

ADEQ

ARKANSAS
Department of Environmental Quality

November 16, 2009

David Jurgens, Utilities Director
City of Fayetteville
113 W. Mountain Avenue
Fayetteville, AR 72701

Re: City of Fayetteville (AFIN 72-00102 NPDES #AR0020010) Pretreatment Program
Audit/Municipal Pollution Prevention (P2) Assessment

Dear Mr. Jurgens:

Please find enclosed the finished report for the audit/assessment conducted October 19 through October 22, 2009. The Department apologizes for the DRAFT sent with the November 10, 2009 letter. The report should be made available for review to appropriate industrial officials. Your staff should discuss and evaluate the findings in this report. Please respond to required actions and recommendations in writing within thirty (30) working days from the date on this correspondence.

The Department appreciates your staff's assistance. They appeared very interested in both the Pretreatment and Pollution Prevention Programs. Most of the recommendations in the attached audit/assessment are intended to aide the City of Fayetteville pretreatment program with achieving the objectives of the Clean Water Act.

Please do not hesitate to contact the Department if the City has questions or concerns.

Sincerely,



Rufus J. Torrence, Water Division Engineer

Encl: Audit/Assessment Checklist

Cc: Rudy Molinda / EPA 6WQ-PM (via e-mail w/o attmt)
Eric Flemings / ADEQ Technical Assistant Mgr-Field Services (w/o attmt)
Cindy Garner / ADEQ Technical Assistant Mgr-Enforcement (w/o attmt)

***PRETREATMENT PROGRAM AUDIT/
POLLUTION PREVENTION ASSESSMENT***

CITY OF FAYETTEVILLE, ARKANSAS

NPDES PERMIT #AR0020010

November 10, 2009

Prepared by: Rufus Torrence

Water Division Engineer

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

5301 Northshore Drive

North Little Rock, Arkansas 72118

TABLE OF CONTENTS

A) Introduction

B) Summary of Findings with Required Actions

C) Recommended POTW Actions for Improved Implementation or Enforcement of the Pretreatment and Pollution Prevention Programs

D) Required Program Modifications to the Approved Pretreatment Program Necessary to Bring the Program into Compliance with the Letter or Intent of the Current Regulatory Requirements

LIST OF ATTACHMENTS

Pretreatment Program Audit/Assessment Checklist:

Section I: General Information

Section II: Program Analysis and Profile

Section III: Industrial User File Review

Reportable Noncompliance (RNC) Worksheet

SIU Site Visit Summaries

Attachments: Supporting Documentation

- A - Superior Industries Permit Application/Wastewater Survey Questionnaire
- B - Superior Industries Industrial Waste Discharge Permit No. FAY09
- C - Superior Industries IPP Inspection Report
- D - Marshalltown Tools Fact Sheet for Permit No. FAY10
- E - American Interplex Chain of Custody Form
- F - Excerpt from Pinnacle Foods Permit No. FAY12
- G - Marshalltown ASPP & TOMP
- H - Excerpts from Elkhart Permit No. FAY03 & Fact Sheet
- I - Excerpts from City of Fayetteville P2 Activities
- J - Table 7-6 Example Fact Sheet from EPA IU Permitting Guidance Manual
- K - Excerpt from City Code: Chapter 51; §51.075 paragraph (D) Local Limits

A) INTRODUCTION

In accordance with ADEQ's (Department) responsibility to fulfill its obligations for the administration and enforcement of the NPDES Program, the department will conduct audits of Pretreatment Programs within the state as part of its coordination and compliance monitoring strategy.

With Pollution Prevention (P2) being integrated into Pretreatment Programs the Department will conduct assessments of cities' P2 projects and programs in conjunction with the audits.

The Water Division Engineer performed an audit from October 19th through the 22nd, 2009 on the Pretreatment Program implemented by the City of Fayetteville, Arkansas.

Participants included:

Rufus Torrence	ADEQ / Water Division Engineer / Auditor
Denise Georgiou	City (OMI) / Industrial Pretreatment Coordinator
Duyen Tran	City (OMI) / Assistant Project Manager

The goals of the audit/assessment were:

- * To determine the implementation and compliance status of the City of Fayetteville's Pretreatment Program with the requirements of the General Pretreatment Regulations located in 40 Code of Federal Regulations (CFR) Part 403
- * To determine the effectiveness of the City's Pretreatment and P2 Programs in eliminating the introduction of toxic pollutants from industrial discharges
- * To provide assistance and recommendations to the City that might allow for more effective implementation of program requirements
- * To assess the level of additional Pollution Prevention activities implemented within the City's day-to-day Pretreatment procedures and make recommendations thereof

The City of Fayetteville's Pretreatment Program is administered and implemented by OMI, Inc. under a multi-year operations contract. "City" may also be interchanged with "OMI" in this document and attachments.

The original Program was approved April 26, 1984. The City modified the approved original Program and ADEQ incorporated the modification into the NPDES permit on July 14, 1998. The City must modify the program again to include recent revisions to 40 CFR Part 403 commonly referred to as the "Streamlining Revisions" promulgated on October 5, 2005.

The City has two wastewater treatment plants (Publicly Owned Treatment Works—POTWs). The City's Noland wastewater treatment plant consists of a biological nutrient removal/activated sludge system which includes aeration basins with RAS and aerobic, anaerobic and anoxic zones, secondary clarification, sand filtration and disinfection by ultraviolet light. The City discharges the wastewater into an unnamed tributary that enters the West Fork of the White River. The new Westside wastewater treatment plant consists of bar screens, fine screens, three stage biological treatment system and disinfection by ultraviolet light. The City discharges the wastewater into Goose Creek which enters the Illinois River.

There has been no pattern of aquatic toxicity observed in either POTW's effluent although in March 2007, the Noland POTW effluent had both lethal and sub-lethal effects on the *Ceriodaphnia dubia* (water fleas). The two required subsequent retests passed both lethal and sub-lethal endpoints.

The Noland POTW has a design flow of 11.2 MGD and an average influent flow of 6.0 MGD. Approximately 13% of the flow is from 9 significant industrial users (SIUs), 5 of which are categorical. Approximately 2750 dry tons of sludge per year is shipped to a landfill. The Westside POTW has a design flow of 10 MGD and an average influent flow of 6.0 MGD. The Westside POTW currently has no SIUs.

The audit/assessment consisted of informal discussions with the City's Pretreatment personnel, examination of their industrial user files, pretreatment records, site visits to four (4) of their permitted industrial users and one (1) suspected non-permitted categorical metal finisher. A checklist was utilized to ensure that all facets of the program were evaluated. A copy of the completed checklist is attached. Additional information obtained during the audit is included in Attachment(s) A.

The report is divided into three sections. Section B provides a summary of the significant findings of the audit which will require action by the City of Fayetteville. Section C includes recommendations to help improve the continuity, implementation and enforcement of their Pretreatment and Pollution Prevention Programs. Finally, required program modifications to the City's approved program, including its adopted legal authorities, are outlined in Section D.

B) SUMMARY OF FINDINGS WITH REQUIRED ACTIONS

This section of the report is a summary of deficiencies found in the City of Fayetteville's Pretreatment Program. The auditor has paraphrased with CFR citations the actions required by the City to comply with the current General Pretreatment Regulations (40 CFR 403) and with the approved program. A narrative explanation of the finding will follow the citations.

1) Under **40 CFR 403.5(c)** "*Each POTW with an approved pretreatment program shall continue to develop [local] limits as necessary...*" Under **40 CFR 122.44(j)(2)(ii)**, the City must update or assess local limits at least every permit cycle.

The City's last "official" assessment of local limits occurred in 1998 when the City modified the program to include specific local limits.

C) RECOMMENDED POTW ACTIONS FOR IMPROVED IMPLEMENTATION OF THE PRETREATMENT AND POLLUTION PREVENTION PROGRAMS

- 1) The City should include a fact sheet with every permit. The fact sheet should be an integral part of the permit and the entire permit should be given to the permittee.
- 2) The City should verify that 40 CFR Part 464 is not applicable to Superior Industries or Elkhart. During the file review in November 2006, the previous auditor indicated that no wastewater was generated by the Aluminum casting operations [40 CFR Part 464 Subpart A]. However, during the October 21, 2009 site visit, this auditor confirmed that Superior had a Solution Heat Treatment operation (which is normally followed by a "water" quench) and that Elkhart has a copper casting operation [40 CFR Part 464 Subpart B]. The City should confirm that no wastewater from any 40 CFR Part 464 operation enters, can enter or will enter the POTW collection system from either of these facilities.
- 3) The City should add an additional column to the Enforcement Response Plan chart to show which official is responsible for each type of enforcement action.
- 4) The City should not issue permits with both local limits and categorical pretreatment standards for the same parameter except as noted below. The City should compare the two requirements and list only the more stringent requirement in the permit. Based on the information in Superior's permit in Table I-1 (see attachment B-6/26), the Daily Maximum limit for Zinc in the permit should be only 0.45 mg/l based on an allowable 0.64 lbs/day in the discharge at an average flow rate of 0.17 mgd. The City should not show either the Daily Maximum (2.27 mg/l) or the Monthly Average (1.29 mg/l) in Superior's permit for this case; only the local limit for zinc should be shown the table. Refer to attachment J-1/1 for more details on EPA guidance. Note in the Example Fact Sheet that some parameters are controlled by a local limit while others are controlled by categorical standards. No parameter has both a local limit and a categorical limit unless the local limit is not as stringent as the "Monthly Limit" (this case is applicable to Nickel in the Example Fact Sheet).

5) “Recommend including pollution prevention (P2) questions in future industry/business surveys as well as in current SIU permit applications (Gilliam Audit Report 2006).”

7) “Recommend all metal finishers under **CFR 433** periodically review their existing toxic organic management plans (TOMPs), where applicable, and update as necessary. The City should also have correspondence in that IU’s file indicating the TOMP has been reviewed and approved (Gilliam Audit Report 2006)”.

8) The City should consider not showing numerical limits in the ordinance. Referring to attachment K-1/2, the City has listed numerical limits in the ordinance/code. The City should consider revising the language in the ordinance to show the following:

Local Limits

To protect against pass through and interference, no Industrial User may discharge or cause to be discharged into the POTW any wastewater pollutant concentration exceeding the Technically Based Local Limits (TBLLs) developed from time to time by the Utilities Director of City of _____ Utilities as required by Part III in City of _____ NPDES permits No. AR00 _____, authorized by 40 CFR 403.5 (c) and approved by the Approval Authority. TBLLs based on calculated Maximum Allowable Industrial Loadings are located in the City's Pretreatment Program, Section _____. At the discretion of the Utilities Director, TBLLs may be imposed and shall apply at the "monitoring point" described in the individual industrial wastewater discharge permits. All concentration limits for metals shall be in terms of "total" metals unless otherwise indicated. At the discretion of the Utilities Director, mass limitations may be imposed in addition to or in place of concentration based TBLLs. The Utilities Director may also develop BMPs in individual wastewater discharge permits, to implement specific pollutant limitations. Such BMPs shall be considered Local Limits and Pretreatment Standards. When new Local Limits are implemented or revised, the Utilities Director will provide individual notice to parties who have requested such notice and an opportunity to respond, as set forth by 40 CFR 403.5 (c) (3). This requirement of notice also applies when Local Limits are set on a case-by-case basis.

9) “Recommend including P2 audits as an enforcement option in the current Program’s Enforcement Response Guide (Gilliam Audit Report 2006)”.

10) “Recommend including the general and specific prohibitions in **40 CFR 403.5(a)(1) & (b)** in all SIUs’ permits (Gilliam Audit Report 2006)”.

11) The City should consider adding Molybdenum to the list of Table III parameters and also test for Molybdenum on a quarterly basis at the Noland plant and semi-annually at the West Side plant.

12) In reference to the language in each permit (Part III sec A.18; see attachment B-16/26), the City should modify the title to show “**Limitations on Permit Transfer**” and include this topic sentence as the first sentence in the section:

“The permit is nontransferable to any person except after notice to the Control Authority”.

See the enclosed “Pretreatment Audit Checklist” Section III paragraph B.3 and footnote number three (3) for more details.

13) The City should not list any limits in the SIU permits which are not local limits or categorical limits. Referring to attachment F-1/1, the City has listed TSS limits in Pinnacle Foods’ permit. The City may continue to show the TSS limits if the City clearly adds a disclaimer. The City may add a footnote to declare that the TSS limits are not national pretreatment standards or requirements and, hence, are not subject to the requirements in Code 51.

14) The Marshalltown Toxic Organic Management Plan (TOMP) should have more details. Referring to attachment G-11/23, the plan should list each toxic organic of concern. Referring to attachment G-13/23, the “Method of Disposal” should list the toxic organic in each chemical. Referring to attachment G-18/23, under “Employee Training” paragraph number 7 lists training on proper disposal; however, employees should also be educated on the content of the chemicals to avoid inadvertently contaminating the wastewater discharged to the sewer.

15) Referring to attachment C-9/11, the City change the title of section L in the inspection report form to show “**Accidental Spill and Slug Discharge Control**”. The City should continue to evaluate each SIU’s slug control plan or the necessity to develop a plan.

16) The City appears to have modified Elkhart’s permit to “increase” the allowable loading of zinc to the POTW. Referring to attachment H-2/4, the zinc limit is 0.48 lb/day. Referring to attachment H-4/4, the “local limit/allocation” for zinc for Elkhart was only 0.023 lb/day. The City should provide justification for increasing Elkhart’s allocation for zinc. The City should provide information in the fact sheet to show the MAIL (Maximum Allowable Industrial Loading) and to show that the increase in Elkhart’s allowable loading of zinc along with all other allocations for zinc did not exceed the MAIL for zinc. Note that the City must not increase Elkhart’s allowable loading for zinc over the categorical limit of 0.654 lb/day.

**D) REQUIRED PROGRAM MODIFICATIONS TO THE APPROVED
PRETREATMENT PROGRAM NECESSARY TO BRING THE PROGRAM
INTO COMPLIANCE WITH THE LETTER OR INTENT OF THE CURRENT
REGULATORY REQUIREMENTS**

The City's Pretreatment Program must be modified to be current with the newly revised **40 CFR 403**. The City must comply with the most recent changes to 40 CFR 403 (commonly referred to as the "Streamlining Rule Changes" promulgated on October 14, 2005). The City must review the existing approved program and make all necessary modifications to comply. Some of the streamlining changes are less stringent than the previous pretreatment regulations and the City may at its option elect to include these changes in the program modification. However, thirteen (13) elements are more stringent than the previous pretreatment regulations and the City must ensure that the approved program contains all applicable more stringent streamlining changes. The City should note that some of the elements may not be applicable to the City's approved program

E) CONCLUSIONS

The City should consider the required actions and recommendations contained in this audit/assessment before finalizing any pretreatment program modifications. Any intended substantial program/ordinance changes made, whether in response to the recommendations or otherwise, should be submitted to ADEQ for review and approval.