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March 13, 2020

Mausami Desai
Climate Change Division
Office of Atmospheric Programs
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW
Washington, DC 20460
Via Email: GHGInventory@epa.gov

**Re: NACWA Comments on Wastewater Treatment Emissions Estimates in
EPA's Draft *Inventory of U.S. Greenhouse Gas Emissions and Sinks:*
1990-2018**

Dear Ms. Desai:

The National Association of Clean Water Agencies (NACWA) appreciates this opportunity to comment on the U.S. Environmental Protection Agency's (EPA) draft *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2018 (Inventory)*, and specifically Section 7.2, *Wastewater Treatment (CRF Source Category 5D)*. NACWA represents the interests of over 300 publicly owned wastewater treatment agencies nationwide, serving the majority of the sewered population in the U.S. NACWA members want to ensure that greenhouse gas (GHG) emissions from wastewater treatment facilities are characterized correctly in the *Inventory*, since the *Inventory* is a frequently-cited reference for GHG information. The wastewater treatment category includes publicly owned treatment works (POTWs), septic systems, and industrial wastewater treatment systems. NACWA's review focused on emissions from POTWs.

NACWA has submitted comments on the wastewater treatment section since the 2005 *Inventory*, and we appreciate the clarifications that EPA has made over the years for the emissions calculations and the factors that are used in the calculations. Several references were updated in the 2017 *Inventory* to better reflect current characteristics of the sector. However, more work needs to be done on updating data sources. For example, the outdated 2004 Clean Watershed Needs Survey (CWNS) was still used as the basis for the percent of wastewater flow to aerobic and anaerobic systems, the percent of utilities that do and do not employ primary treatment, and the wastewater flow to POTWs that have anaerobic digesters. The forecasts made using the 2004 CWNS and previous editions of the CWNS may not accurately reflect recent trends and practices for wastewater utilities.

Another factor that should be updated is the wastewater flow of 100 gal/person/day, which was taken from a 2004 document published by the Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers. Due to droughts and effective water conservation measures, many areas of the US now have wastewater flows significantly less than this value. NACWA recommends that EPA consider updated wastewater flow references that represent current wastewater flow in other regions of the country.

NACWA agrees with EPA's planned improvements for the *Inventory* and encourages development of US-specific methodologies and emission factors when appropriate. As NACWA has explained in comments on the *Inventory* in previous years, the Association believes that the nitrogen loading rates for N_2O_{EFFLUENT} are sourced incorrectly and that using information from the existing National Pollutant Discharge Elimination System (NPDES) database will yield more accurate and justifiable loading rates. The NPDES permitting program represents long-term, nationwide facility performance that would allow emissions estimate projections over the time series represented in the *Inventory*. EPA should also investigate additional references for nitrogen loading rates.

NACWA also asks that EPA consider reformatting the explanations of the variables used to calculate methane and nitrous oxide emissions. Both the value used in the calculation and the source should be clearly stated, preferably in bullet or table form. The current paragraph format, which generally does not include the value used in calculation, increases the difficulty of reproducing the emissions calculations.

Thank you for your consideration of these comments. Please contact me at 202-533-1836 or cfinley@nacwa.org if you have any questions.

Sincerely,



Cynthia A. Finley, Ph.D.
Director, Regulatory Affairs