

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Matt Blunt, Governor • Doyle Childers, Director

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APR 03 2006

Mr. John DeLashmit
U.S. Environmental Protection Agency
Region VII
901 North 5th Street
Kansas City, KS 66101

RE: Permit for El Dorado Springs Wastewater Treatment Plant in Lieu of Total Maximum Daily Load for Walnut Creek (WBID 1339)

Dear Mr. DeLashmit:

One mile of Walnut Creek near El Dorado Springs in Cedar County, Missouri, is on the 2002 303(d) list for Biochemical Oxygen Demand (BOD₅) and Volatile Suspended Solids (VSS). The sole source of these impairments is the El Dorado Springs Wastewater Treatment Plant (WWTP), Permit Number MO-0040002. 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 1998 listing for the impaired reach was based on stream surveys of Walnut Creek conducted by the department in 1983, 1985, 1988 and 1994. These surveys cited sludge, green water, bacterial slime, minor odor, blackfly and midge larvae (abundant), and caddisfly larvae (sparse). The water upstream of the WWTP was described as clear, the substrate had a good appearance and minnows, sunfish and caddisfly larvae were noted.

The department reissued the permit for El Dorado Springs on September 5, 2003, with new limits designed to achieve stream water quality standards (WQS). The permit has been issued as a no-discharge system. In the event of an emergency discharge, the following limits were included. To achieve the dissolved oxygen WQS of 5 mg/L, the effluent was limited to a daily maximum BOD₅ of 30 mg/L weekly average and 20 mg/L monthly average. The VSS standard (as a narrative of no noticeable downstream objectionable deposits) will be achieved by limiting the effluent to 30/25 mg/L Total Suspended Solids (TSS) weekly/monthly average. These permit limits were based on 10 CSR 20-7.015 (8) (B) 3C and what is achievable by this facility using a review of discharge monitoring report data. The previous permit had limits for TSS of 45 mg/L weekly average and 30 mg/L monthly average. Limits for BOD₅ in the previous permit were 20 mg/L under Option 1 (where a discharge was allowed only if the discharge was equal to or less than the upstream flow in Walnut Creek) and 30 mg/L under Options 2 and 3 (when the discharge was either "one-half or less" or "one-third or less" than the upstream flow in Walnut Creek).

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Enclosed, please find the Missouri State Operating Permit for the El Dorado Springs WWTP. By eliminating the discharge from the stream, the WQS should now be achieved in Walnut Creek. Two studies (24-hour low flow and biocriteria) by the department are scheduled for 2005. Also, special studies for VSS embeddedness have been scheduled for each of 2006 and 2007. In addition, instream monitoring is included in the permit to ensure permit limits will be achieved, Sample Point #S1 is upstream of the discharge point at the bridge over Walnut Creek (coordinates given) and Sample Point #S2 is downstream of the discharge at another bridge over the creek (again, the coordinates are specified). These parameters shall be monitored as a grab sample once a quarter and include ammonia as N, dissolved oxygen, pH, and temperature. Flow is to be collected once a month, as a 24-hour estimate. A reopener clause is included in the permit to allow for stricter limits if future monitoring shows WQS violations.

With this letter, the department submits the El Dorado Springs WWTP permit to the U.S. EPA for concurrence that the permit will serve in lieu of a TMDL for Walnut Creek. We appreciate EPA taking prompt action on this. If you have any questions, please contact Ms. Ann Crawford at (573) 751-5827 or by mail at the 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:apl

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