

MISSISSIPPI RIVER – BEAVER SLOUGH
SUMMARY OF COMMENTS AND RESPONSES
Prepared by the Environmental Protection Agency, Region 7
Water, Wetlands and Pesticides Division
January 2010

COMMENTOR(S):

- ♦ Allen Bonini, Supervisor, Watershed Improvement Section, Iowa Department of Natural Resources (IDNR)
- ♦ Steve Williams, Iowa Department of Natural Resources
- ♦ Jeff Berckes, Iowa Department of Natural Resources
- ♦ Jeff Bonkoski, Archer Daniels Midland
- ♦ James R. Woll, Plant Manager, Archer Daniels Midland

INTRODUCTION

This document summarizes the comments that were submitted, identifies the commentor or commentors (at the end of the comment), responds to the comments, and summarizes changes that were made to the final TMDL. They are arranged by topic wherever possible. When multiple comments were received on a single topic, the multiple commentors were identified under the single comment. Any change that is made to the TMDL in response to the comment is summarized in the response. If no change is noted in the response, then no change was deemed needed in the TMDL.

Summary of Changes to the Final TMDL

General Comment Responses: A reference to IDNR's website address was corrected and Attachment B was included in the final TMDL.

COMMENTS AND RESPONSES

Section 1: Summary

Comment 1:

“ADM is concerned that the draft TMDL contains a zero wasteload allocation of *Sphaerotilus natans*. This is a naturally occurring organism in river ecosystems, and it exists in the normal functioning of a wastewater treatment plan. Given that, ADM cannot be expected to achieve a wasteload allocation of zero in an absolute sense in the Clinton plant's effluent. However, ADM understands that the zero standard “is a translation of the narrative criteria to protect against aesthetically objectionable conditions and nuisance aquatic life,” (TMDL draft report, at p.2). Therefore, ADM presumes the zero standard is met once the *Sphaerotilus natans* discharged no longer results in nuisance conditions in the receiving waters. Commentor: Archer Daniels Midland Company (ADM), James R. Woll, Plant Manager via facsimile and letter.

Response 1:

Sphaerotilus natans is a beneficial, filamentous bacterium, if present in a small amount, in wastewater treatment systems. It helps suspended particles form flocs (or aggregates). If *Sphaerotilus natans* appears in a large quantity, it can cause bulking sludge and reduce the overall treatment performance for the systems. Approximately 50 percent of activated sludge treatment systems in the country often do not meet their discharge standards because of bulking, resulting primarily from the undesired massive appearance of *Sphaerotilus natans*.

EPA approved the state of Iowa general use narrative criteria that states “waters shall be free from materials attributable to wastewater discharges or agricultural practices producing objectionable color, odor, or other aesthetically objectionable conditions,” and “waters shall be free from substances, attributable to wastewater discharges or agricultural practices, in quantities which would produce undesirable or nuisance aquatic life.” The water quality target for this TMDL is not to increase in *Sphaerotilus natans* downstream of the ADM facility discharges, compared to upstream conditions. This is a translation of the narrative criteria written to protect against aesthetically objectionable conditions and nuisance aquatic life. As a result, the WLA is zero *Sphaerotilus natans* for the facility to control and prevent the development of slime in the target segment.

Section 2: Mississippi River, Description and History

No comments

Section 3: TMDL for Sphaerotilus Natans**Comment 1:**

(see Comment 1 under Section 1). “However, ADM understands that the zero standard “is a translation of the narrative criteria to protect against aesthetically objectionable conditions and nuisance aquatic life,” (TMDL draft report, at p.2).” Commentor: ADM, James Woll, November 20, 2009.

Response 1:

As previously stated, “waters shall be free from materials attributable to wastewater discharges or agricultural practices producing objectionable color, odor, or other aesthetically objectionable conditions,” and “waters shall be free from substances, attributable to wastewater discharges or agricultural practices, in quantities which would produce undesirable or nuisance aquatic life” are the narrative water quality criteria used for this TMDL. Therefore, the goals of this TMDL are to restore and maintain the general and aquatic life uses. For this TMDL, a specific focus should be placed on controlling and preventing the aesthetically objectionable nuisance levels of the persistent occurrence of slime associated with *Sphaerotilus natans* in the wastewater discharged from the ADM facility, along with the factors contributing to its growth. Therefore, the WLA is set to zero *Sphaerotilus natans* for the ADM facility.

Section 4: Monitoring

No Comments

Section 5: Public Participation

Comment 1:

Archer Daniels Midland (ADM) representative stated that he had just heard about the Public Notice of the Beaver Slough (Mississippi River) TMDL for Slime. He stated that the ADM facility had worked with EPA and had been cooperative with EPA in providing information and data to write this TMDL. ADM also stated that he had not received a copy of the Public Notice or TMDL and needed more time to provide comments. Commentor: Jeff Bonkoski, ADM, telephoned Tabatha Adkins, EPA on October 22, 2009.

Response 1:

Tabatha Adkins talked to Mr. Bonkoski initially and had subsequent telephone conversations regarding the Public Notice closure date. The Public Notice was reposted and extended to November 22, 2009, to allow ADM additional time to comment.

Comment 2:

“I just did a quick scan of the draft TMDL and discovered that the link provided in the document to the DNR website (in last paragraph of Section 5 *Public Participation* on page 21) is not correct. It should be as follows:

<http://www.iowadnr.gov/water/watershed/pubs.html>” Commentor: Allen Bonini, IDNR, September 10, 2009.

Response 2:

The IDNR website address was corrected in the Public Notice and in the Public Participation Section of the TMDL.

Section 6: References

No comments

Appendix A: 2008 Water Quality Survey Data

No comments

Appendix B: 2008 Slime Identification Report

Comment 1:

“Appendix B is not included in the draft TMDL on EPA’s website. Do you have a copy or can you get one? I’d like to know how they sorted out *Sphaerotilus* as the culprit from all the other junk that makes up the slime.” Mr. Steve Williams, IDNR via Jeff Berckes, IDNR September 21, 2009

Response 1:

EPA responded to Mr. Williams and Mr. Berckes thanking them for catching the omission of Attachment B. Attachment B was added to the electronic copy of the TMDL, reposted on Public Notice, and extended to close on October 30, 2009, due to the omission of Attachment B.