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Thomas W. Sigmund, P.E.
Commissioners
Kathryn Hasselblad, President
James Blumreich, Secretary
Thomas P. Meinz, Vice President
Mark D. Tumpach, Vice President
Lee D. Hoffmann, Vice President

NEW Water
The brand of the Green Bay Metropolitan Sewerage District

January 3, 2020

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AIR ENFORCEMENT BRANCH
U.S. EPA REGION 5

VIA CERTIFIED MAIL AND
EMAIL TO WHEELER.ANDREW@EPA.GOV AND MOONEY.JOHN@EPA.GOV

Mr. Andrew Wheeler
EPA Administrator
U. S. Environmental Protection Agency
Mail Code 1101A
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Mr. John Mooney
U.S. Environmental Protection Agency
Mail Code A-187
77 West Jackson Boulevard
Chicago, IL 60604-3507

RE: 40 CFR § 60.4861(b) Supplement to Written Report
NEW Water Fluidized Bed Incinerator
Operation Permit No. 405004600-P30
WPDES Permit No. WI-0065251-01-1

Dear Messrs. Wheeler and Mooney:

On December 31, 2019, Green Bay Metropolitan Sewerage District ("NEW Water") filed a written report with EPA pursuant to 40 CFR § 60.4861 (the "Malfunction Report"). A copy of the Malfunction Report is attached hereto as Attachment A. In addition, on the same date, NEW Water filed a request for a 30-day extension to the written report deadline pursuant to 40 CFR sec. 60.4861(b) ("Extension Request"). A copy of the Extension Request is attached hereto as Attachment B.

In the unlikely event that the Extension Request is not granted by EPA and without waiving its right to receive the same, NEW Water is supplementing the response to 40 CFR § 60.4861(a)(9) in the Malfunction Report with this letter. In particular, this letter serves as the written root cause analysis based on NEW Water's understanding of the malfunction event to date and provides a description of actions taken to complete a more comprehensive report on this topic in the near future.

Affirmative Defense Pursuant to 40 CFR § 60.4861(a)

(9) A written root cause analysis has been prepared the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

Response:

NEW Water is investigating the cause of the failure as well as the performance of the monitoring and protective systems during the malfunction event. Based upon consultation with industry experts and NEW Water's general understanding of the granular activated carbon ("GAC") technology, NEW Water's current and preliminary understanding of what may be the primary cause of the malfunction is as follows: Carbon bed hotspots commonly form as a result of an exothermic reaction due to moisture or contaminants in the incineration flue gas adsorbing onto the carbon. These hotspots, if not properly cooled with adequate, well-distributed air flow, can reach temperatures that can damage fiberglass components of the GAC system.

In addition, NEW Water has retained Chavond-Barry Engineering Corporation ("CBE") to perform a more comprehensive root cause analysis. NEW Water will provide EPA and DNR with a copy of CBE's findings along with recommendations for possible changes for operational procedures and system monitoring and controls that will correct and eliminate the primary causes of the malfunction ("Final Report"). The Final Report will attempt to clarify the extent to which the following conditions (and potentially others) may have contributed to the development and inability to control the carbon bed hotspot:

- Build-up of deposits in carbon bed;
- Carbon bed washing and drying operations during the maintenance outage; and
- Carbon monoxide and carbon bed temperature monitoring system performance.

With regard to the amount of emissions associated with malfunction that is the subject of the root cause analysis, please see the discussion regarding emissions contained in pages 8-10 of the Malfunction Report.

Of course, if you have any questions about the content of this supplemental letter, please feel free to contact the undersigned at your convenience.

Sincerely,

GREEN BAY METROPOLITAN SEWERAGE DISTRICT

The undersigned is the Executive Director of Green Bay Metropolitan Sewerage District, also known as NEW Water, and hereby certifies, based on information and belief formed after reasonable inquiry, the statements and information contained herein are accurate.

Thomas W. Sigmund

Thomas W. Sigmund, P.E.
Executive Director

Enclosures: Attachment A
Attachment B

cc: Louise Gross (gross.louise@epa.gov)
James Bonar-Bridges (james.bonarbridges@wisconsin.gov)
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