



**Environmental
Protection Agency**

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

September 13, 2012

RE: CITY OF CONNEAUT WWTP
INDUSTRIAL PRETREATMENT PROGRAM
PRETREATMENT PROGRAM AUDIT
NPDES PERMIT 3PD00002
ASHTABULA COUNTY

NOTICE OF VIOLATION

CERTIFIED MAIL

Timothy J Eggleston,
City Manager, City of Conneaut
City Hall Building
294 Main Street
Conneaut, OH 44030

Dear Mr. Eggleston:

This office conducted a Pretreatment Audit Inspection (PAI) of the City of Conneaut Wastewater Treatment Plant (Conneaut WWTP) Industrial Pretreatment Program (IPP) on August 21, 22, and 23, 2012. The purpose of the inspection is to determine if the Conneaut WWTP IPP is compliant with State and Federal Pretreatment Regulations and requirements. John Schmidt represented the Ohio EPA. Craig Pierce, Conneaut WWTP Superintendent, Bob DeMarco, Conneaut WWTP Assistant Superintendent, and Brian Bidwell, Pretreatment Coordinator, represented the City. Nicholas Sanford and Patricia Vanah represented CT Consultants, who assist the City in administering the program and functions as the Pretreatment Engineer. One industry, Vesuvius USA Corporation, formerly Forseco, was visited during the inspection. The last PAI was conducted on November 13 and 15, 2007.

The following deficiencies were identified during the inspection:

Deficiencies

1. Evaluation of Existing IUs for Operations Changes

- a. SIU Evaluation: The examination of IPP files showed that Conneaut has evaluated its SIUs for some but not all changes in operations, relying upon the initial industrial waste surveys (IWS) when facilities joined the IPP and the annual site inspection form. However, the annual inspection forms did not fully inquire about potential changes to facility operations. Observations noted in the annual inspections were also incomplete or inaccurate, noting "no change" when there were clearly changes in process operations and/or flow. For example, the one facility permit (Vesuvius) lists a maximum flow rate of 3,000 gpd when actual flows for most quarters in 2011 and 2012 usually range from 25,000 to 35,000 gpd. Other SIUs may have the wrong categorical standards applied to their operations. For example, Vesuvius USA contains a foundry and makes foundry molds, and may be regulated by 40 Code of Federal Regulations (CFR) 464 Subpart C. Another SIU (Overhead Door Corp - ODC) is incorrectly listed as categorical standard 40 CFR 433 (metal finishing), while the appropriate category appears to be 40 CFR 463 (plastics molding and forming), if there is a process wastewater discharged to the City.

Other SIUs may not discharge any process wastewater. For example, Conneaut WWTP contacted with ODC representatives during the audit to ascertain the appropriate categorical standards applicable to their operations. ODC representatives told Conneaut staff that none of the subcategories listed in 40 CFR 433 (metal finishing) or 40 CFR 463 (plastics molding and forming) appear to apply to waste water discharges to Conneaut from ODC. If no waste streams from regulated operations are received by the City, then only local limits would apply. Conneaut indicated that ODC stated that they there may not be any industrial process water discharged to the City.

Finally, a review of all six SIU files did not identify the proper IU categorization on the permit (significant categorical, significant non-categorical, non-significant) other than to reference the general standard in the annual report.

To ensure that the appropriate pretreatment standards are applied to each SIU, Ohio EPA recommends that permit applications or IWS reference, or other documentation submitted reference, the specific applicable federal categorical standard(s), classification(s) as either an existing source or a new source(s), and their applicable subcategories. It is also important to note that more than one category or subcategory may be applicable to a particular facility, depending on the specific operations. The proper SIU category, subcategory, and new/existing designation must be identified in the SIUs files maintained by Conneaut. Conneaut must develop a procedure to more thoroughly evaluate all SIUs, and recommends that permit renewal applications include completed IWS forms. Failure to characterize and evaluate the discharges from all SIUs is a deficiency in the requirement found in 40 CFR 403.8(f)(2)(ii) and Ohio Revised Code(OAC) 3745-3-03(C)(2)(b). Conneaut has begun to address this deficiency, and in an August 31, 2012, submission has included a proposed revised survey to be sent to all SIUs.

- b. All Other IU Evaluation: Conneaut developed a list of potential IU dischargers in 2008, and typically inspects 2-3 existing non-significant IUs annually. Conneaut has no established procedures for evaluating new or modified industrial discharges from existing facilities, or coordinating with other agencies (water department, building department, Ohio EPA) to see if changes trigger a change to the IU's status (IU or SIU, categorically regulated SIU). Conneaut must develop procedures to determine if a change in any industrial discharge must be controlled by a permit, and to periodically evaluate existing industries to see if a discharge permit is necessary. Based upon observations in other IPPs, Ohio EPA recommends that existing non-domestic dischargers be evaluated every three to five years. Failure to characterize and evaluate the discharges from all IUs is a deficiency in the requirement found in 40 CFR 403.8(f)(2)(ii) and OAC 3745-3-03(C)(2)(b).

2. Control Mechanism Evaluation:

- a. Re-Issuance of Permits: Ohio EPA is pleased to note that given the nature of pending changes to Conneaut's pretreatment program, Conneaut has elected to reissue permits for both 2011 and 2012 on a 12-month basis rather than for a five-year period to implement changes as soon as possible once approved by Ohio EPA. Ohio EPA does note that the 2012 permits were issued on February 2, 2012, and made retroactive to January 1, 2012. Ohio EPA recommends that future permit issuance/reissuance be made prior to the current permits expiring.

- b. SIU Renewal Applications and IU Required Reports: There did not appear to be discharge permit renewal applications submitted between 2007 and 2012 although renewal applications are required in Part 3, Section A, Item 9 of each permit. While renewal applications are not a specific requirement of 40 CFR 403 or OAC, Chapter 3745-3-03, if applications are required per permit they must be submitted.

The files indicate that each facility responded to City information requests, the City conducted all sampling, and Conneaut inspected and sampled each facility. However, there were not any comprehensive application/questionnaires prepared and certified by the company in all SIU facility files reviewed. Discussions with the one facility visited and additional facilities contacted via phone during the survey found that actual operations were significantly different in terms of flow (Vesuvius USA), materials processed (ODC), or process waters discharged (Continental Structural Plastics) than those identified in their permits. At a minimum, documentation provided by the IU must include a reference to the most current documents (slug control discharge plans, TOMP's if applicable) any changes or anticipated changes in industrial processes, changes in legal ownership, changes in production, new IWS, etc. During the site visit, it was discovered that Vesuvius USA has a process flow that varies significantly from its maximum discharge, yet Vesuvius USA's files do not reflect notification of this change from the IU.

As indicated in Deficiency 1a, all SIUs should have current IWS forms completed, which Conneaut has agreed to do. For those IUs that have indicated no process industrial discharges to the City system, such information must be properly documented and hold IUs accountable for false or misleading information. Ohio EPA recommends that IUs claiming no process industrial discharge to the City subject to the IPP should complete an affidavit/certification statement from the appropriate signatory identified in Part B, Item 5 of the IU's permit, and contain the certification paragraph referenced by the section attesting that waste water discharges are domestic wastewater only.

Failure to require IUs to submit required information to ensure accurate permits is a deficiency in the identification of the character and volume of pollutants contributed by SIUs, which is a requirement found in 40 CFR 403.8(f)(2)(ii) and OAC 3745-3-03(C)(2)(b). While Conneaut conducts all sampling, IUs are still required to submit semiannual reports indicating the nature and concentration of effluent pollutants and a record of estimated or measured average and maximum daily flows and certify each report pursuant to 40 CFR 403.12(g)(1) and (h), and to immediately notify Conneaut of any change that discharges pollutants which are not monitored.

- c. Calculation and Application of Combined Waste Stream Formula: Discussions with Conneaut WWTP staff indicated that, with the exception of Vesuvius USA, all identified sample points are downstream of sanitary waste streams from each facility, and may be downstream of other waste streams (noncontact cooling water, condensate, etc.). However, permit limits were not adjusted utilizing the combined waste stream formula (CWF). Sample locations must either be relocated to ensure that they are immediately downstream of all categorically regulated operations or the CWF must be used to calculate facility-specific permit limits. Failure to have control mechanisms that contain effluent limits based upon applicable general pretreatment standards in 40 CFR 403, categorical pretreatment standards, local limits, and state and local law which are not

adjusted by the CWF when it is required is a violation of 40 CFR 403.6(d) and (e), as well as OAC 3745-3-09(I)(1)(b).

- d. SIU Permit Limits Higher than Approved Local Limits and Categorical Standards: In review of the SIU permit limits and comparing these limits to applicable federal categorical standards and local limits, all permits have a copper limit of 2.227 mg/l, which is higher than the approved local limit of 1.80 mg/l. For Leather Resource of America, the categorical standard lists a minimum pH of 6.0 (40 CFR 425.45), while the permit lists a minimum pH of 5.0 (local limit). Failure to have control mechanisms that contain effluent limits based upon applicable general pretreatment standards in 40 CFR 403, applicable categorical pretreatment standards, local limits, and state and local law is a violation of 40 CFR 403.5(d) and OAC 3745-3-03(C)(1)(c)(iii).
 - e. IU Self-Monitoring Requirement Specifications: While Ohio EPA acknowledges that currently Conneaut samples all SIUs/IUs, a review of the permits issued do not specify the minimum monitoring frequency should facilities choose to self-report, and do not specify that data must be submitted to Conneaut within a minimum time frame of collection. Failure of control mechanisms to specify minimum sampling frequencies and data reporting requirements is a violation of 40 CFR 403.8(f)(1)(iii)(B)(4) and OAC 3745-3-03(C)(1)(c)(iv).
3. Enforcement Response Plan: The enforcement response plan (ERP) was last updated in April 2008, and the ERP review is currently pending with Ohio EPA. The ERP must be again revised to reflect streamlining in Ohio EPA and U.S. EPA rules, and submitted along with the SUO and local limits and submitted to Ohio EPA for review and approval. Failure to have an updated ERP is a deficiency in the requirement found in 40 CFR 403.8(f)(5) and OAC 3745-3-03(C)(5).
 4. Data Management and Confidentiality: Although Section 931.05 in the SUO (revised 8/26/1991) contains information on confidentiality; Conneaut has not developed written procedures for public file review requests and requests from IUs to maintain confidentiality prior to allowing public access to files. Conneaut must evaluate its procedures for handling public records requests and confidentiality requests to ensure they conform to federal and state public records requirements. 40 CFR 403.8(f)(1)(vii) and OAC 3745-03-03(C)(1)(i) requires the legal authority of the IPP to comply with the provisions of 40 CFR 403.14. 40 CFR 403.14(c) states that information submitted to the State or POTW shall be available to the public at least to the extent provided by 40 CFR 2.302, and OAC 3745-3-07 discusses requests for confidentiality.
 5. Facility Inspection Documentation: Files for all six SIUs indicate that inspections were documented in 2010 and 2011. Some facility inspections were missing for 2007, but were provided during the audit. As noted in Deficiency 1a, annual inspection documentation must be more thorough. Inspections were documented as "no change" over previous inspections without documenting what they were changing from. Conneaut must collect all the required information needed to develop appropriate limit calculations, document significant changes that may impact IU classification, and determine if a slug control discharge plan is warranted. Ohio EPA recommends that Conneaut develop a more comprehensive annual inspection form that requires a current process flow diagram, documents a complete current process description, evaluates any changes that may warrant category reclassification, the requirement of a slug control discharge plan,

toxic organics analysis, or other necessary changes to the IU's permit (or the requirement of a permit for IUs without one).

6. Contract Laboratory QA/QC: Although the Conneaut WWTP laboratory conducts a number of QA/QC procedures (splits, blanks, spikes, and duplicates), Conneaut does not appear to have evaluated the QA/QC practices for its contract laboratory (Microbac Laboratories, and more recently Cardinal Laboratories) to ensure that the data produced is legally defensible. Conneaut must require the supporting QA/QC documentation to be made available to Conneaut upon request or provided when analytical data is reported, and should include at a minimum eDMR QA data, and should also include splits, blanks, spikes, and duplicates. Sample collection and analysis must be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions pursuant to 40 CFR 403.8(f)(2)(vii) and OAC 3745-3-03(C)(2)(g).
7. Slug Discharge Control Plans: The Conneaut files contained no slug discharge control plans (SDCPs) for any of its SIUs. During the inspection, we determined that Vesuvius USA required a SDCP based on an evaluation of their processes (see Paragraph 10.c). All SIUs must be evaluated to determine if a SDCP is required and that evaluation documented in Conneaut's files, and any SIU requiring a SDCP must have an up-to-date SDCP. If an SDCP is required, it must be incorporated into the SIU permit. Facilities requiring a SDCP must have the SDCP re-evaluated and updated prior to the start of each permit cycle. Failure to evaluate SIUs for the need for a slug discharge control plan at least once during a permit cycle is a violation of OAC 3745-3-03(C)(2)(f).
8. Total Toxic Organics Evaluation: Facilities subject to the categorical standards 40 CFR 413, 40 CFR 433, and 40 CFR 469 may submit certification statements in lieu of total toxic organics (TTO) sampling, after receiving a toxic organics management plan (TOMP) approval. ODC is listed in Conneaut's annual reports as being subject to the categorical standards of 40 CFR 433. However, TTO sampling or semiannual TTO certification statements with an approved TOMP are not contained in the facility files. Failure to appropriately apply categorical standards, including the TTO or its alternative, is a deficiency in the requirements found in 40 CFR 403.8(f)(1)(ii) and (iii) and OAC 3745-3-03(C)(1)(c)(iii). As noted in Deficiency 1a above, ODC may not have activities regulated by 40 CFR 433 and the standard may not apply.
9. Timely Review of Submitted Data: A review of Conneaut files indicated that some SIUs exceeded permit limits for flow resulting in noncompliance in 2010 and 2011; however, NOVs were not sent to the affected facilities. Failure to receive and analyze all required reports and associated data is a deficiency in the requirement found in 40 CFR 403.8(f)(2)(iv) and OAC 3745-3-03(C)(2)(d).
10. Findings during IPP Inspection (Vesuvius USA Corp.):
 - a. Control Authority Representative Sampling: During the course of the audit, Conneaut acknowledged that the composite sampler used by Conneaut only takes time-proportional samples. Given the variability of streams (series of individual batches, each with a different recipe) discharging into Vesuvius USA's treatment process over a 24-hour period, the composite sample collected does not appear to be representative. As discussed in 40 CFR 403.12(g)(3) and OAC 3745-3-06(H)(7), flow proportional sampling is required unless time proportional sampling is determined to be representative, and that fact documented in the Conneaut's files. Conneaut must evaluate current sampling procedures to ensure representative samples are collected. Failure to conduct the appropriate

sampling and analysis procedures is a deficiency in the requirement found in 40 CFR 403.12(g)(3) and OAC 3745-3-06(H)(4).

- b. Failure to Notify of a Significant Change in Flow Characteristics: Vesuvius USA's permit has a stated maximum industrial discharge of 3,000 gpd, while most quarters reviewed in 2011 and 2012 show average flow ranging from 25,000 gpd to 35,000 gpd. Vesuvius personnel stated that they presumed that the maximum flow of 3,000 gpd provided in their permit was a typographical error. The flow was lowered from 144,000 gpd to 3,000 gpd based upon the 2007 audit and Vesuvius USA's operations at that time. During the discussions with Vesuvius USA staff during the visit, it appears that floor drains from other process areas other than the AFAX area may drain to the equalization tank at the headworks of Vesuvius USA's pretreatment unit. Based upon the site plan drawing provided to Ohio EPA during the site visit and a discussion of other process areas, if scrubber water or other process waters and floor drains are received from process areas associated with the foundry operations or foundry sand mold production, the facility may be subject to the categorical standards of 40 CFR 464 Subpart C. Failure of the IU to notify Conneaut of changes to operations that affect application of categorical standards is a violation of OAC 3745-3-06(E). Failure of the IU to notify Conneaut of changes in operations that affect flow characteristics (including flow) is also a violation of OAC 3745-3-06(E).
 - c. Failure to Notify for Slug Loads, Lack of a Slug Discharge Control Plan (SDCP): Vesuvius USA discharges activated carbon at levels to cause operational issues at the Conneaut WWTP, requiring Conneaut to take its primary clarifiers offline, dewater them, and remove the accumulated carbon. Vesuvius staff also acknowledged that they add a chemical to keep the activated carbon in suspension to recycle it, and is reluctant to add too much polymer to aid in the activated carbon settling. Changes in the effluent containing this suspension chemical and/or excess activated carbon may not be detected by monitoring equipment at Vesuvius USA maintains at its facility, and a written SDCP must include notification of Conneaut personnel when a clarifier problem develops at Vesuvius so that Conneaut personnel can look for changes in settling characteristics at the Conneaut WWTP. Failure to immediately notify Conneaut of a discharge that could cause a problem to the POTW, including slug loadings as defined by 40 CFR 403.8(F)(2)(vi) and OAC 3745-3-04(B)(4) is a violation of 40 CFR 403.12(f), OAC 3745-3-03(C)(2)(f), and OAC 3745-3-05(A).
 - d. Evaluation of Pretreatment Needs: As we discussed, slug loads must be prevented, and a recipe heavy with activated carbon may require further pretreatment than currently provided by Vesuvius USA. Vesuvius USA must retain the services of a qualified engineering firm to evaluate the pretreatment process and recommend process changes, operational changes, or additional equipment to ensure that activated carbon in quantities that interfere with Conneaut WWTP's treatment processes are not discharged. Failure to prevent pass-through and interference with the Conneaut WWTP is a violation of 40 CFR 403.5(B) and OAC 3745-3-04(B)(4). Failure of Conneaut to protect against pass-through and interference is a violation of 40 CFR 403.2.
11. Annual and Quarterly Violation Reports: The annual reports and quarterly violation reports certify under penalty of law that the signing official personally examined and is familiar with the information contained in the report and any attachments and further

certifies that the information is true, accurate, and complete. From the deficiencies noted above, the reports indicate that the applicable categorical standards for ODC have been incorrect. As noted above, Vesuvius USA may be subject to categorical standards. While Ohio EPA does not expect revisions of reports already submitted, Conneaut must ensure that future reports are accurate. Failure to have an accurate annual report is a violation of 40 CFR 403.12 and OAC 3745-3-03(J), as well as Part II, Item V.9.b. of the Conneaut NPDES Permit. Violations for Vesuvius USA Corporation for exceeding maximum flows (3,000 gpd) were not acknowledged or cited in the quarterly user violation reports or summarized in the annual reports. Failure to have accurate quarterly reports is a violation of Part II, Item V.9.a of the Conneaut NPDES permit. Failure to evaluate an IU for significant noncompliance is a violation of 40 CFR 403.8(f)(2)(viii) and OAC 3745-3-03(C)(2)(h).

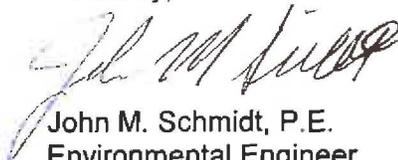
Recommendations

1. Total Dissolved Solids: Total dissolved solids (TDS) have become a pollutant of concern at some wastewater treatment plants (WWTPs), and water plant discharges have been documented to contain high TDS concentrations. This office recommends that TDS analyses be conducted annually on the effluent from the Conneaut water treatment plant discharges and other known and suspected sources of high TDS, as well as a part of the annual WWTP priority pollutant scan.
2. Oil and Grease: Ohio EPA notes that Conneaut's current local limit for oil and grease is 75 mg/l. Grease balls have been noted as a problem in the final clarifiers and disinfection tank at the Conneaut WWTP in recent compliance inspections and Conneaut may wish to examine lowering the local limit. Ohio EPA notes that the oil and grease local limits adopted by other smaller municipalities range from 35 mg/l to 100 mg/l.

Please respond to this office within 30 days of the receipt of this letter, documenting the steps that will be taken to address the issues noted above.

If you have any questions or comments, please contact me at (330) 963-1175. I can also be reached at john.schmidt@epa.state.oh.us.

Sincerely,



John M. Schmidt, P.E.
Environmental Engineer
Division of Surface Water

JMS/cs

cc: Craig Pierce, Conneaut WWTP
Shawn Aiken, Nick Sanford, and Patricia Vanah, CT Consultants, Inc.
Ryan Laake, Ohio EPA, DSW, CO

ec: Donna Kniss, Ohio EPA, DSW NEDO

File: Municipal/Conneaut/Pretreatment/PCI-Correspondence