Communities with a facultative lagoon system used to treat domestic sewage may be able to seek a break on their ammonia requirements if the Missouri-approved Multiple Discharger Variance (MDV) framework is approved by the United States Environmental Protection Agency (EPA).

On Jan. 4, 2018, the Missouri Water Quality Standards was unanimously adopted by the Missouri Clean Water Commission. Within the Water Quality Standards packet is the regulation 10 CSR 20-7.031(B), that is the incorporation of the MDV framework. This language enables the Missouri Department of Natural Resources (MDNR) to use the adopted MDV framework to issue permits with a variance from the water-quality-based effluent limit of ammonia for a permittee that meets all of requirements within the MDV framework. The Water Quality Standards packet was submitted to EPA on April 13, 2018. The EPA has 60 days to approve or 90 days to deny the new rule.

The rigorous application process set forth by MDNR meets all requirements set forth by the federal Clean Water Act. The potential applicants for the variance from the ammonia standards must be municipalities with a population of less than 10,000; a publicly-owned utility, commonly known as POTW; and have multi-celled, facultative lagoon systems where the residents of the community would experience a substantial and widespread social and economic impact if required to comply with final ammonia limits within their Missouri State Operating Permit. The MDNR has stated during past meetings that they are willing to assist any municipality through the application process.

The MDV framework allows a wastewater Missouri State Operating Permit to be issued with ammonia limits that are less stringent than the regulations required for the 20-year term of the MDV. The ammonia limits issued within the permit is based on current performance of the lagoon system. Limits will be calculated using the past five years of discharge monitoring-reported data from the.
permitted lagoon in order to establish the highest attainable effluent limit (HAC).

The limit set will be based on one of two scenarios:

**Scenario 1:** The 95th percentile is to be the final effluent limit in the form of the monthly average and the 99th percentile is to be the final effluent limit in the form of the daily maximum.

**Scenario 2:** If the applicant’s well-functioning facility meets the total ammonia nitrogen criteria during one season but not the other, the current criteria for total ammonia nitrogen will remain as the water-quality-based effluent limit during the season in which the facility can treat to the criteria level. The season, in which the facility cannot meet the current criteria, the permit will be issued with the highest attainable effluent limits as the monthly average and the daily maximum based on the 95th and 99th percentile of the facility’s current performance.

Additional conditions include that the facility comply with the pollutant minimization program (PMP) that is characterized within the framework. The PMP establishes requirements to ensure that the lagoon system is well-operated and maintained throughout the term of the variance.

The MDV framework established by MDNR is a tool for municipalities to use if compliance with ammonia requirements is beyond the current financial capability of the city. The Missouri Public Utility Alliance and the Missouri Municipal League are eagerly waiting for the approval from EPA of the water quality standards packet so that the department can begin the implementation process of the MDV framework and municipalities can feel relief that they will be able to use existing infrastructure to comply with their wastewater permit.

**Lacey Hirschvogel** is the environmental and public policy coordinator with the Missouri Public Utility Alliance. She focuses on municipal National Pollutant Discharge Elimination System (NPDES) wastewater permitting, as well as policy issues within the Missouri Clean Water Law and the Clean Water Act. She graduated with a Bachelor of Science degree in Biochemistry from the University of Florida and is currently working on her Masters of Public Affairs at the University of Missouri.