

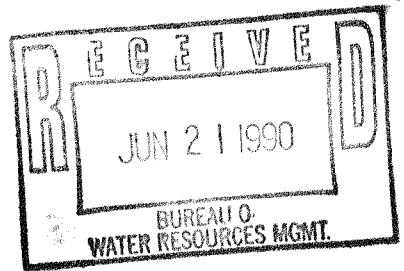
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STREAM CLASSIFICATION FOR THE HEADWATERS OF LOHN CREEK

ST. CROIX COUNTY NEAR CADY CHEESE

JUNE 1990

PAUL LA LIBERTE



Watershed

Cady Cheese discharges cooling water to the headwaters of Lohn Creek in T28N, R15W, S28. The mean flow of Lohn Creek near the mouth is 0.35 CFS. Its watershed size is 2.7 MI². The maximum flow recorded in Lohn Creek by U. S. Army Corps of Engineers (USACOE) in 1980-82 was about 35 CFS during an event in April. The effluent is discharged at a rate of 1,000 GPD (0.0015 CFS).

On the day of inspection, the effluent traveled about 300 yards before flow ceased due to loss to groundwater. At the Tenth Avenue bridge, about one-half mile downstream, the stream channel was dry. The USGS map indicates that the continuously flowing portion of Lohn Creek is over two miles downstream from the point where effluent flow ceased. In the absence of runoff, the effluent probably never reaches the naturally flowing portion of Lohn Creek. Since there is no hydrologic connection of the effluent with a naturally flowing surface water under low flow conditions, no significant lowering of water quality, as defined in NR 207 WAC, in downstream water bodies can exist.

Although the effluent was clear at the point of discharge, water in the stream starting 100' downstream from the outfall and beyond had a milky appearance. Sphaerotilus was present in the stream channel.

Effluent temperature was 23^oC and stream BOD₅ (sampled 100' below the outfall) was >440 mg/l. The stream contained 180 mg/l chloride. It appeared that runoff from the truck loading area also can reach the stream.

Based primarily on the lack of flow, the headwaters of Lohn Creek in the vicinity of Cady Cheese is not capable of supporting a full aquatic life community. It should be classified as capable of supporting only marginal aquatic life upstream from its continuously flowing natural origin. Effluent limits for the current discharge of cooling water from Cady Cheese should conform to NR 104.02(3)(b)(3).WAC. In addition, a thermal limit of 120^oF should be applied.

Attachment

- c: Duane Schuettpelz - WR/2
- Jon Kling - WD
- Pete Skorseth

WR6\PL006.plm

State Laboratory of Hygiene
University of Wisconsin Center for Health Sciences
465 Henry Mall, Madison, WI 53706

R.H. Laessig, Ph.D., Director S.L. Inhorn, M.D., Medical Director

Environmental Science Section (608) 262-3458 DNR LAB ID 113133790
Inorganic chemistry (#1 of 1 on 06/13/90, seen)

Id: 0053597 Point/Well/...: 262 Field #: CADY Route: WR60
Collection Date: 05/31/90 Time: 10:00 County: 56 (Saint Croix)
From: CADY CHEESE COOLING WATER OUTFALL
To: LALIBERTE

DNR Source: Effluent
EAU CLAIRE Sample depth: 000 Feet
Account number: WR049 Collected by: LALIBERTE
Date Received: 06/01/90 Labslip #: IA095865 Reported: 06/07/90

Comment: Partial report; RESULTS ARE PROVISIONAL AND MAY CHANGE.

BOD 5 DAY	>440	MG/L
CHLORIDE	180.	MG/L

ATTN. _____		<input type="checkbox"/> PRETREATMENT WW/2	Date 0 5 3 1 9 0 M M D D Y Y	
<input type="checkbox"/> ENV. ENF. EE/5	<input type="checkbox"/> MUNIC. WASTEWATER SECTION WW/2	Time (24-Hour Clock) 1 0 : 0 0		
<input type="checkbox"/> PRIV. WATER SECTION WS/2	<input type="checkbox"/> IND. WASTEWATER SECTION WW/2	Contact Method <input checked="" type="checkbox"/> In Person <input type="checkbox"/> Telephone		
<input type="checkbox"/> PUBL. WATER SECTION WS/2	<input checked="" type="checkbox"/> <u>Pete Scarseth</u> DISTRICT			
Facility Name <u>Cady Cheese</u>		Location (Address or 1/4-1/4) <u>RFD Spring Valley</u>		County <u>St Croix</u>
Facility I.D. Or Wis. Unique Well Number _____		WPDES Permit Number <u>0053597</u>	District No. <u>6</u>	DNR Person Making Contact <u>P. LaLiberte</u>
Facility Representative Contacted <u>Ed</u>		Title or Position of Representative <u>Foreman</u>		
Activity Codes _____		Representative's Telephone Number (including area code) _____		

Inspected cooling water outfall. Discharge is NW of facility and seeps to groundwater in the 1st 300 yds. Remainder of stream to 10th ave is dry (1/2 mile). USGS map indicates the stream (Lohn Creek) is intermittent for another mile. Effluent at the outfall was clear and 23°C. 100' downstream the effluent was cloudy white. This appearance persisted for the remaining channel. Took BOD & CI sample 100' below the outfall. Some runoff from tanker truck loading area also reaches the stream. Sphaerolilus in stream channel. Recommended stream classification will be marginal. Effluent limits should conform to NR104.02(3)(b)3. NR 207 demonstrations by the facility should not be necessary. Formal documentation to follow.

cc Jon Kling

Cady Cheese Factory, Wilson

Findings of Fact

THE DEPARTMENT FINDS:

1. That the Cady Cheese Factory manufactures cheese at a plant near Spring Valley.
2. That process wastes, other than whey, are directed to a holding tank and spray irrigation system.
3. That the spray irrigation system is seldom utilized, and wastes are allowed to flow from the holding tank to the headwaters of Lohn Creek.
4. That the discharge of inadequately treated wastes constitutes a source of pollution of the Chippewa River and its tributaries.

Conclusions of Law

1. That this Department has authority under 144.025 (2) (d), Wisconsin Statutes, to issue a special order directing particular owners to secure such operating results toward the control of pollution of the waters of the state as the Department prescribes within a specified time.
2. That the order hereinafter made for the construction of adequate treatment facilities by the Cady Cheese Factory is reasonable, proper and necessary for the protection of public rights in the Chippewa River and its tributaries.

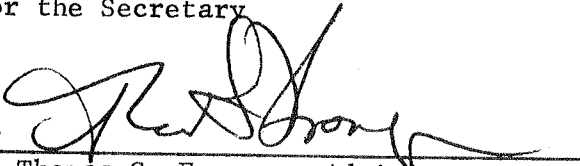
Order

IT IS, THEREFORE, ORDERED:

1. That the Cady Cheese Factory shall by July 1, 1972, place in operation facilities, in accordance with approved plans, for the adequate treatment or disposal of process wastewaters.
2. That the Cady Cheese Factory shall by December 1, 1971, submit plans and specifications for the construction of the required treatment facilities.

Dated at Madison, Wisconsin, this 5th day of October, 1971.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By 
Thomas G. Frangos, Administrator
Division of Environmental Protection

Cady Cheese



VALLEY CORP BDY

SPRING

Galle Cr
Lohn Cr

Eau Claire Reservoir
Boat Ramp

Picnic Area
Boat Ramp

Gaging Sta
Riser

Gaging Station

Mines Cr

Golf Course

Sewage Disposal
Handy Andy Memorial Park

ST CROIX CO
PIERCE CO

Spring Valley

St John Cem

St Michael Cem

St Matthew Ch

Lohn Cr

Green

C A

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