



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

March 12, 2013

Mayor and Council
101 West Third Street
Dayton, Ohio

RE: Montgomery County, Dayton WTP, Compliance Evaluation Inspection

Ladies and Gentlemen:

On March 8, 2013, Matt Walbridge, Joe Reynolds and I conducted a Compliance Evaluation Inspection at the Dayton WTP (NPDES Permit No. OHGW00012; OEPA Permit No. 1GW00001*BG). Representing this facility was Phil VanAtta, James Blevins, Shannon Zell and Keshia Kinney. A copy of my inspection report is enclosed.

The inspection report contains one marginal area. The Effluent / Receiving Waters section was rated marginal as a result of the NPDES Permit violations. The areas noted in the report summary do not require a response at this time.

If you have any questions, please call me at (937) 285-6096.

Sincerely,

Ned Sarle
Environmental Specialist
Division of Surface Water
Permits Section

NS/tb

Enclosure

ec: Phil Van Atta, City of Dayton



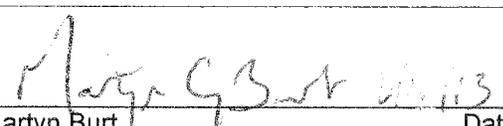
State of Ohio Environmental Protection Agency
Southwest District Office

NPDES Compliance Inspection Report

| Section A: National Data System Coding | | | | | |
|--|-----------|----------------|-----------------|-----------|---------------|
| Permit # | NPDES# | Month/Day/Year | Inspection Type | Inspector | Facility Type |
| 1GW00001*BG | OHGW00012 | 3/8/2013 | C | S | 2 |

| Section B: Facility Data | | |
|---|-----------------|------------------------|
| Name and Location of Facility Inspected | Entry Time | Permit Effective Date |
| Dayton Ottawa WTP 1048 Ottawa Street Dayton, Ohio 45402 | 10:00 A.M. | 5/1/2012 |
| | Exit Time | Permit Expiration Date |
| | 12:55 P.M. | 12/31/2016 |
| Name(s) and Title(s) of On-Site Representatives | Phone Number(s) | |
| Phil Van Atta, Water Supply & Treatment Supervisor | (937) 333-6099 | |
| James Blevins, WTP Supervisor | (937) 333-4935 | |
| Shannon Zell, Kiln Supervisor | (937) 333-4939 | |
| Keshia Kinney, Acting Lab Supervisor | (937) 333-6054 | |
| Name, Address and Title of Responsible Official | Phone Number | |
| Tammi Clements, Water Director 320 Monument Avenue Dayton, Ohio 45402 | (937) 333-3734 | |

| 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 | S | Compliance Schedule |
| S | Operations & Maintenance | M | Effluent/Receiving Waters | S | Self-Monitoring Program |
| S | Facility Site Review | S | Sludge Storage/Disposal | N | Other |
| N | Collection System | | | | |

| Section D: Summary of Findings (Attach additional sheets if necessary) | |
|--|--|
| See Attached Summary of Findings / Comments. | |
| Inspector | Reviewer |
|  Ned Sarle Permit Section Division of Surface Water Southwest District Office |  Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office |
| Date | Date |

Permit #: 1GW00001*BG
NPDES #: OHGW00012

Summary of Findings / Comments

A review of the Discharge Monitoring Reports (DMRs) for January 2011 through January 2013 indicated several permit violations. These violations are listed below. These violations have been adequately addressed at this time. All future violations must continue to be reported as required by the General WTP NPDES Permit as detailed in Part V, Section S titled "Noncompliance Notification."

| <u>Reporting Period</u> | <u>Station</u> | <u>Parameter</u> | <u>Limit Type</u> | <u>Limit</u> | <u>Reported Value</u> |
|-------------------------|----------------|------------------|-------------------|--------------|-----------------------|
| April 2011 | 002 | TSS | Daily | 45 | 65 |
| May 2011 | 002 | TSS | Daily | 45 | 76 |
| July 2011 | 001 | Chlorine | Daily | 0.038 | 0.06 |
| January 2012 | 001 | Chlorine | Daily | 0.038 | 0.07 |
| May 2012 | 001 | Chlorine | Daily | 0.038 | 0.06 |
| December 2012 | 001 | TSS | Monthly | 30 | 38 |
| December 2012 | 001 | TSS | Daily | 45 | 47 |

For Outfalls 001 and 002, the flow rate is monitored using an ultrasonic meter and a flume. A review of the DMRs for the noted period indicated that the average and peak flow rates were 386,000 gpd and 1,518,000 gpd for Outfall 001 and 156,000 gpd and 3,318,000 gpd for outfall 002. At the time of the inspection, discharges were occurring from both Outfalls and were both noted as being relatively free of any solids.

The water treatment plant is designed to treat an average daily flow rate of 88 MGD of drinking water. The water treatment process consists of pH adjustment and lime addition for the influent water, followed by two primary and two secondary settling basins operated in series and then 16 rapid sand filters. The chlorine and fluoride is added prior to the rapid sand filters. The treated drinking water is then directed to the water distribution system. The sludge generated from the two primary settling basins is sent to the kiln treatment system. The sludge generated from the two secondary settling basins is directed to the WTP influent where the lime is added. The rapid sand filters are backwashed as needed. The backwash water is then discharged to a concrete lined lagoon. The clear water from this lagoon is recycled back to the WTP influent. The solids in this lagoon are recycled to the kiln treatment system two times a year.

The kiln treatment system consists of a carbonation tank, two sludge thickening tanks, two centrifuges and then the kiln. The supernate from the two sludge thickening tanks is discharged to an earthen settling lagoon prior to being discharged to the Mad River via outfall 001. The wastewater from the centrifuge is discharged to the sanitary sewer. Whenever the kiln is not in operation, the lime sludge is redirected to the Route 4 lagoon. The supernate from the Route 4 lagoon is discharged to the Mad River via Outfall 002.

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The kiln treatment system produces more lime than the Dayton WTP's need for their systems. As a result, excess lime is sold to other WTP's or facilities that need lime. In 2012, the Dayton WTP sold 1,353 tons to lime to other facilities.

The spent lime produced from the Route 4 lagoon is removed by Synagro. They have a small barge that pumps the lime sludge to a small storage cell where it is subsequently pumped into liquid tanker trucks. The lime is then hauled to farm fields where it is immediately land applied. In 2012, the Dayton WTP removed 10,867 tons of lime sludge from this lagoon for land application.

For required maintenance, the kiln operation is typically taken offline two times a year for between 9 and 12 days for each occurrence. At the time of the inspection, the kiln was offline for emergency repairs. The kiln was placed back into operation on Saturday, March 9.