Fields of Opportunities

STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR
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DEPARTMENT OF NATURAL RESOURCES
CHUCK GIPP, DIRECTOR

March 15, 2016

Jeff Nemmers, City Clerk
City of Fort Dodge
819 1st Avenue South
Fort Dodge, Iowa 50501

Subject: Pretreatment Program Audit
NPDES Permit # 9433003

Attention - Honorable Mayor and Council Members:

David Miller, an Environmental Specialist with this office, conducted an audit of Fort Dodge's wastewater Industrial Pretreatment Program on March 3, 2016.

The facility was found to be in material compliance with applicable requirements.

Should you have questions regarding this inspection, please feel free to contact Mr. Miller at david.miller@dnr.iowa.gov or 641 424-4073.

Sincerely,

FIELD SERVICES & COMPLIANCE BUREAU

Jeffrey B. Vansteenburg
Field Office Supervisor

JBV/dlm
Enclosure

c: DNR Records Center
Travis Pender, USW Utility Group, 1801 Avenue O, Fort Dodge, IA 50501
U.S. EPA Region VII, Office of External Programs, 901 N 5th Street, Kansas City, KS 66101

Industrial Pretreatment Program Audit
Report of Investigation

Iowa Department of Natural Resources
Environmental Services Division

Investigation Date **Current:** 3/3/2016 **Last:** 3/13/2013 (DNR) 10/15/2013 (USEPA)	**From:** Iowa Department of Natural Resources ESD Field Office #2 2300 15th Street SW Mason City, Iowa 50401
To: City of Fort Dodge, Iowa 819 1st Ave South Fort Dodge, IA 50501	**Person(s) Contacted:** Travis Pender – USW Utility Group Project Manager Mike Winninger – USW Utility Group Assistant Project Manager
Subject: Pretreatment Compliance Audit NPDES Permit Number 9433003	

Introduction

On March 3, 2016, the Iowa Department of Natural Resources (DNR) conducted an audit of the wastewater Industrial Pretreatment Program (IPP) for the City of Fort Dodge, Iowa (the City). The purpose of the inspection was to evaluate the adequacy of the overall IPP and its implementation, and this inspection covers the period from November 1, 2013 to January 31, 2016. The IPP is governed by NPDES Permit # 9433003 which was issued on March 1, 2015, and expires on February 29, 2020.

This is a publically-owned treatment works (POTW) which, along with the wastewater collection system is owned by the City. The City has contracted with USW Utility Group (USW) to operate the treatment plant, certain portions of the collection system, and manage the IPP. All sampling and laboratory analysis supporting the IPP is managed by USW. Laboratory analysis is performed by both a third party laboratory and the on-site USW analytical laboratory, both of which hold a current State of Iowa certification under Chapter 567 IAC 83. Information supporting this IPP audit was provided by from Travis Pender and Mike Winninger, both of USW.

The IPP audit consisted of an overall DNR review of the IPP, a joint DNR and USW review of effluent data from all significant industrial users (SIUs) and a specific review of Compliance Plans for two of the SIUs, CJ BioAmerica Inc., and BHJ USA.

SIU Permitting and Monitoring

The City currently has 13 SIUs, three of which are subject to Categorical Standards. All of the SIUs have been issued Pretreatment Permits by the City, which have a duration of two years. With the exception of Cargill, who is on a different permitting schedule, all the Permits were set to expire in December 31, 2015, but they have been amended to expire on April 1, 2016, at which time new three year Permits will be issued.

A list of the SIUs and a summary of their compliance status is provided in Table 1.

Table 1- Fort Dodge SIU Summary

SIU	Categorical	*Compliance History this Inspection Period*		
		In Compliance	Infrequent Non-Compliance	Actionable Non-Compliance *(discussed later)*
Advantech Ltd.	-	X		
Americold	-		X[1]	
BHJ USA Inc.	-			X
BIVI (Main)	439		X[2]	
BIVI (Riverside)	439		X[3]	
Cargill Inc.	406		X[4]	
CJ BioAmerica, Inc.	-			X
Fort Dodge Correctional Facility	-		X[5]	
Josephson Manufacturing Co.	-	X		
Koch Fertilizer Duncombe (hauled)	-	X		
NCIRSWA Landfill	-		X[6]	
Nestle Purina Petcare	-		X[7]	
Trinity Regional Medical Center	-		X[8]	

(1) one-time each effluent limit violation for BOD, FOG & NH_3
(2) one-time FOG and zinc effluent limit violations
(3) one-time NH3 and infrequent zinc effluent limit violations
(4) one-time pH and infrequent zinc effluent limit violations
(5) one-time FOG and zinc effluent limit violations, infrequent BOD, TSS & flow effluent limit violations
(6) one-time event BOD effluent limit violation
(7) infrequent pH, FOG, and BOD effluent limit violations
(8) one-time zinc effluent limit violations

Enforcement

Records indicate that Notices of Violations (NOVs) were issued for each of the footnoted violations listed above, except for the Americold FOG and NH_3 issues which were addressed via email correspondence and additional monitoring. Fines are levied for effluent limit violations based upon the City of Fort Dodge Sewer Ordinance 2188, Chapter 13.24, in accordance with State and Federal regulations. Fines in 2014 totaled $14,500 and $24,590 in 2015.

Two SIUs have been placed upon Compliance Schedules during this inspection period as discussed below:

> ***BHJ USA*** was put under a Compliance Schedule on January 29, 2014, due to failure to meet effluent limits. The City agreed not to take enforcement action during the Compliance Schedule provided meaningful progress was being made and there was not an adverse effect to the POTW. The Compliance Schedule was extended by mutual agreement while BHJ America installs a pretreatment system, with an expected compliance date of June 30, 2016.

CJ BioAmerica was under a compliance schedule from May 1, 2014, to September 1, 2015, for repeated effluent limit violations, primarily TKN and TSS. They have changed operational practices, installed additional slug control measures and implemented several additional onsite monitoring and sampling upgrades which have improved the effluent. On September 10, 2014, they were granted a pH variance of 8.0 to 12.0 for the reminder of the current permit duration. This variance was rescinded on March 31, 2015, after confirmation that the high pH discharge was adversely affecting the POTW.

Hauled Waste

The facility accepts approximately 500,000 gallons of hauled septage each year. Each hauler must have an authorization from the City which specifies that that the incoming loads must be limited to domestic septage. There is a dedicated, metered unloading station for the incoming wastewater.

Sludge Quality

A key component of the IPP program is to ensure the generated sludge meets the requirements in 40 CFR Part 503. Pathogen reduction is attained through the use of two heated anaerobic digesters and four aerobic digesters. Records were reviewed which demonstrated that the sludge is tested the required four times per year and the results of the testing were within the ranges required for land application as Class I sewage sludge. The facility uses sludge injection under Subparagraph 567 IAC 67.7(1)"c"(7) to meet the vector attraction requirements.

USW contracts with a third party for the sludge injection. Beginning in 2015, due to operational changes at the Cargill SIU onsite treatment facility and their ongoing partnership with the City of Fort Dodge, sludge is now being generated at a higher rate than was typical in the past. Two recent requests have been made to DNR to add additional application fields to the Five Year Biosolids Management Plan, both of which DNR approved after receiving the required supporting documentation. In addition, USW is currently implementing procedural changes to the management and operation of the sludge storage lagoons.

REQUIRED ACTION

1. Continue to implement the IPP accordance with 40 CFR 403.8(f)(1).

Inspector Signature: David Miller	**Date:** 15MAR16
Reviewer Signature: Trent Lambert	**Date:** 15 MAR 16