**The Louisiana Nitrogen Removal Program**

The Louisiana 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.

Louisiana has four poultry processing plants and several chemical processing plants and fertilizer processing facilities 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 chemical processing and fertilizer processing plants have a daily mass based nitrogen limits and do not presently require the use of supplemental carbon.

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 Louisiana Department of Environmental Protection has listed several lakes and small steams as nutrient impaired. TMDL will need to be developed for the waterways and preliminary assessments indicate that the source of the nitrogen is from onsite septic systems and agricultural sources.

The Louisiana Department of Environmental Quality is actively involved in the larger Mississippi River basin study with the US EPA. The drainage basin for the Mississippi River in Louisiana 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.