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March 14, 2019

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:
1990-2017***

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: 1990-2017 (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 For example, the outdated 2004 Clean Watershed Needs Survey (CWNS) was still used as the basis for the percent of wastewater flow to aerobic and anaerobic systems, the percent of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.

NACWA agrees with EPA's planned improvement to investigate updated sources and re-evaluate its methodology as related to wastewater system type and methane emissions.

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 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.

As EPA notes in the *Inventory*, the refinements to the *2006 IPCC Guidelines for National Greenhouse Gas Inventories* – which are currently undergoing government review – may incorporate newer scientific information. The IPCC's refinement of the emissions factors used in wastewater treatment emissions calculations may resolve some of the issues with the current methodology. Since the refinements will not be available for public review and comment prior to publication, NACWA asks that EPA allow additional time for expert review when the refinements are incorporated into the *Inventory* for the first time.

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