



State of Ohio Environmental Protection Agency

Northeast District Office

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

February 15, 2008

RE: CITY OF SALEM
INDUSTRIAL PRETREATMENT PROGRAM
RECONNAISSANCE INSPECTION
NPDES PERMIT 3PD00027*JD
COLUMBIANA COUNTY

NOTICE OF VIOLATION

Mayor and Council
City of Salem
231 South Broadway Avenue
Salem, OH 44460

Dear Ladies and Gentleman:

This office conducted a Reconnaissance Inspection of the City of Salem Industrial Pretreatment Program (IPP) on January 31, 2008. The purpose of the inspection was to evaluate the City's actions in response to the 2006 Pretreatment Program Audit. Matthew Hoopes represented the City during the inspection.

The deficiencies noted during the inspection are in italics, and the Reconnaissance Inspection findings follow:

1. *Significant Industrial Users (SIUs) are required to sample their discharge and report the results to the Control Authority, the City of Salem, a minimum of two times a year. This requirement is found in 40 CFR 403.12(e) and (h), and OAC 3745-3-06(E) and (I). The Control Authority can collect the samples for the SIUs, as described in 40 CFR 403.12(g) and (h), and 3745-3-06(H)(5) and (I). 40 CFR 403.8(f)(2)(v) and OAC 3745-3-03(C)(2)(e) requires the Control Authority to sample all SIUs at least once per year. Mr. Hoopes stated that he believes that only two samples per year, not three, are required because the City conducts the SIU sampling.*

The minimum sampling requirement has been assessed by Ohio EPA Legal staff, which considered the sections of the regulations cited above. It was determined that the samples collected to satisfy the requirements for SIUs found in 40 CFR 403.12 and OAC 3745-3-06 cannot also be used to satisfy the requirements for Control Authorities found in 40 CFR 403.8 and OAC 3745-3-03. Therefore, the City of Salem must collect a minimum of three samples per year, not two. It should also be noted that the City of Salem Pretreatment Program Annual Report General Monitoring Information states that the Industrial User Self-Monitoring Frequency is two per year, and the POTW Industrial User Monitoring Sampling Frequency is once per year, for a total of three per year.

Mr. Hoopes stated that the City conducts sampling for Salem Hospital and FreshMark, and collects three samples per year. The other SIUs conduct their own sampling in addition to City sampling, resulting in a minimum of three events. This deficiency is resolved.

2. *SIU inspection notes were kept in a "log book" (note pad) that could not be located at the time of the inspection. Consequently, inspection records were not available for review during the audit. 40 CFR 403.8(f)(2)(v) and OAC 3745-3-03(C)(2)(e) require that each SIU be inspected at least once per year. Failure to keep documentation of these inspections is a deficiency of this requirement. During the audit, we discussed different ways to document the SIU inspections.*

Mr. Hoopes has developed a one page inspection form, which he completes during the SIU inspection. He also logs inspections into Microsoft Outlook. This deficiency is resolved.

3. *The first SIU inspection, conducted at FreshMark, did not collect all the information listed on U.S. EPA's form IU Site Visit Data Sheet. SIUs are required to submit an Industrial User Survey each year; this survey contains some of the information requested on the U.S. EPA form. Mr. Hoopes used the U.S. EPA form in the subsequent inspections, and we discussed ways to collect the information. The inspection and/or annual survey must be modified to collect all necessary information, including an evaluation of the need for a slug discharge control plan (see below).*

The inspection form discussed above was modeled on the U.S. EPA form, and contains the U.S. EPA form elements. This deficiency is resolved.

4. *The evaluation of the need for slug discharge control plan can be conducted during the annual inspection of the SIU; if so, this evaluation must be specifically documented on the inspection form. This was not documented, and Mr. Hoopes indicated that the evaluations have not been recently conducted. Failure to evaluate an SIU for a slug discharge control plan at least every two years is a deficiency in the requirement found in 40 CFR 403.8(f)(2)(v) and OAC 3745-3-03(C)(2)(e). Mr. Hoopes indicated during the audit that he would make these evaluations a priority.*

The slug plan evaluation is included on the inspection form. We discussed the requirement to incorporate language in the SIU permit to require the SIU to adhere to the requirements of the Slug Discharge Control Plan. This requirement is found in the revised pretreatment rules at 40 CFR 403.8(f)(1)(iii)(B)(6) and OAC 3745-3-03(C)(1)(c)(vi).

5. *A review of the sample chain-of-custody forms (COCs) showed that the forms were generally completed properly; however, one internal COC did not completely document the sample transfer. The contract laboratory conducting the analyses does not provide QA/QC data with the analytical results. Failure to collect information with sufficient care to produce evidence admissible in enforcement proceedings, which includes incorrectly using Chain of Custodies and using improper analytical procedures, is a deficiency in the requirements found in 40 CFR 403.8(f)(2)(vi) and OAC 3745-3-03(C)(2)(f). The City must ensure that COCs are completed correctly, and must review and evaluate contract laboratory procedures to ensure that they meet requirements.*

Mr. Hoopes indicated that he has discussed QA/QC requirements with the contract laboratory, and the laboratory personnel will make QA/QC information available when needed. This deficiency is resolved.

6. *Quaker City Castings is classified as a non-categorical SIU. It appears that Quaker City Castings may be subject to 40 CFR 464 Subpart C categorical regulations. Mr. Hoopes indicated that he would attempt to locate the information used to categorize this industry, and this office would consult the categorical standard Development Document. A classification determination must be made once the pertinent data is collected.*

Mr. Hoopes determined that Quaker City Castings is categorically regulated under two subparts. Because the categorical limits are production based limits, a flow meter was installed to collect required information, and Mr. Hoopes calculated equivalent concentration based limits based on yearly data. The most stringent limit was applied in the permit; however, the combined wastestream formula must be used to determine the correct limits. Also, flow and production information must be provided with each SIU report.

The recommendations and observations noted during the inspection are in italics, and the Reconnaissance Inspection findings follow:

1. *Mr. Hoopes indicated that a revised Sewer Use Ordinance (SUO) is under development. The revision of the SUO to update the language should be continued, and the revised SUO submitted to Ohio EPA as a program modification.*

The SUO has not been revised, and the revision is still in development. We discussed the SUO changes required by changes to the national and Ohio pretreatment regulations. A model SUO is available on the U.S. EPA Web site.

2. *The Enforcement Response Plan (ERP) has not been updated since October 26, 1993. The City of Salem should evaluate the ERP to see if any updates or revisions are required.*

The ERP was reviewed, and determined to be acceptable. The City should ensure that changes to the SUO do not result in discrepancies between the SUO and the ERP.

3. *There have been National Pollutant Discharge Elimination System (NPDES) permit limit violations for copper, which may reflect the adequacy of the IPP to prevent pass-through. Mr. Hoopes stated that the City is currently evaluating potential copper sources. Samples were taken in the collection system, and one industrial park will be re-sampled. The City must continue its efforts to identify the reason for the copper violations and make changes to the IPP if necessary.*

City personnel sampled the Salem Industrial Park and discovered a label maker incorrectly washing a copper based dye into the sanitary sewer system. This was discussed with the company, and should not recur. This office noted that if high copper

concentrations are discovered in the future, the company should be placed under permit as an SIU for potential to impact the POTW. This requirement is found in 40 CFR 403.3(v)(3) and OAC 3745-3-01(FF)(3).

4. *During the audit, this office presented information to Mr. Hoopes indicating that the City of Salem WWTP influent and effluent mercury concentrations appeared to be higher than expected. Mr. Hoopes indicated that he would review the data and determine what actions would be necessary. At this time, there does not appear to be an impact on the IPP, but there may be impacts in the future.*

Influent and effluent data collected since the 2006 audit was compiled and reviewed. There were some extremely high mercury concentrations in the effluent. This office reviewed the data sheet for the highest result, 490 ng/l, and determined that the method blank was acceptable. Mr. Hoopes indicated that City personnel began additional investigations when the high concentrations were initially detected, and began collecting split samples to send to multiple contract laboratories. The first three months of sample split data shows that the City's current contract laboratory reports mercury concentrations that are approximately three times the concentrations reported by the other laboratories.

We discussed the need to continue collecting split samples to evaluate contract lab performance. We also discussed clean sampling protocols and the potential need to retrain City personnel who collect the samples. The City submitted a Mercury Variance Request stating that the City would achieve an annual average mercury effluent concentration (AAMEC) of 12 ng/l. Because of the number of extremely high effluent concentration samples, the AAMEC was 99.5 ng/l in December 2007. Because the sample blank data was acceptable, the high mercury concentrations cannot be dismissed as invalid at this time, but further proof of laboratory bias can be considered. It should also be noted that the AAMEC began rising before the extremely high concentrations were reported. The City must aggressively evaluate potential mercury sources and begin mercury reduction activities in order to reduce the AAMEC and satisfy the terms of the Variance.

The following deficiency was noted during the Reconnaissance Inspection:

This office reviewed the influent and effluent phosphorus concentrations reported by the City in the Discharge Monitoring Reports (DMRs) for the period January 2006 to January 2008. The City of Salem NPDES permit contains a 1.0 mg/l monthly average concentration limit for phosphorus. The NPDES permit was appealed, but the phosphorus limit was not stayed during the appeal, so the limit is still effective. This NPDES permit limit was violated every month during the above period. As noted in a February 11, 2008 Notice of Violation sent by Joseph Trocchio, the excessive phosphorus in the WWTP discharge is producing nuisance algae growths downstream from the discharge.

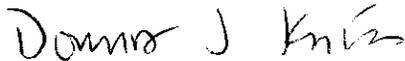
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The influent phosphorus concentrations were consistently higher than typical domestic sewage influent. Mr. Hoopes has conducted sampling in the collection system to determine phosphorus sources, and has collected the data necessary for developing a local limit for phosphorus. To date, this local limit has not been developed or implemented.

The purpose of the IPP is to prevent pass through or interference due to industrial wastewater discharges. The DMR data clearly demonstrates that phosphorus is passing through the WWTP, resulting in NPDES permit violations and negative downstream impacts. The failure to implement a local limit to prevent pass through is a violation of the IPP, and places the City IPP in Significant Non-Compliance.

Please respond to this office within 15 days of the date of this letter documenting the steps that will be taken to address the issues noted above, including a schedule for implementation of a phosphorus local limit. If you have any questions or comments, please contact me at (330) 963-1285. I can also be reached at donna.kniss@epa.state.oh.us.

Sincerely,



Donna J. Kniss
Environmental Engineer
Division of Surface Water

DJK/mt

cc: Donald Weingart
Matthew Hoopes

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File: Municipal Pretreatment/PCI-Correspondence