



March 9, 2018

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: 1990-2016*

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: 1990-2016 (Inventory)*, and specifically Section 7.2, *Wastewater Treatment (IPCC 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. NACWA has previously stated its concern that potentially outdated data were used in the emissions calculations, and this remains a concern with the current inventory. For example, the 1992, 1996, 2000, and 2004 Clean Watershed Needs Surveys (CWNS) are 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 The 2004 CWNS is outdated, and forecasts made from it and the previous surveys likely do not accurately reflect recent trends and practices for wastewater utilities. In addition, the wastewater flow of 100 gal/person/day 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, other areas of the U.S. 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 also recommends that EPA consider updating the Metcalf and Eddy (2003) reference to the newest edition of this book. 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.

NACWA agrees with EPA's other planned improvements and encourages the development of country-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 Pollution 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 revisions to the *2006 IPCC Guidelines for National Greenhouse Gas Inventories* may incorporate newer scientific information, and the refinement of the emissions factors used for wastewater treatment may help to resolve some of the issues with the current methodology.

Thank you for consideration of our comments on the draft *Inventory*. Please contact me at 202-533-1836 or cfinley@nacwa.org if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Cynthia A. Finley".

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