

CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

Date: July 21, 1977

File Ref: 3207

To: Chuck Ledin - 10

From: Steve Skavroneck

Subject: Boyd STP

RECEIVED
JUL 25 1977
WNR - WCD

The final effluent limits for the treatment facility at Boyd are as follows:

<u>Parameter</u>	<u>Summer</u>	<u>Winter</u>	
BOD ₅	20	20	(monthly average)
Suspended Solids	20	20	(monthly average)
NH ₃ -N	7.5	15	(weekly average)
Dissolved Oxygen	4	4	(daily minimum)

These effluent limits are based upon the NR 104 classification system and a survey performed by the Water Quality Evaluation Section in 1977.

SS:kl

cc: Lee Liebenstein

—> Terry Moe - West Central District

drop
delete

drop delete

Region WCR County Chippewa Date 6-22-77 Classification LFF

Water Body: Hay Creek Trib

Discharger: Boyd WWTP

If classified as Limited Forage Fish (LFF) or Limited Aquatic Life (LAL), check any of the following Use Attainability Analysis factors that apply:

☐ Naturally occurring pollutant concentrations prevent the attainment of use

☐ Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met

☐ Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place

☐ Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or operate such modification in a way that would result in the attainment of the use

☐ Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses

☐ Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact

Supporting Evidence included

- ☐ Biological Data (fish/invert)
- ☐ Chemical Data (temp, D.O., etc.)
- ☐ Physical Data (flow, depth, etc.)
- ☐ Habitat Description
- ☒ Site Description/Map
- ☐ Other:

DROP DELETE

Comments:

- limiting factors not clearly identified

BOYD, CHIPPEWA COUNTY

WASTEWATER RECEIVING STREAM CLASSIFICATION

Receiving stream - Tributary to Hay Creek, $Q_{7,10}$ at discharge site = 0.00 CFS.

The Boyd WWTP discharges to a tributary stream of Hay Creek. Above the outfall the stream has ill-defined banks with intermittent flow through agricultural land.

At a point approximately 0.25 mile below the effluent discharge, ground water augments stream flow increasing it to about 0.3 CFS at the Sec. 31-32, north/south town road. Aquatic life observed here includes attached algae, Sphaerotilus, midges, and snails. Pastureland occurs adjacent to the stream. Beyond the town road about 0.25 mile, this tributary joins Hay Creek. The area of juncture is backed up by a series of beaver dams.

Classification changes occur in close downstream proximity to the plant discharge and also establish higher treatment requirements. Because of these changes, an abbreviated waste load allocation investigation was conducted by water quality evaluation staff on April 19, 1977. The results have established effluent limits (see attached memo) which were not determined on Table 7 of NR 104 at the time the latest revisions went to hearing (June 22, 1977).



Upstream view
above Boyd WWTP



Boyd WWTP
outfall pipe

1/4 mile below outfall
on Sec. 31-32 N/S town
road facing west

RECOMMENDATIONS:

The tributary stream from the Boyd WWTP outfall to a point approximately 1,300 feet downstream should be classified noncontinuous, marginal surface water. Beyond that point downstream to Hay Creek shall be classified continuous, intermediate aquatic life. Hay Creek is classified continuous, fish and aquatic life. Effluent limitations determined during the April 19, 1977 field sampling survey are binding.

EVALUATION DATE: August 27, 1975

SURVEY DATE: April 19, 1977

PERSONNEL:

Lewis A. Seymour - Environmental Engineer - WCD (8/27/75)
Stuart A. Hagen - Area Fish Manager - Eau Claire Area (8/27/75)
Terry A. Moe - Water Pollution Biologist - WCD (8/27/75 and 4/19/77)
Steve Skavroneck - Water Quality Evaluation - Madison (4/19/77)
Lee Liebenstein - Water Quality Evaluation - Madison (5/19/77)
Ron Martin - Biologist - Water Quality Evaluation - Madison - (8/27/75)

