

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Matt Blunt, Governor • Dovie Childers, Director

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APR 06 2006

Mr. John DeLashmit
U.S. Environmental Protection Agency
Region VII
901 North Fifth Street
Kansas City, KS 66101

RE: Permit for Montgomery City's Northeast Wastewater Treatment Plant in Lieu of Total Maximum Daily Load for Elkhorn Creek (WBID 189)

Dear Mr. DeLashmit:

Elkhorn Creek near Montgomery City in Montgomery County, Missouri, is on the 2002 303(d) list for Biochemical Oxygen Demand (BOD). In addition, EPA removed sediment from Elkhorn Creek's 303(d) listing and added Non-Volatile Suspended Solids (NVSS). The stream is impaired for two miles from the source, the Montgomery City Northeast Wastewater Treatment Plant (WWTP), Permit Number MO-0084158. The WWTP's effluent Total Suspended Solids (TSS) includes some inorganic material (NVSS) that washes into sewers and Volatile Suspended Solid (VSS) organics like sludge and algae related to wastewater processes. The Missouri Department of Natural Resources (department) has opted to correct these impairments through permit limits in lieu of a Total Maximum Daily Load (TMDL).

The city's northeast WWTP is located near the headwaters of Elkhorn Creek. There are no other treatment plants upstream and the land is sparse rural development. In 2004 BOD upstream of the WWTP was non-detectable and the dissolved oxygen (DO) averaged 6.0 mg/L above the WWTP, suggesting that there are no significant sources of BOD pollution to the stream above the WWTP.

The listing for the impaired reach was based on 10 samples taken from approximately 0.5 miles upstream of the WWTP to 2.5 miles below the WWTP, on August 11, 1999. Forty samples were collected at several locations from 0.4 mile above the WWTP to 3 miles below the WWTP on July 14-15, 2004 and August 4-5, 2004.

Montgomery City is designing a new WWTP and will begin construction in 2006. The department renewed the operating permit for this facility on March 24, 2006 with interim limits during the construction period and new final limits to take effect on March 28, 2008. These limits ensure stream water quality standards (WQS) will be met. The DO WQS of 5 mg/L will be achieved by limiting the effluent BOD to 30 mg/L as a daily maximum and 15 mg/L monthly average. The effluent TSS is limited to 30 mg/L as a daily maximum and 15 mg/L monthly average which will significantly reduce any suspended solids to the stream. In addition, the permit sets ammonia limits at 5 mg/L as a daily maximum and 2.5 mg/L monthly average for summer and 8.1 mg/L as a daily maximum and 4 mg/L monthly average for winter. The interim permit limits for BOD are 25 mg/L monthly average (40 mg/L weekly average) in summer and 30 mg/L monthly average (45 mg/L weekly average) in winter. TSS interim limits are 30 mg/L monthly average and 45 mg/L daily maximum. The interim monthly average ammonia limits are 2.4 mg/L summer and 3.6 mg/L winter. The wasteload allocation and new permit limits were established for BOD, TSS and ammonia using the QUAL2E model. The new limits go into effect upon completion of the construction.

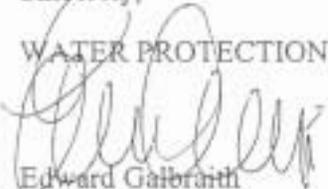
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Enclosed please find the Missouri State Operating Permit for the Montgomery City's Northeast WWTP. The final limits will be met when the construction is complete and, by meeting them, the WQS should be achieved in Elkhorn Creek. The department will schedule ambient instream water quality monitoring the first full year after the new plant is in operation to determine if the new permit limits have eliminated the impairment. In addition, the permit includes the following monitoring requirement to ensure permit limits are being achieved: quarterly instream water monitoring one quarter mile downstream of the outfall for DO, pH, ammonia, and temperature, as well as an annual WET test. A reopener clause is included in the permit to allow for stricter limits if monitoring shows WQS violations.

With this letter, the department submits the Montgomery City Northeast WWTP permit to the U.S. EPA for concurrence that the permit will serve in lieu of a TMDL. We appreciate EPA taking prompt action on this. If you have any questions, please contact Mr. Philip Schroeder at (573) 751-6623 or by mail at Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102-0176.

Sincerely,

WATER PROTECTION PROGRAM



Edward Galbraith

Director

EG:mcl

Enclosure

c: Mr. William Bryan, Attorney General's Office
Mr. Daniel R. Schuette, Director, DEQ
Mr. Earl Pabst, Deputy Director, DEQ
Missouri Clean Water Commission