



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

JUL 27 2007

Mr. Edward Galbraith, Director
Water Pollution Control Program
Water Protection and Soil Conservation Division
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, Missouri 65102

Dear Mr. Galbraith:

RE: Permit Limits in Lieu of a TMDL for Gabriel Creek (WBID 883)

This letter responds to the submission from the Missouri Department of Natural Resources (MDNR) dated April 24, 2007, regarding Gabriel Creek. Gabriel Creek was listed as impaired on Missouri's 1998 §303(d) list for Biochemical Oxygen Demand (BOD) and Non Filterable Residue (NFR). MDNR proposes to correct the impairments with National Pollutant Discharge Elimination System (NPDES) permit limits in lieu of Total Maximum Daily Loads (TMDLs). The following water body segment is proposed to be corrected through permit limits:

Table with 6 columns: Water Body, WBID, Impairment, Source, Permit #, Year added to list. Row 1: Gabriel Creek, 883, Biochemical Oxygen Demand (BOD) Non Filterable Residue (NFR), Stover's southwest and northwest waste water lagoons, MO-0047058 MO-0047040, 1998

Waters require TMDLs when certain pollution control requirements are not stringent enough to implement water quality standards (WQS) for such waters. To exempt an impaired water from the TMDL process, the pollution control requirements cited in the regulation under 40 CFR §130.7(b)(1)(i), (ii), and (iii) must be established and enforced by federal, state, or local laws or regulations, and be stringent enough that, when applied, the receiving water will meet WQS.

In regards to Gabriel Creek, Federal regulations at 40 CFR §130.7(b)(1)(ii) provide that where [more stringent effluent limitations (including prohibitions) required by either state or local authority preserved by section 510 of the Act, or Federal authority (law, regulation, or treaty)] are stringent enough to implement WQS, a TMDL is not required. The Environmental Protection Agency (EPA) Region 7 has completed its review of this submission, and other previously submitted information supporting this permit in lieu of a TMDL, and concur that a

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TMDL is not required for this impaired water body because the impairments are being addressed through more stringent NPDES permit limits as per 40 CFR 130.7(b)(ii).

The Stover waste water lagoons have been identified as the sole sources for the BOD and NFR impairments on Gabriel Creek as a result of surface water monitoring directly above and below the lagoons. NPDES permits for both lagoons were issued on April 13, 2007. Both permits include a compliance schedule to commence by April 13, 2007. Final limits, which will achieve WQS for BOD and NFR, will be imposed through the April 13, 2007, permits with the conclusion of the compliance schedule by April 13, 2010. In review of the southwest lagoon permit, the existing effluent limits have been reduced from 65/45 weekly/monthly average BOD and TSS to 25/13. The permit also includes the addition of permit limits for ammonia. Additionally, the permit requests instream monitoring of dissolved oxygen, temperature, pH, and ammonia, ensuring limits are appropriate. The permit also includes a reopener clause to allow for stricter limits if monitoring shows WQS violations. The northwest lagoon's discharge to Gabriel Creek will be eliminated by April 13, 2011, and the facility closed by April 12, 2012. At that time, effluent will only be discharged through the upgraded southwest lagoon.

Enclosed with this letter is the Region 7 4b Rationale Document which summarizes EPA's approval of the permit in lieu of (PIL) a TMDL. EPA believes the separate elements of the PIL described in the enclosed form adequately address the pollutant of concern.

If you have any questions or concerns in regards to this matter, please do not hesitate to contact Tabatha Adkins, of my staff, at (913)551-7128.

Sincerely,



William A. Spratlin

Director

Water, Wetlands and Pesticides Division

Enclosure

cc: John Hoke
Missouri Department of Natural Resources

Phil Schroeder
Missouri Department of Natural Resources



EPA Region 7 4b Rationale

Water body ID(s): MO_0833
Water body Name(s): Gabriel Creek
Pollutant(s): Biochemical Oxygen Demand (BOD) and Non-Filterable Residue (NFR)
State: MO **HUC(s):** 10300103
Basin:
Submittal Date: April 24, 2007
Concurred: July 12, 2007
First listing cycle: 1998 MO 303(d) list also listed on 2002 MO 303(d) list

Submittal Letter

State submittal letter indicates final Maximum Daily Load(s) for specific pollutant(s)/water(s) were adopted by the state, and submitted to EPA for approval under section 303(d) of the Clean Water Act. Include date submitted letter was received by EPA and date of receipt of any revisions.

EPA received this submittal with cover letter, final permits, and fact sheets on April 24, 2007.

Concern

A statement of the problem causing the impairment.

The sole source of the impairments is Stover's Southwest Lagoon and Northwest Lagoon (permit numbers MO-0047058 and MO-0047040). The lagoons discharge near the headwaters of Gabriel Creek. The upstream flow is low (zero to 0.01 cubic feet/second). The effluent contribution to the stream ranges from 10-80 times that of the stream. There have been observed violations of the narrative standard for Non-Filterable Residue (NFR).

Implementation Strategy

A description of the proposed implementation strategy and supporting pollution controls necessary to achieve WQS, including the identification of point and nonpoint source loadings that when implemented assure the attainment of all applicable WQS.

Both permits were reissued on April 13, 2007. The previous permits had weekly and monthly average limits for BOD of 65 mg/L and 45 mg/L and for TSS 120 mg/L and 80 mg/L, respectively. A wasteload allocation (WLA) study was conducted. A BOD of 25 mg/L was the result. The WLA for BOD was set at 25 pounds/day (lbs/d) for the Southwest plant and 15.2 lbs/d for the Northwest plant. The WLA for TSS was set for both plants at 25 lbs/d. The WLA for ammonia was set seasonally (May 1 - October 31, November 1 - April 30) at 2.0/3.5 lbs/d for the Southwest plant and 1.2/2.1 lbs/d for the Northwest plant. These WLAs will ensure the water quality standards (WQS) for dissolved oxygen (DO) of 5 mg/L and the narrative standards for NFR will be met.

Time

An estimate or projection of the time when WQS will be met.

April 13, 2012, when the Southwest Lagoon meets the new limits and the Northwest Lagoon ceases discharging, WQS should be achieved in Gabriel Creek.

Schedule

A reasonable schedule for implementing the necessary pollution controls.

Both permits were issued April 13, 2007. The Southwest Lagoon limits have been reduced and will require a treatment plant upgrade to achieve the necessary permit limits. The final effluent limits will become final three years from the date of permit issuance (April 13, 2010). The Northwest Lagoon retains the previous limits. It also includes a compliance schedule for the city to cease discharges and close the plant within four years of the date of permit issuance (April 13, 2011) and eliminate the lagoon within five years (April 12, 2012).

Monitoring

A description of, and schedule for, monitoring milestones for tracking and reporting progress to EPA on the implementation of the pollution controls.

Ambient stream monitoring by MDNR will be scheduled after the new limits go into effect, to determine if the impairment has been eliminated. The permit includes quarterly instream monitoring 100 yards downstream of the outfall, for DO, temperature, pH, and ammonia, to ensure permit limits are being achieved.

Commitment to Revise

A commitment to revise, as necessary, the implementation strategy and pollution controls if progress towards meeting WQS is not being shown.

A reopener clause has been included in both permits if monitoring shows violations of WQS.

*******Pollution control requirements in the submittal*******

National Pollution Discharge and Elimination System (NPDES)