



November 30, 2022

Daniel Ortiz-Hernandez
400 Second Street
P.O. Box 217
Webster City, IA 50595

Re: Wastewater Treatment Facility Improvements
DNR Project No. S2017-0216

Subject: Anti-degradation Alternatives Analysis Approval

Dear Daniel:

The Iowa Department of Natural Resources (DNR) has reviewed the August 2022 Anti-degradation Alternatives Analysis for the City of Webster City. We are in agreement that the selected alternative is the least degrading reasonable alternative identified and that the analysis is in accordance with the Iowa Antidegradation Implementation Procedure (567 IAC 61.2(2)).

The following is a brief summary of the approved antidegradation alternatives analysis:

Wastewater Treatment/Disposal Facilities

Alt. No. BPCA: A new activated sludge (extended air) WWTP facility at a new site.

Selected Alternative Design Flows and Loads

Design Flows			Max 30-day Design Loadings		
ADW	1.989	MGD	BOD ₅	7,446	lbs./day
AWW	4.586	MGD	TSS	8,104	lbs./day
MWW	9.430*	MGD	TKN	845	lbs./day
PHWW	11.780*	MGD	* Hydraulic capacity of the mechanical plant is 5.086 MGD after flow EQ.		

Other treatment alternatives that were considered include:

Alternative No.	Description	Classification	Rationale
1	Recycle / Reuse	NDA	Not Practicable
2	Land Application	NDA	Not Practicable
3	Regional Treatment	NDA	Not Practicable

Public and interagency participation has been completed in the analysis. The following comments were received:

No oral or written comments were received.

In approving the Analysis the Department has made the following findings:

1. The level of water quality necessary to protect applicable beneficial uses is fully maintained. Water quality shall not be degraded to a level that does not comply with the applicable Water Quality Standards (WQS).

Wasteload allocation calculated Water Quality Based Effluent discharge criteria for the selected alternative are shown in Table 4.3 of the Analysis (Page 19). The selected alternative is shown as practicable in Table 6.2 (Page 31). The Department is in agreement that the selected alternative is practicable as described in Section 3.2 of the AIP and capable of providing the Minimum Level of Pollution Control as defined in the AIP.

2. The highest statutory and regulatory requirements for new and existing point sources are achieved.

Secondary and wasteload allocation calculated Water Quality Based Effluent discharge criteria for the selected alternative are shown in Table 4.3 of the Analysis (Page 19). The selected alternative is shown as practicable in Table 6.2 (Page 31). The Department is in agreement that the selected alternative is practicable as described in Section 3.2 of the AIP and capable of providing the Minimum Level of Pollution Control as defined in the AIP.

3. All cost-effective and reasonable BMPs for nonpoint source pollution control are implemented.

See Section 8 of the AIP.

4. Allowing degradation of water quality is necessary and accommodates important economic or social development in the area where the surface water is located.

The Department is in agreement that the selected alternative is the least degrading reasonable alternative (see Pages 33 - 35 of the Analysis) and therefore degradation is "necessary" as defined in the AIP. Important social and economic

development associated with the project is described on Page 35 of the Analysis. The Department is in agreement that the project will accommodate this important development.

Based on the above findings, the anti-degradation review is accepted and the Department has made a final determination to approve the analysis for the above project. Our approval is limited to the selected treatment and disposal alternatives described in the analysis under the stated flow and loading conditions. If the design conditions or selected alternative are modified subsequent to this approval, a new or revised alternatives analysis may be required.

If you have any questions or comments concerning this project, please feel free to contact me at 515/725-8428 or email james.oppelt@dnr.iowa.gov.

Sincerely,

**James C.
Oppelt**

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James C. Oppelt, P.E.
Project Manager
Wastewater Engineering Section

cc: Bolton & Menk, Inc. / Andrew Sindt, P.E.
DNR Field Office 2
DNR Sewage File 6-40-63-0-01
CWSRF File CS1921085 01