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Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

September 20, 2010

RE: MIDDLEFIELD CHEESE CO OP
GEAUGA COUNTY
NPDES# 3IH00076

CERTIFIED MAIL
NOTICE OF VIOLATION

Mr. Nevin Byler
Middlefield Original Cheese Co-op
16942 Kinsman Road, P.O. Box 237
Middlefield, OH 44062

Dear Mr. Byler:

On September 15, 2010, this writer, along with Chris Moody of this office, met with you and Mr. Steve Howe of AKE Laboratories to conduct a compliance evaluation of the wastewater treatment plant serving Middlefield Original Cheese Co-op. The intent of the inspection was to evaluate the systems compliance with the Director's Final Findings and Orders dated January 7, 2009 and perform a review of the facility in regard to compliance with the National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit for the above referenced facility will expire on October 13, 2014.

INSPECTION:

The inspection revealed the following upon which we have comments and/or recommendations:

All treatment plant components were in operation and appeared to be in satisfactory condition. The aeration tank was provided with adequate air and the contents of the tank appeared light brownish orange with good rollover. The effluent from the UV disinfection system appeared clear and free from solids and odors. The wetland is in use and appeared to have a good regrowth of wetland vegetation.

At the time of the inspection, the system was capable of using four of the six blowers that are located at the wastewater treatment plant. It is understood the two blowers located at the flow equalization tank are not in use. The flow equalization tank is currently provided air from the blowers servicing the aeration tanks. The flowequalization tank appeared to be provided with an adequate amount of air and the rollover within the tank appeared satisfactory.

At the time of the inspection, a PVC tank in place adjacent to the flow equalization tank. It is understood this tank was installed to prevent overloading the system during high flow events. Sump pumps can be added to the flow equalization tank and direct the flow to the PVC overflow tank during high flow events which may include tank spills in the process room. All floor drains in the facility are directed to the wastewater treatment plant. It is understood this tank was installed approximately ten years ago and has not been used in recent years. The installation of this tank was an alteration from the original design of the system as shown in the Ohio EPA approved PTI. According to Ohio Administrative Code 3745-42, any changes to the treatment system that include adding any treatment units or tanks that differ from the original approval, must have a PTI issued prior to installation. Please provide this office with updates regarding the last time the PVC overflow tank was used and any future use of the tank. Should the use of this tank become more frequent, this office will recommend a PTI be submitted for the tank.

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087-1924

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Approximately one month ago, the sand filters located at the wastewater treatment plant were flooded and overflowed onto the surrounding area. The overflow impacted an adjacent homeowner's property. The cause of the overflow was discussed during the inspection. It appears solids were not properly settling in the system which caused solids to overload the filters causing the overflow. In accordance with your NPDES permit, Part III, Section 11, you are required to report any unauthorized discharges to the Ohio EPA within 24 hours of discovery. In the future, any overflows must be reported to this office in accordance with the requirements of your NPDES permit.

COMPLIANCE:

A review of discharge monitoring reports was performed and indicated some compliance issues with the NPDES permit. A summary of NPDES permit discharge and frequency violations for the period January 1, 2007 through September 1, 2010, has been attached to this letter. The noncompliance noted in the review indicates there may be problems at the wastewater treatment plant. The review shows routine noncompliance with dissolved oxygen and total suspended solids.

The Ohio EPA issued Director's Final Findings and Orders to Middlefield Original Cheese Cooperative on January 7, 2009. Upon review of the Findings and Orders, Middlefield Cheese has complied with Order #1.c and Orders #3 -#5. Orders #1.a and #1.b were not officially documented in the records as completed. In order to effectively terminate Middlefield Cheese's obligations under these Orders, the facility must demonstrate to the satisfaction of Ohio EPA that all obligations have been performed.

These Orders are:

1.a. Conduct and submit to Ohio EPA a thorough engineering study of the treatment system, including wetland, to determine how to restore the system to full operation, capable to achieve interim effluent limits.

1.b. Evaluate the wetland and submit to Ohio EPA a determination as to whether the wetland would require dewatering, dredging and replanting in order to achieve its intended use in pollution reduction.

2. By October 7, 2009, Middlefield Cheese was required to complete construction of the necessary improvements to the wastewater treatment system identified in the study and engineering report (see Order #1.a), to achieve compliance with the active NPDES permit.

Below is a summary of our review of Middlefield Cheese's compliance with Orders #1.a, #1.b and #2:

Order # 1.a. required Middlefield Cheese to submit a thorough engineering study of the entire treatment system which was to include the wetland. The intent of the study was to determine how to resort the system to full operation, capable to achieve interim effluent limits. This office has record of the submittal of an engineering report, dated June 20, 2008, on the enlargement of sludge storage capacity. This report does not address the entire treatment system and does not fulfill the intended purpose of the study required in Order #1.a. Due to the noncompliance with the NPDES permit limits, an updated engineering report must be submitted to this office. The engineering report must involve a complete hydraulic and organic analysis of the wastewater treatment system that must include the following components:

- Hydraulic volume of influent based on design average and peak flows;
- Organic waste load of influent;
- Amount of air supplied to each treatment unit
- Current operational and structural condition of each process unit which must include the design hydraulic and organic loading capacity of the system.

Per Order #1.b., Middlefield Cheese was required to submit a formal wetland evaluation. It is understood Middlefield Cheese requested a timeline extension for the submittal of this wetland evaluation. It is understood the extension would be dependent on the regrowth in the wetland. At the time of the inspection, the wetland appeared to have an adequate amount of regrowth. To confirm the wetland has regrown to a satisfactory level, this office will be conducting a follow up inspection with one of our wetland specialists to assess the growth in the wetland. If it is determined there is adequate regrowth, this office will not request a wetland evaluation be submitted

Per Order #2, By October 7, 2009, Middlefield Cheese was required to complete construction of the necessary improvements to the wastewater treatment system identified in the study and engineering report 9see Order #1.a), to achieve compliance with the active NPDES permit. There was no engineering study performed on the entire system and therefore, Order #2 will need to be met.

In summary, the following items have been noted in this correspondence and must be addressed:

1) Provide notification to this office when the PVC tank at the flow equalization tank is used. This notification must include the reason the tank was put into use, such as a spill inside the facility.

2) In accordance with your NPDES permit, Part III, Section 11, you are required to report any unauthorized discharges to the Ohio EPA within 24 hours of discovery.

3) Conduct and submit to Ohio EPA a thorough engineering study of the treatment system, including wetland, to determine how to restore the system to full operation, capable to achieve NPDES permit effluent limits.

If you have any questions or comments regarding this letter, please contact this office at (330) 963-1299.

Respectfully,

Laura A. Weber, P.E.
Environmental Engineer
Division of Surface Water

LAW:bo

pc: Mr. Steve Howe, AKE Environmental & Construction Services, Inc.
Geauga County Health Department

File: Industrial/Permit Compliance/Middlefield Cheese Co-op

Discharge Monitoring Violations

Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
January 2007	601	00530	Total Suspended Solids	30D Conc	12	103.	1/1/2007
January 2007	601	00530	Total Suspended Solids	30D Qty	0.61	1.55942	1/1/2007
January 2007	601	00530	Total Suspended Solids	7D Conc	18	103.	1/22/2007
January 2007	601	00530	Total Suspended Solids	7D Qty	0.92	1.55942	1/22/2007
February 2007	601	00530	Total Suspended Solids	30D Conc	12	181.	2/1/2007
February 2007	601	00530	Total Suspended Solids	30D Qty	0.61	2.74034	2/1/2007
February 2007	601	00530	Total Suspended Solids	7D Conc	18	181.	2/15/2007
February 2007	601	00530	Total Suspended Solids	7D Qty	0.92	2.74034	2/15/2007
March 2007	601	80082	CBOD 5 day	30D Conc	10	16.	3/1/2007
March 2007	601	80082	CBOD 5 day	30D Qty	0.51	.54504	3/1/2007
March 2007	601	00530	Total Suspended Solids	30D Conc	12	35.	3/1/2007
March 2007	601	00530	Total Suspended Solids	30D Qty	0.61	1.19228	3/1/2007
March 2007	601	80082	CBOD 5 day	7D Conc	15	16.	3/8/2007
March 2007	601	00530	Total Suspended Solids	7D Conc	18	35.	3/8/2007
March 2007	601	00530	Total Suspended Solids	7D Qty	0.92	1.19228	3/8/2007
August 2007	601	00530	Total Suspended Solids	30D Conc	12	24.	8/1/2007
August 2007	601	00530	Total Suspended Solids	7D Conc	18	24.	8/8/2007
November 2007	601	00530	Total Suspended Solids	30D Conc	12	32.	11/1/2007
November 2007	601	00530	Total Suspended Solids	7D Conc	18	32.	11/15/2007
April 2008	601	80082	CBOD 5 day	30D Conc	10	16.7	4/1/2008
April 2008	601	80082	CBOD 5 day	7D Conc	15	16.7	4/1/2008
April 2008	601	00300	Dissolved Oxygen	1D Conc	6	.5	4/14/2008
April 2008	601	00300	Dissolved Oxygen	1D Conc	6	.02	4/21/2008
April 2008	601	00300	Dissolved Oxygen	1D Conc	6	2.2	4/28/2008
May 2008	601	00300	Dissolved Oxygen	1D Conc	6	5.8	5/27/2008
June 2008	601	00300	Dissolved Oxygen	1D Conc	6	4.1	6/2/2008
June 2008	601	00300	Dissolved Oxygen	1D Conc	6	4.6	6/9/2008

June 2008	601	00300	Dissolved Oxygen	1D Conc	6	.7	6/16/2008
June 2008	601	00300	Dissolved Oxygen	1D Conc	6	4.4	6/23/2008
June 2008	601	00300	Dissolved Oxygen	1D Conc	6	5.4	6/30/2008
July 2008	601	00300	Dissolved Oxygen	1D Conc	6	4.8	7/7/2008
August 2008	601	00300	Dissolved Oxygen	1D Conc	6	.04	8/4/2008
August 2008	601	00300	Dissolved Oxygen	1D Conc	6	.01	8/11/2008
August 2008	601	00300	Dissolved Oxygen	1D Conc	6	.07	8/18/2008
September 2008	601	00300	Dissolved Oxygen	1D Conc	6	2.3	9/2/2008
September 2008	601	00300	Dissolved Oxygen	1D Conc	6	3.6	9/8/2008
September 2008	601	00300	Dissolved Oxygen	1D Conc	6	3.1	9/15/2008
October 2008	601	00300	Dissolved Oxygen	1D Conc	6	5.9	10/6/2008
October 2008	601	00300	Dissolved Oxygen	1D Conc	6	5.2	10/13/2008
November 2009	601	00300	Dissolved Oxygen	1D Conc	6.0	.1	11/16/2009
May 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	4.9	5/24/2010
June 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	2.1	6/7/2010
June 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	2.4	6/21/2010
June 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	.1	6/28/2010
July 2010	601	80082	CBOD 5 day	30D Conc	20	34.9	7/1/2010
July 2010	601	80082	CBOD 5 day	1D Conc	30	34.9	7/12/2010
July 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	.1	7/12/2010
July 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	.1	7/19/2010
July 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	.1	7/26/2010
August 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	.1	8/3/2010
August 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	1.	8/10/2010
August 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	2.2	8/17/2010
August 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	2.5	8/24/2010
August 2010	601	00300	Dissolved Oxygen	1D Conc	6.0	4.9	8/31/2010

Frequency Violations:

Reporting Period	Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported	Violation Date
February 2007	601	00515	Residue, Total Dissolv	1/Month	1	0	02/01/2007
March 2007	001	00056	Flow Rate	1/Quarter	1	0	03/01/2007
March 2007	001	00300	Dissolved Oxygen	1/Quarter	1	0	03/01/2007
March 2007	601	00010	Water Temperature	1/Week	1	0	03/22/2007
March 2007	601	00300	Dissolved Oxygen	1/Week	1	0	03/22/2007
June 2007	601	00550	Oil and Grease, Total	2/Year	1	0	06/01/2007
July 2007	601	00530	Total Suspended Solids	1/Month	1	0	07/01/2007
August 2007	601	00665	Phosphorus, Total (P)	1/Quarter	1	0	08/01/2007
August 2007	601	00515	Residue, Total Dissolv	1/Month	1	0	08/01/2007
December 2007	001	00400	pH	1/Quarter	1	0	12/01/2007
December 2007	001	00300	Dissolved Oxygen	1/Quarter	1	0	12/01/2007
December 2007	601	00665	Phosphorus, Total (P)	1/Quarter	1	0	12/01/2007
December 2007	601	00550	Oil and Grease, Total	2/Year	1	0	12/01/2007
December 2007	601	00515	Residue, Total Dissolv	1/Month	1	0	12/01/2007
May 2008	601	00083	Color, Severity	1/Day	1	0	05/02/2008
May 2008	601	01330	Odor, Severity	1/Day	1	0	05/02/2008
May 2008	601	01350	Turbidity, Severity	1/Day	1	0	05/02/2008
May 2008	601	00083	Color, Severity	1/Day	1	0	05/03/2008
May 2008	601	01330	Odor, Severity	1/Day	1	0	05/03/2008
May 2008	601	01350	Turbidity, Severity	1/Day	1	0	05/03/2008
May 2008	601	00083	Color, Severity	1/Day	1	0	05/04/2008
May 2008	601	01330	Odor, Severity	1/Day	1	0	05/04/2008
May 2008	601	01350	Turbidity, Severity	1/Day	1	0	05/04/2008
May 2008	601	00083	Color, Severity	1/Day	1	0	05/05/2008
May 2008	601	01330	Odor, Severity	1/Day	1	0	05/05/2008
May 2008	601	01350	Turbidity, Severity	1/Day	1	0	05/05/2008
May 2008	601	00083	Color, Severity	1/Day	1	0	05/07/2008
May 2008	601	01330	Odor, Severity	1/Day	1	0	05/07/2008
May 2008	601	01350	Turbidity, Severity	1/Day	1	0	05/07/2008
May 2008	601	00083	Color, Severity	1/Day	1	0	05/09/2008
May 2008	601	01330	Odor, Severity	1/Day	1	0	05/09/2008
May 2008	601	01350	Turbidity, Severity	1/Day	1	0	05/09/2008
May 2008	601	00083	Color, Severity	1/Day	1	0	05/10/2008
May 2008	601	01330	Odor, Severity	1/Day	1	0	05/10/2008
May 2008	601	01350	Turbidity, Severity	1/Day	1	0	05/10/2008
May 2008	601	00083	Color, Severity	1/Day	1	0	05/11/2008
May 2008	601	01330	Odor, Severity	1/Day	1	0	05/11/2008
May 2008	601	01350	Turbidity, Severity	1/Day	1	0	05/11/2008
May 2008	601	00083	Color, Severity	1/Day	1	0	05/13/2008
May 2008	601	01330	Odor, Severity	1/Day	1	0	05/13/2008

May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/13/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/14/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/14/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/14/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/16/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/16/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/16/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/17/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/17/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/17/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/18/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/18/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/18/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/20/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/20/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/20/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/21/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/21/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/21/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/23/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/23/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/23/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/24/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/24/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/24/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/25/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/25/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/25/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/26/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/26/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/26/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/28/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/28/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/28/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/30/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/30/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/30/2008
May	2008	601	00083	Color, Severity	1/Day	1	0	05/31/2008
May	2008	601	01330	Odor, Severity	1/Day	1	0	05/31/2008
May	2008	601	01350	Turbidity, Severity	1/Day	1	0	05/31/2008

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Sent To Nevin Byler

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