



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

12th
21 JAN 2001

Mr. Edwin D. Knight, Director
Water Pollution Control Program
Division of Environmental Quality
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, Missouri 65102-0176

Re: Approval of the bundled TMDL for Little Muddy Creek and Tributary to Little Muddy Creek, and the Eleven Point River TMDL (§303(d) Clean Water Act)

Dear Mr. Knight:

Thank you for the submissions dated December 5, 2000 requesting approval of the Little Muddy Creek, Tributary to Little Muddy Creek and Eleven Point River total maximum daily loads (TMDLs) under §303(d) of the Clean Water Act. We have completed our review of the bundled TMDL for Little Muddy Creek and Tributary to Little Muddy Creek, and the Eleven Point TMDL as submitted by your office and in accordance with §303(d) of the Clean Water Act (33 U.S.C. 1251 et.seq.), we approve all aspects of these TMDLs.

Enclosed are the Environmental Protection Agency (EPA) Region 7 Review Forms which summarize the rationale for EPA's approval of these TMDLs. EPA believes the separate elements of these TMDLs described in the enclosed forms adequately address the pollutants of concern, taking into consideration seasonal variation and a margin of safety.

Again, EPA appreciates the thoughtful teamwork and partnering effort that Missouri has put forth in the development of these TMDLs and will continue to cooperate with and assist, as appropriate, in future efforts by Missouri, to develop the remaining TMDLs on the current Missouri §303(d) list of impaired water bodies.

Sincerely,

U. Gale Hutton
Director
Water, Wetlands, and Pesticides Division

Enclosures



January 5, 2001

EPA Region 7 TMDL Review Form

TMDL ID 6

Water Body Name Eleven Point

Pollutant Chlorine

Tributary

Water Body ID 2604

State MO

HUC 1101001101000

Basin

Submittal Date 12/11/00 *Completion Date* 12/20/00

Approved Yes

Submittal Letter: State submittal letter indicates final TMDL(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.

EPA received a submittal letter dated December 5, 2000 on December 11, 2000.

Water Quality Standards Attainment: TMDL and associated allocations are set at levels adequate to result in attainment of applicable water quality standards.

The water quality standards are described along with the designated uses of the reach. The WQS for chlorine is 0.01 mg/L for protection against chronic impacts to aquatic life and 0.019 mg/L for acute impacts to aquatic life. End of pipe permit limits are being applied to the single facility contributing to violations of the chlorine WQS.

Numeric Target(s): Submittal describes applicable water quality standards, including beneficial uses, applicable numeric and/or narrative criteria.

The desired endpoint for this TMDL is the Missouri WQS for chlorine which is 0.01 mg/L. This standard will be applied to the WWTP facility at end of pipe.

Source Analysis: *Point, non point and background sources of pollutants of concern are described, including magnitude and location of the sources. Submittal demonstrates all significant sources have been considered.*

The Willow Spring WWTP is the only permitted facility in the watershed that discharges chlorine. There are no known nonpoint sources of chlorine.

Allocation: *Submittal identifies appropriate waste load allocations for point, and load allocations for non point sources. If no point sources are present the waste load allocation is zero. If no non point sources are present, the load allocation is zero.*

Waste Load Allocation:

The WLA is 0.01 mg/L of chlorine. The facility will have end of pipe limits.

Load Allocation:

The LA is zero.

Margin of Safety: *Submittal describes explicit and/or implicit margin of safety for each pollutant.*

The MOS is implicit based on the following conservative assumptions: assumes a critical low flow of zero when the facility is discharging at it's design flow, and this part of the river is effluent dominated, therefore, the water quality will be that of the facility's effluent. Facilities that violate their permit limits are subject to fines.

Link Between Numeric Target(s) and Pollutant(s) of concern: *Submittal describes relationship between numeric target(s) and identified pollutant sources. For each identified pollutant, the submittal describes analytical basis for conclusions, allocations and margin of safety that do not exceed the load capacity.*

The target is the Missouri water quality standard for chlorine.

Seasonal Variation and Critical Conditions: *Submittal describes the method for accounting for seasonal variation and critical conditions in the TMDL(s).*

Since this part of the river is effluent dominated, the concern is low flow conditions. The TMDL considers seasonal variation and critical conditions by looking at monitoring data from all seasons and determining when low flow conditions occur.

Public Participation: *Submittal describes public notice and public comment opportunity, and explains how the public comments were considered in the final TMDL(s).*

This TMDL was public noticed from October 27- November 26, 2000. The TMDL was modified to incorporate the comments received.

Monitoring Plan for TMDL(s) Under Phased Approach: *The TMDL identifies the monitoring plan and schedule for considering revisions to the TMDL(s) (where phased approach is used).*

The Willow Springs NPDES permit requires quarterly monitoring for TRC.

Reasonable Assurance: *Reasonable assurance only applies when reductions in non point source loading is required to meet the prescribed waste load allocations.*