohio's waiver request submittal on behalf of the applicant dated May 15, 2015.

If you have any questions concerning the contents of this memorandum, please contact Timothy Connor, Chemical Engineer, Municipal Support Division, at connor.timothy@epa.gov or (202) 566-1059.