August 2, 2011

The Honorable Lisa P. Jackson  
Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Mail Code: 1101A  
Washington, D.C. 20460

Dear Administrator Jackson,

Nitrogen and phosphorus are unlike any pollutants previously addressed through the Clean Water Act (CWA). The unique properties of these nutrients and the varying responses aquatic ecosystems can exhibit when nutrient levels increase or decrease demand special consideration when crafting control approaches. The undersigned organizations and their respective members are ready to do their fair share to address nutrient-related impacts where water quality goals are attainable, measurable, and meaningful and are achieved through the most cost-effective nutrient control measures by all relevant sources, including nonpoint sources such as agriculture.

The municipal clean water community, however, continues to be the only major source of nutrients held accountable for its contributions in most parts of the country and has already invested billions of dollars of ratepayer money to address this critical water quality challenge. Given that tens of billions of dollars in additional investment may be needed nationwide to address our sector’s contribution of nutrients, there must be certainty as to the corresponding water quality outcomes from these investments. Therefore, it is critical that the U.S. Environmental Protection Agency (EPA) enable the States to develop meaningful water quality goals to serve as the foundation of the CWA’s total maximum daily load (TMDL) and permitting programs. This will serve to help ensure that nutrient loading reductions are both cost-effective and sustainable and the investments municipalities make have a real and significant impact on water quality while maximizing overall environmental benefit.

With this as context, we recommend that EPA accept approaches that do not fit its current mold for developing water quality criteria. EPA’s continued insistence that States develop independently applied numeric criteria for both nitrogen and phosphorus for all waters is hindering progress and we urge EPA to embrace and support the many innovative approaches being employed by, and available to, States to reduce nutrient loadings.

Recently, concerns have been raised about an apparent conflict in two EPA policy statements. The first is a March 1, 2011 letter from Nancy Stoner, Acting Assistant Administrator for EPA’s Office of Water, responding to a letter from the New England Interstate Water Pollution Control Commission. The second is a March 16, 2011 memorandum from Ms. Stoner to the EPA Regional Administrators. The March 1 letter was in response to correspondence regarding the
nutrient criteria being developed by two States in the Northeast. The States’ preferred methodology relies on a weight of evidence approach for determining when designated uses were not being met. The Agency’s response was clear – States must adopt numeric nutrient criteria (NNC) in all waterbodies for both nitrogen and phosphorus and those numeric values must be applied independent of any other information (e.g., biological indicators of water quality) to determine whether a use was being impaired. The letter was interpreted as limiting State innovation when responding to local water quality needs.

Two weeks later, however, EPA issued the March 16 memorandum which stressed that States must take the lead in addressing nutrients and that they “need room to innovate and respond to local water quality needs, so a one-size-fits-all solution to nitrogen and phosphorus pollution is neither desirable nor necessary.” While the March 16 memorandum suggested additional flexibility from EPA on the development of NNC, in reality the memorandum only provided the timeframe and process in which EPA expects all States to develop NNC for nitrogen and phosphorus for all waters. The March 16 memorandum also states that in the interim, while States work to develop these NNC, they should focus on making reductions by ensuring the “effectiveness of point source permits”.

Though the March 16 memorandum contained some language that could be read as EPA being open to flexible approaches, it simply gave “interested and willing states” more time to develop independently applicable NNC for all waters. This federal model for numeric criteria development has not been working and has only resulted in further delay in implementing nutrient controls. States are exploring new approaches, including:

- Adopting criteria for response variables, such as chlorophyll a or dissolved oxygen, instead of numeric values for nitrogen and phosphorus;
- Developing predictive tools and models to evaluate nutrient impacts and protect unimpaired waters;
- Timing technology upgrades for nutrient control with wastewater treatment plant upgrades;
- Taking steps to control nutrients to protect downstream uses, such as monitoring to ensure uses are maintained, setting permit limits that ensure upstream discharges do not cause exceedances of downstream criteria, and applying antidegradation rules at upstream sites;
- Using other indicators of adverse water quality impacts in a waterbody to direct reduction activities;
- Exploring the use of water quality trading to achieve nutrient reductions;
- Prioritizing to make targeted reductions to address key watersheds first using existing narrative standards.

EPA must embrace and support these types of approaches and ensure that other States have the flexibility to undertake similar efforts.
States must be able to look beyond simple numeric values for nitrogen and phosphorus and use different approaches and strategies as needed to address the unique needs of a particular watershed. Where numeric values that lack a meaningful link to water quality are simply imposed, as with the federal nitrogen and phosphorus criteria developed by EPA for Florida’s rivers and streams, there are significant concerns that implementation will be costly and ineffective in protecting the environment. Efforts in the Chesapeake Bay have demonstrated that NNC for response variables, instead of nitrogen and phosphorus, can still enable TMDL development and CWA permitting. Criteria development efforts in Ohio are demonstrating that a weight of evidence approach, using biology in addition to concentrations of nitrogen and phosphorus, can be used not only to evaluate impairment, but to predict adverse water quality impacts and prevent impairments in waters that are currently healthy. In Kansas, real progress is being made in addressing nutrient-related water quality impacts even though the State has not developed any numeric nutrient criteria. At the same time as supporting these different State efforts, EPA must use the full suite of CWA tools currently available, including adaptive management and variances like the approach being explored by Montana, to ensure criteria implementation is as flexible as possible. Where NNC are developed, they must:

- Be technically and scientifically defensible, and adequately reflect the full range of biological, chemical, and physical properties of the waterway, ultimately protecting the designated use;
- Be based on a demonstrated and quantified cause and effect relationship and appropriately qualified by the uncertainty in that relationship; and
- Not be used as the basis for imposing nutrient controls unless the weight of the evidence indicates that impacts have resulted, or will result, from excess nutrients.

Reliance on criteria development and permit implementation approaches that are poorly linked to the ecological effects of nutrient pollution will result in major expenditures for point sources with possibly no or minimal improvement to water quality for many waters and potentially having a greater overall environmental impact (e.g., greenhouse gas release, raw material consumption, etc.). This is especially true in the majority of watersheds nationwide where point sources are not the predominant source of nutrient loadings. At the same time, placing an emphasis on reducing nutrient loadings ahead of criteria development, as encouraged in the March 16 memorandum, will similarly result in a waste of resources if there is a lack of connection to the specific ecological needs of a waterbody. Reducing nutrient loadings cannot be presumed to yield positive outcomes in all cases and efforts to address impacts must be prioritized based on an understanding of the underlying biological conditions.

Ultimately, for real progress to be made on this critical issue, more comprehensive change is needed to ensure all sources of nutrients are equitably incorporated into any viable solution and held accountable for their fair share. Too often point sources, even in cases where they represent a fraction of the total load, are being required to achieve reductions at the limits of
technology simply because they are deemed by EPA to be the only controllable source under the CWA. Recent examples in New Hampshire and Colorado underscore this inequity in nutrient control implementation.

Again, the undersigned organizations urge EPA to focus on water quality, not process, and embrace and support the many innovative approaches being employed by States to reduce nutrient loadings.

Signed

National Association of Clean Water Agencies
Water Environment Federation
Association of Environmental Authorities of New Jersey
Association of Ohio Metropolitan Wastewater Agencies
Bay Area Clean Water Agencies
California Association Sanitation Agencies
Colorado Nutrient Coalition
Colorado Stormwater Council
Colorado Wastewater Utility Council
Georgia Association of Water Professionals
Florida Water Environment Association Utility Council
Illinois Association of Wastewater Agencies
Kansas Water Environment Association
Lower Neuse Basin Association
Maryland Association of Municipal Wastewater Agencies
Massachusetts Coalition for Water Resources Stewardship
Massachusetts Water Pollution Control Association
Missouri Water Environment Association
New England Water Environment Association
Neuse River Compliance Association
New York Water Environment Association
Oregon Association of Clean Water Agencies
Rocky Mountain Water Environment Association
South Carolina Water Quality Association
Southern California Alliance of Publicly Owned Treatment Works
Texas Association of Clean Water Agencies
Virginia Association of Municipal Wastewater Agencies
Water Environment Association of Texas
Western Coalition of Arid States

cc: Nancy Stoner, Acting Assistant Administrator, Office of Water, U.S. EPA