## PAT MCCRORY



## Governor

DONALD R. VAN DER VAART

Secretary

KIM H. COLSON

Director

December 15, 2015

Mr. Timothy Connor, Chemical Engineer, Municipal Support Division via e-mail to: connor.timothy@epa.gov Located at: Office of Wastewater Management **Environmental Protection Agency** cwsrfwaiver@epa.gov 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

Subject:

AIS Availability Waiver Request(s) Winston-Salem and Forsyth County City/County Utilities Commission Muddy Creek Consolidated Pumping Station (CIPS) Engineer: Black and Veatch Contractor: MWH Constructors Project No. CS370399-08.1

Dear Mr. Connor:

The North Carolina Division of Water Infrastructure (Division) has reviewed the information provided by the Contractor, the Engineer, and the City of Winston Salem for CWSRF Project CS370399-08.1 submitted on October 29, 2015 and additional information received 12/11/2015. The following information is provided to EPA requesting AIS Waiver for the following items:

- Stainless Steel Closure Couplings
- Long Radius Flanged Reducing Bends

The city has previously been granted AIS Waivers for items necessary and critical to the construction and schedule for this important project that are not available from domestic sources. A Waiver was previously issued by EPA to the City of Toledo, Ohio for similar reducing bends. These couplings and fittings were specified by the Engineer and the City due to the nature of the project and their previous experience, and professional judgement.

Additional information will be provided if needed and as requested.

Nothing Compares

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Winston Salem, SRF Project No. CS370399-08 AIS Waiver Request No. 4 12/15/2015 Page No. 2 of 2

The Division's regular construction inspections of CW and DW SRF Projects cover loan administration, construction, and SRF Requirements. If you have any questions or comments, please contact me at (919) 616-4245 or at tom.poe@ncdenr.gov.

Sincerely,

Tom 5 Poe

Tom S. Poe Construction Inspector

tsp

Attachments:

Project Specifications and Details for the Waiver Requested items:

- Stainless Steel Closure Couplings
- Long Radius Flanged Reducing Bends

cc, via e-mail:

Jeremy Hogan, MWH Construction

Terry Cornett, P.E., Black & Veatch Corp., 1277 Millerwood Drive, Winston-Salem, NC 27106

Mr. Ron Hargrove, Utilities Director Winston-Salem and Forsyth County City/County Utilities Commission

Seth Robertson, P.E., Mark Hubbard, P. E, Ken Pohlig, P.E. DWI Supervisors

NC-CWSRF Project File and Share Drive

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10/26/2015

Terry Cornett Black & Veatch International Company 10715 David Taylor Drive, Suite 240, Charlotte, NC 28262 USA

Subject: Availability Waiver Request from American Iron and Steel Provisions Clean Water Revolving Loan Fund (CWSRF) Muddy Creek WWTP Consolidated Influent Pumping Improvements (SRF CS370399-08) Winston-Salem, North Carolina

Mr. Cornett,

MWHC formally requests relief from the AIS provision on the basis of certain iron and steel products not being produced in the United States in sufficient and reasonably available quantities. This waiver request is specifically related to 24-inch by 36-inch ductile iron flanged long radius reducing 90-degree pipe bends to be used for the Muddy Creek Wastewater Treatment Plant Improvements Project as specified in the attached contract specifications. MWHC received noticed from their supplier (Fortiline Waterworks) that 24-inch by 36-inch ductile iron flanged long radius reducing 90-degree pipe bends are not available in sufficient and reasonably available quantities in a timeframe that would allow the project to meet its schedule

MWHC has contacted several other venders and has not been able to find a source that can provide 24-inch by 36-inch ductile iron flanged long radius reducing 90-degree pipe bends

During the research into this matter, MWHC did find a similar situation where the EPA received and approved another case in which large diameter ductile iron flanged long radius reducing 90-degree pipe bends were not available domestically. This decision memorandum is attached.

Feel free to contact me if you have and questions Sincerely, MWH Constructors,

Jeremy Hogan Project Engineer

Attachments:

- A) Decision Memorandum dated 06/10/2015
- B) Contract Specifications
- C) Cutsheets for Long Radius Bends
- D) Notification from Vendor

2-4.04. <u>Oil Chamber Housing</u>. The oil chamber shall contain a drain plug and a vent plug.

2-4.05. <u>Mechanical Seals</u>. Each pump shall be provided with two mechanical rotating shaft seals arranged in tandem and running in an oil chamber. Each interface shall be held in contact by an independent spring system designed to withstand maximum suction submergence. The seals shall require neither maintenance nor adjustment and shall be readily accessible for inspection and replacement.

Shaft seals lacking positively driven rotating members or conventional double mechanical seals which utilize a common single or double spring acting between the upper and lower units and requiring a pressure differential to offset external pressure and effect sealing, will not be acceptable. The seals shall not rely upon the pumped media for lubrication and shall not be damaged if the pumps are run unsubmerged for extended periods while pumping under load.

## 2-4.05.01. Seal Water Lubrication Station. Not Used.

2-4.06. <u>Sealing of Mating Surfaces</u>. All mating surfaces of major components shall be machined and fitted with O-rings where watertight sealing is needed. Sealing shall be accomplished by O-ring contact on four surfaces and O-ring compression in two planes, without reliance on a specific fastener torque or tension to obtain a watertight joint. The use of elliptical O-rings, gaskets, or seals requiring a specific fastener torque value to obtain and maintain compression and watertightness will not be acceptable. The use of secondary sealing compounds, gasket cement, grease, or other devices to obtain watertight joints will not be acceptable.

## 2-4.07. Guiderail Mounted Base. Not used.

2-4.08. <u>Concrete Pedestal Mounted Base</u>. All equipment will be installed on concrete bases as indicated on the Drawings. Each pump shall have a base plate mounted on the concrete base extending to below the bottom of the suction elbow inlet flange. All seams and contact surfaces between steel shapes and plates of fabricated steel pedestals shall be continuously welded and ground smooth. Each base plate shall be suitable for grouting and bolting to the concrete equipment base in accordance with the details on the Drawings.

2-4.08.01. <u>Suction Elbow</u>. Each pump shall be provided with a flanged long radius reducing-type suction elbow complete with a cleanout handhole with contoured interior surfaces. The diameter and drilling of the inlet flange shall conform to ANSI B16.1, Class 125. The reducing elbow shall be sized to connect the suction piping to the pump casing as indicated on the Drawings.