

nitrogen and total phosphorus, develop TBELs, and provide a NPDES permit implementation schedule.

Upon completion of the Nutrient Management Strategy, EPD would begin implementing the Strategy by including site-specific nitrogen effluent limits and potentially new and reduced phosphorus limits, as applicable, in point source discharge permits, based on the results of lake and watershed models for those lakes with water quality standards. The development of effluent limits for point source dischargers into or upstream from lakes that currently do not have numeric nutrient criteria will be challenging. For these lakes, EPD may have to develop numeric nutrient targets ahead of establishing lake standards. This will allow a comprehensive evaluation to be performed to assess the discharge of phosphorus and nitrogen from point source dischargers and their effects on chlorophyll a in lakes.

In lieu of including numeric nutrient effluent limits for nitrogen (unless required in a TMDL or wasteload allocation), EPD will include a nutrient optimization permit condition, as appropriate in all domestic wastewater permits and non-POTW permits where nitrogen has been identified as a pollutant of concern or where there is a potential to discharge nutrients. Additionally, EPD will include a specific permit condition to reopen the permit during the 5-year term to include applicable nutrient effluent limits upon completion and implementation of the Nutrient Permitting Strategy.

## **5.8 Comprehensive Nutrient Optimization Plan**

40 CFR 122.44(k) states that best management practices (BMPs) to control or abate the discharge of pollutants are acceptable when numeric effluent limitations are infeasible. While EPD develops a comprehensive Nutrient Permit Strategy, continues to develop water quality standards resulting in wasteload allocations and the development of numeric WQBELs, EPD is including a permit condition requiring the development of a Comprehensive Nutrient Optimization Plan (CNOP). Wastewater treatment efficiency optimization is an adaptive management strategy the Permittee shall use to limit the discharge of total phosphorus and total nitrogen. The CNOP will include a suite of site specific BMPs that EPD believe meets the intent of 40 CFR 122.44(k).

The proposed permit requires the permittee to develop, implement, and maintain a Comprehensive Nutrient Optimization Plan due 24 months following the permit effective date. The Permittee must use the CNOP to evaluate existing treatment processes for nutrient reduction. This must include identifying opportunities through influent source identification, operational adjustments designed to enhance nitrification and denitrification, minor retrofits such as the incorporation of anoxic zones, side-stream management opportunities, and minor upgrades. The Permittee must update the plan annually to evaluate effectiveness of the adopted strategies, reduction goals, and established targets.