**The Mississippi Nitrogen Removal Program**

The Mississippi Department of Environmental Quality manages the NPDES surface water discharge program. Mississippi does not have specific total nitrogen or nitrate nitrogen on any municipal (POTW) surface water discharges.

Mississippi has eleven poultry processing plants and several fish processing plants that have individual permits with surface water discharges or discharge into a municipal POTW. The poultry processing plants with individual surface discharge permits have a 103 mg/l total nitrogen monthly average and 147 mg/l maximum month total nitrogen limit. The limit of 103 mg/l is a federal US EPA technology based limit for poultry processing facilities were individual site specific limits are not issued. Poultry processing facilities that discharge to a POTW have local discharge limits that vary. The fish processing plants have a daily mass based nitrogen limit or local limits if they discharge into a municipal POTW.

Most of the poultry processing facilities do not require a supplemental carbon source to achieve the federal limit for total nitrogen due to the high total nitrogen concentration based limit or high local limits from the POTW. For the few facilities that use a supplemental carbon source glycerin typically is used and it is generally used intermittently.

The Mississippi Department of Environmental Protection has listed the Pascagoula and Tombigbee River basins in the states 303d list of impaired waters with nutrient concerns. TMDLs for both rivers are in the development stage for nutrients along with site specific nutrient criteria. Implementation of any specific nutrient limits for point source dischargers is estimated to be greater than five years out.

The Mississippi Department of Environmental Protection is actively involved in the larger Mississippi River basin study with the US EPA. The drainage basin for the Mississippi River in Mississippi will affect the majority of large wastewater treatment plants in the state. The likely schedule for actual wastewater nitrogen limits for dischargers and completed wastewater improvements with nitrogen limits is greater than five years.