



EPA Region 7 4B Rationale

Water body ID(s): NE-SP2-10000

State: NE

Water body Names(s): LODGEPOLE CREEK

Pollutant(s): AMMONIA, NITROGEN

HUC(s): 10190016

Basin: SOUTH PLATTE RIVER BASIN

Tributary(ies):

First Listing Cycle: 1996

Submittal Date: 3/28/2008

Approved: Yes

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, fact sheet, final permit, water quality based calculation sheet and inspection reports on March 28, 2008 included as part of the 2006/2008 NE 303(d) list submittal. The July 31, 2008 permit and fact sheet was received through in-house email from the WIMB Branch.

Concern

A statement of the problem causing the impairment.

The sole source of the impairment is the City of Sydney's wastewater treatment facility (WWTF) (permit number: NE0023884). Ammonia was identified as the impairing parameter in the 2004, 2006 and 2008 Integrated Report (IR).

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.

A site specific permit was issued on July 31, 2008. Permit limits include final Spring (March 1 through May 31)/Summer (June 1 through October 31)/Winter (November 1 through February 29) water quality seasonal discharge limits for ammonia 10.21/10.7/25.95 kg/day daily maximum and 7.7/8.07/17.37 kg/day 30 day monthly average and nitrogen 10 mg/L daily maximum. Interim limits for reporting ammonia and nitrogen were established during the schedule of compliance. The permit also includes a SOC for the permittee to evaluate and commence proposed upgrades. Upgrades include: A denitrification basin, an effluent pump station with force and gravity mains, and a group of three rapid infiltration beds with monitoring wells located south of I-80. The permit proposes that after the upgrades are complete, all discharge will be through outfall 002 to the infiltration beds. Outfall 001, which discharges to Lodgepole Creek, will be an intermittent emergency outfall only. This WLA will ensure that water quality standards (WQS) will be achieved through the numeric standards for ammonia.

Time

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

June 30, 2013 when the City of Sydney WWTF has completed the schedule of compliance (SOC) for meeting ammonia and nitrogen limitations, WQS should be achieved in Lodgepole Creek.

Schedule

A reasonable schedule for implementing the necessary pollution controls.

The permit was issued July 31, 2008. The permit also includes a SOC for the permittee to evaluate and commence proposed upgrades. Upgrades include: A denitrification basin, an effluent pump station with force and gravity mains, and a group of three rapid infiltration beds with monitoring wells located south of I-80. The permit proposes that after the upgrades are complete, all discharge will be through outfall 002 to the infiltration beds. Outfall 001, which discharges to Lodgepole Creek, will be an intermittent emergency outfall only.

Monitoring

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

The permit includes monitoring of the ground water at the infiltration beds and a provision for increased monitoring frequency and additional parameters in NDEQ Title 119. NDEQ monitors all waters on a five year rotating basin program.

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 (page 12, part VIII, C.4) has been included in the permit to allow for incorporation of stricter effluent limits if monitoring shows that WQS are not being achieved, NDEQ Title 119 - Chapter 24.

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

National Pollution Discharge and Elimination System (NPDES)