



## EPA Region 7 4B Rationale

**Water body ID(s):** NE-LP1-21010  
**Water body Names(s):** SHONKA DITCH  
**Pollutant(s):** AMMONIA, TOTAL RESIDUAL CHLORINE  
**HUC(s):** 10200201  
**Basin:** LOWER PLATTE BASIN  
**Tributary(ies):**  
**First Listing Cycle:** 1996  
**Submittal Date:** 3/28/2008

**State:** NE

**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. Follow-up information was sent via email October 27, 2008.

### Concern

*A statement of the problem causing the impairment.*

The sole source of the impairment is Cargill Meats Solutions Corporation (permit number: NE0000795). Ammonia was identified as the impairing parameter in the 2004 and 2008 Integrated Report (IR). Total Residual Chlorine (TRC) was identified as the impairing parameter in the 2006 IR. Specifically, treated categorical process wastewater discharge resulting from the slaughter of beef cattle are the source of the pollutants of concern.

### 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 August 30, 2004. Previous permit limits used two seasons. New permit limits include Spring (March 31 through May 31)/Summer (June 1 through October 31)/Winter (November 1 through February 29) water quality seasonal discharge limits for ammonia 66.7/39.1/75.9 kg/day daily maximum and 28.7/16.4/28.5 kg/day monthly average and TRC limits of 0.02 mg/L daily maximum and 0.01 mg/L monthly average. Interim limits for TRC were established during the schedule of compliance. This WLA will ensure that water quality standards (WQS) will be achieved through the numeric standards for ammonia and TRC.

### Time

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

August 31, 2009 when the Cargill Meats Solutions Corporation has completed the SOC for TRC, WQS

should be achieved in Shonka Ditch.

**Schedule**

*A reasonable schedule for implementing the necessary pollution controls.*

The permit was issued August 30, 2004. The permit also includes a schedule of compliance for the permittee to conduct a site-specific water quality study to evaluate the proposed TRC limitations. The facility is chlorinating/disinfecting with 12% hyperchlorite and dechlorinating with 38% sodium bisulfite. There has not been a recently reported violation of the permit limits. On completion of the permit cycle WQS should be attained.

**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 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 15, part V, J) 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)