



**Environmental  
Protection Agency**

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



\*11Y0002320080806\*

GREENE CEDARVILLE UNIVERSITY

ZIMMERMAN, MICH 2008/08/06



State of Ohio Environmental Protection Agency

**Southwest District Office**

401 E. Fifth St.  
Dayton, Ohio 45402

TELE: (937) 285-6357 FAX: (937) 285-6249  
www.epa.state.oh.us

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

August 6, 2008

Steve Aviles  
Manager of Mechanical Systems  
Cedarville University  
251 North Main Street  
Cedarville, Ohio 45314

**Re: Cedarville University Water Treatment Plant  
NPDES Permit No. IY00023\*AD; OH000085502  
NPDES Compliance Inspection and Notice of Violation**

Dear Mr. Aviles:

On July 24, 2008 I conducted a National Pollutant Discharge Elimination System (NPDES) permit compliance inspection at the above referenced facility. Paul Mitchell, Supervisor of Water Systems, and Mike Blosser, Operator, represented the University during the inspection. The purpose of the inspection was to evaluate the operation and performance of the water plant's wastewater treatment system and to determine compliance with the NPDES permit.

The five pressure filters in the water treatment building had been recently backwashed prior to the inspection. Backwash wastewater was still flowing through the slow sand filter ("red water" filter) located outside the building. Final effluent from the red water filter was checked at the manhole adjacent the filter and farther downstream in the creek (unnamed tributary of Massie Creek). The water was clear at both locations.

However, my review of the Discharge Monitoring Reports for the period January, 2006 through June, 2008, revealed a number of final effluent limit violations for pH and total suspended solids (refer to the attached Table 1). These violations and the failure to report the violations, as required by the conditions in Part III, Nos. 11 and 12, of the NPDES permit, resulted in marginal ratings for "Effluent/Receiving Waters" and "Self-Monitoring Program". As you are aware, failure to comply with the effluent limits, or to satisfy monitoring or reporting requirements of your NPDES permit may be cause for enforcement action pursuant to the Ohio Revised Code Chapter 6111. Please provide this office a written response by August 31, 2008, indicating the steps you intend to take to reduce and/or eliminate these violations.

Page 2

Cedarville University had previously applied for and received approval from Ohio EPA to upgrade its filter backwash treatment system. A Permit to Install for the construction of a new settling lagoon was issued on August 12, 2003. Reasons given by the university at that time for upgrading the system were 1) increased water usage on campus; 2) need for reduced maintenance time; and 3) relocation away from main campus area. However, the university has still taken no action on this project. In light of the violations referenced above, the university's response should include an update on its plans for upgrading the treatment system.

A copy of the inspection report is attached. If you have any questions, don't hesitate to contact me at (937) 285-6102.

Sincerely,



Michael W. Zimmerman  
Permits Group  
Division of Surface Water

Copy: Rod Johnson, Cedarville University  
Paul Mitchell, Cedarville University

Enclosure



State of Ohio Environmental Protection Agency  
Southwest District Office

NPDES Compliance Inspection Report

| Section A: National Data System Coding |           |                |                 |           |               |
|--|-----------|----------------|-----------------|-----------|---------------|
| Permit #                               | NPDES#    | Month/Day/Year | Inspection Type | Inspector | Facility Type |
| 11Y00023*AD                            | OH0085502 | 7/24/2008      | C               | S         | 2             |

| Section B: Facility Data  |                       |                                     |
|---|-----------------------|-------------------------------------|
| Name and Location of Facility Inspected   | Entry Time            | Permit Effective Date               |
| Cedarville University Water Treatment Plant<br>251 North Main Street<br>Cedarville, Ohio 45314<br><br>Mailing Address: same | 10:00 am              | 9/1/2003                            |
|   | Exit Time<br>10:45 am | Permit Expiration Date<br>8/31/2008 |
| Name(s) and Title(s) of On-Site Representatives   | Phone Number(s)       |                                     |
| Paul G. Mitchell, Supervisor of Water Systems<br>Mike Blosser, Operator   | (937) 766-3204        |                                     |
| Name, Address and Title of Responsible Official   | Phone Number          |                                     |
| Steve Aviles, Mechanicals Manager   | (937) 766-7775        |                                     |

| Section C: Areas Evaluated During Inspection                            |                          |   |                           |   |                         |
|---|--------------------------|---|---------------------------|---|-------------------------|
| (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated) |                          |   |                           |   |                         |
| S   | Permit                   | S | Flow Measurement          | N | Pretreatment            |
| S   | Records/Reports          | N | Laboratory                | N | Compliance Schedule     |
| S   | Operations & Maintenance | M | Effluent/Receiving Waters | M | Self-Monitoring Program |
| S   | Facility Site Review     | N | Sludge Storage/Disposal   | N | Other                   |
| N   | Collection System        |   |                           |   |                         |

| Section D: Summary of Findings (Attach additional sheets if necessary)   |  |
|--|--|
| <p>The five pressure filters were backwashed the night before the inspection, resulting in approx. 9200 gallons of backwash wastewater flowing to the red water filter. Wastewater was standing in the red water filter during the inspection. The filter is cleaned approx. every 3 months, last cleaned in June, 2008.</p> <p>Review of the Discharge Monitoring Reports for the period Jan., 2006 through June, 2008 revealed several final effluent limit violations for pH and TSS (refer to the attached Table 1). These violations and the failure to report the majority of the violations, as required by the conditions in Part III, Nos. 11 and 12, of the NPDES permit, resulted in marginal ratings for "Effluent/Receiving Waters" and "Self-Monitoring Program". Mr. Mitchell did notify the Ohio EPA about the June, 2008 pH violation. During the inspection he also reported a high pH reading (9.72 su) for July 9<sup>th</sup>. However, the previous pH and TSS violations had not been reported.</p> |  |
| Inspector  | Reviewer   |
| <br>Michael W. Zimmerman<br>Division of Surface Water<br>Southwest District Office   | <br>Martyn Burt<br>Compliance & Enforcement Supervisor<br>Division of Surface Water<br>Southwest District Office |
| Date<br>Aug 5, 2008  | Date<br>8/6/08   |

**Section J: Effluent/Receiving Water Observations**

| Outfall Number | Oil sheen | Grease | Turbidity | Visible Foam | Visible Floating Solids | Color | Other |
|----------------|-----------|--------|-----------|--------------|-------------------------|-------|-------|
| 001            | None      | None   | Clear     | None         | None                    | None  | -     |
|                |           |        |           |              |                         |       |       |
|                |           |        |           |              |                         |       |       |
|                |           |        |           |              |                         |       |       |
|                |           |        |           |              |                         |       |       |
|                |           |        |           |              |                         |       |       |

**Comments/Status:**

*The final effluent discharges to an unnamed tributary of Massies Creek.*

**Section K: Multimedia Observations**

- (a) Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories..... N
- (b) Do you notice staining or discoloration of soils, pavement or floors.. N
- (c) Do you notice distressed (unhealthy, discolored, dead) vegetation.. N
- (d) Do you see unidentified dark smoke or dust clouds coming from sources other than smokestacks..... N
- (e) Do you notice any unusual odors or strong chemical smells..... N
- (f) Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities..... N

If any of the above are observed, ask the following questions:

- (1) What is the cause of the condition?
- (2) Is the observed condition or source a waste product?
- (3) Where is the suspected contaminant normally disposed?
- (4) Is this disposal permitted?
- (5) How long has the condition existed and when did it begin?

**Comments/Status:**

Permit # : 11Y00023\*AD  
 NPDES # : OH0085502

Table 1. Final Effluent Limit Violations

(Period of Review: January 1, 2006 – June 30, 2008)

| Reporting Period | Parameter              | Limit Type | Limit | Reported Value | Violation Date |
|------------------|------------------------|------------|-------|----------------|----------------|
| January 2008     | pH                     | 1D Conc    | 9.0   | 9.6            | 1/10/2008      |
| April 2007       | Total Suspended Solids | 1D Conc    | 45    | 386.           | 4/12/2007      |
| April 2007       | Total Suspended Solids | 1D Conc    | 45    | 413.           | 4/17/2007      |
| April 2007       | Total Suspended Solids | 30D Conc   | 30    | 399.5          | 4/1/2007       |
| February 2008    | Total Suspended Solids | 1D Conc    | 45    | 99.            | 2/7/2008       |
| February 2008    | Total Suspended Solids | 30D Conc   | 30    | 52.            | 2/1/2008       |
| December 2007    | pH                     | 1D Conc    | 9.0   | 9.3            | 12/7/2007      |
| July 2007        | pH                     | 1D Conc    | 6.5   | 6.19           | 7/17/2007      |
| May 2007         | Total Suspended Solids | 1D Conc    | 45    | 510.           | 5/2/2007       |
| May 2007         | Total Suspended Solids | 30D Conc   | 30    | 277.5          | 5/1/2007       |
| November 2007    | pH                     | 1D Conc    | 9.0   | 9.4            | 11/5/2007      |
| November 2007    | pH                     | 1D Conc    | 9.0   | 9.2            | 11/19/2007     |
| June 2008        | pH                     | 1D Conc    | 9.0   | 9.17           | 6/9/2008       |
| June 2008        | pH                     | 1D Conc    | 9.0   | 9.52           | 6/23/2008      |

