

## **Total Nitrogen Monitoring - Major Sanitary Dischargers**

### **Frequently Asked Questions & Answers**

**Q: Who is responsible to monitor for total nitrogen?**

A: Major Sanitary Dischargers 1.0 MGD average design flow or greater.

**Q: When do permittees need to commence monitoring for total nitrogen?**

A: Permit renewals or modifications resulting from applications received after January 1, 2019. Permittees are not obligated to begin monitoring for total nitrogen until the requirement is placed in the NPDES permit.

**Q: Why is IDEM requiring monitoring for total nitrogen for all major sanitary dischargers?**

A: In response to the nutrient pollution concerns, the U.S. Environmental Protection Agency (EPA) released a memorandum on September 22, 2016 entitled “Renewed Call to Action to Reduce Nutrient Pollution and Support for Incremental Actions to Protect Water Quality and Public Health” <https://www.epa.gov/sites/production/files/2016-09/documents/renewed-call-nutrient-memo-2016.pdf>. The memorandum highlights examples of problems related to nutrient pollution and also provides EPA’s approaches for dealing with sources of nutrient pollution.

One of the key action items that EPA highlights within the memorandum is the reduction of the nutrient load from point sources. EPA recommends a goal of monitoring requirements inclusion for total phosphorus and total nitrogen in NPDES permits for major municipal wastewater facilities.

The State of Indiana has not yet instituted any statewide monitoring requirements for total nitrogen. To begin the process of total nitrogen data collection, IDEM is proposing that all major sanitary dischargers with average design flow ratings of 1.0 MGD or greater begin monitoring for total nitrogen as a requirement of their next NPDES permit renewal.

The data collected will be used to get a better understanding of nitrogen loadings in Indiana waters and aid the State of Indiana with future updates of the State of Indiana’s nutrient reduction efforts.

**Q: What is the required monitoring frequency for total nitrogen?**

A: The minimum monitoring frequency expected is one (1) time monthly by 24 hr. composite sampling in the effluent only. Influent monitoring is not proposed at this time.

**Q: What are the reporting requirements for total nitrogen?**

A: Total nitrogen results are to be reported on the monthly discharge monitoring report. Permittees are required to report both the concentration in milligrams per liter and associated loading in pounds per day.

**Q: What analytical methods are required for total nitrogen monitoring?**

A: There is no approved method for the analysis of total nitrogen for NPDES reporting purposes. Permittees must analyze for the components of total nitrogen. These components are *total kjeldahl nitrogen* and *nitrates/nitrites*. The sum of these components are to be reported as the total nitrogen result.

Only methods that are listed as approved in 40 CFR 136.3 for total kjeldahl nitrogen and nitrates/nitrites can be used for analysis. Please reference the following site for the approved methods:

<https://www.epa.gov/cwa-methods/approved-cwa-chemical-test-methods#analyte>

