2013 Pretreatment Annual Report

City of York Wastewater Treatment Plant
York, Pennsylvania

NPDES PA0026263

The City of York
Pennsylvania

101 South George Street ❖ PO Box 509 ❖ York PA 17405
www.yorkcity.org
Honorable C. Kim Bracey, Mayor

Veronica Chavez
Pretreatment Permit & Compliance Manager
Department of Public Works – MIPP

March 29, 2014

Certified Mail No. 7013 3020 0000 1065 3522
Liz Ottinger (3WP41)
Pretreatment Coordinator
EPA Region 3
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

RE: 2013 Pretreatment Program Annual Report

Dear Ms. Ottinger:

The City of York Wastewater Treatment Plant 2013 Pretreatment Program Annual Report is enclosed. This report is also submitted as part of the City of York's annual Pennsylvania Chapter 94 Municipal Wasteload Management report. The entire seventh section of the Chapter 94 report, which is dedicated to the pretreatment program, Appendix J containing the wastewater treatment plant's priority pollutant and local limits analytical results, and Appendix K containing correspondence regarding plant performance, are submitted as the City of York's annual pretreatment program report to EPA.

The Monitoring Data Submission Survey is enclosed. The monitoring data summary tables for influent, effluent, and sludge monitoring data will be emailed as allowed by the 2013 pretreatment annual report guidance. A paper copy of the spreadsheet tables is included with this annual report.

The City of York wastewater treatment plant's NPDES discharge permit expired January 13, 2013. The new permit has not been issued as of late-March 2014. The local limits sampling plan is required to be submitted to EPA within three months of permit issuance, which would have occurred mid-April 2013: because the NPDES renewal has not yet been issued, the sampling plan cannot be submitted under the original timeframe.

Should you have any questions, or require further information, please do not hesitate to contact me at 717-812-1444 (office), 717-324-6590 (cellular) or vchavez@yorkcity.org.

Sincerely,

Veronica Whaley Chavez
Pretreatment Permit & Compliance Manager

Enclosures
C: file

Contents

Appendices

7.1.Municipal Industrial Pretreatment Program §94.12 (a)(8)

7.2. Purpose of the Municipal Industrial Pretreatment Program

Wastewater treatment plants are designed to treat domestic sewage; however, they also receive higher strength wastewater from industrial (non-domestic) facilities and processes. Recognizing that industrial wastewater often has different types and greater concentrations of pollutants compared to household wastewater, the United States Environmental Protection Agency (USEPA) established the National Pretreatment Program. The program's authority comes from Section 307 of the Federal Water Pollution Control Act, which is referred to as the Clean Water Act.

The National Pretreatment Program requires wastewater treatment plants to enforce all federal pretreatment standards and requirements in addition to any local sewer use regulations. The goals of the pretreatment program are to:

- prevent the introduction of industrial pollutants into wastewater treatment plants that interfere with, or are incompatible with, wastewater treatment plant processes and operations,
- prevent industrial facility pollutants from passing through wastewater treatment plants into receiving waters (i.e., streams or lakes),
- prevent the contamination of, and improve the quality of, municipal and industrial wastewater and sludges so they can be properly disposed of or used for beneficial purposes, and
- protect treatment plants, sanitary sewer systems, their workers and the safety of the public and the environment from the threats posed by industrial wastewater. [1, 2]

The City of York Municipal Industrial Pretreatment Program (MIPP) is responsible for monitoring the industrial and commercial wastewater dischargers in the City of York Wastewater Treatment Plant service area. This is accomplished through inspections and sampling of industrial wastewater. Inspections are performed to ensure industries conduct their manufacturing processes and operate their wastewater treatment systems in compliance with pretreatment regulations, and to prevent the discharge of unwanted substances to the sanitary sewer system and wastewater treatment plant. The results of wastewater sample tests allow the City of York to evaluate an industrial user's (IU) compliance with both federal and local wastewater regulations. To meet federal and local wastewater limits, some industrial facilities may be required to treat their wastewater before releasing it into the sewer; hence, the term "pretreatment." Wastewater test results are also used to recoup costs incurred by the City of York wastewater treatment plant to process the higher strength industrial waste - costs that would otherwise be borne by ratepayers.

7.3. Reporting Requirements

This section documents the activities of the City of York Municipal Industrial Pretreatment Program (MIPP) for reporting year 2012. It fulfills the Pennsylvania Department of Environmental Protection's (PADEP) annual Chapter 94 reporting requirements, the annual reporting requirements of the City of York Wastewater Treatment Plant's National Pollution Discharge Elimination System (NPDES) permit, and the United States Environmental Protection Agency's (USEPA) annual pretreatment program reporting requirements. The format of the section is based on the USEPA 2012 reporting year pretreatment annual report guidance, which includes a program summary and various supporting attachments showing more detailed information.

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1 40 CFR 401.12(f), 40 CFR 403.2

2 1996. Pretreatment Facility Inspection. 3rd ed. California State University, Sacramento.

7.4. Pretreatment Performance Summary

I. General Information

Control Authority Name: **City of York Wastewater Treatment Plant**
Address: **1701 Blackbridge Rd**
City: **York** State: **PA** Zip+4: **17402-1911**
Contact Person: **Andrew Jantzer, PE**
Contact Title: **General Manager of Wastewater Facilities**
Contact Telephone Number: **717-845-2794**
E-mail address: **ajantzer@yorkcity.org, vchavez@yorkcity.org**
NPDES No.: **PA0026263**
Permit Issuance Date**: 2/1/2008** Permit Expiration Date: **1/31/2013 (administratively extended)**
Reporting Period: **January 1, 2013 through December 31, 2013**
Total Categorical IUs (CIUs): **10**
Total "Middle Tier" CIUs (MTCIUs): **NA**
Total Nonsignificant CIUs (NSCIUs): **0**
Total Significant Noncategorical IUs (SNIUs): **20**

II. Compliance Monitoring Program

1. Number of SIUs with current control documents ..... **(plus 1 zero-discharge NSCIU)** **30**
2. Number of SIU facilities inspected **31**
3. Number of SIU facilities sampled ..... **(No discharge from 2 facilities)** **29**
4. Number of SIUs submitting Self-Monitoring Reports **31**

III. Significant Industrial User Compliance

1. Number of SIUs violating a compliance schedule/Number on a schedule **0/2**
2. Number of SIUs in SNC for the July to December review period **0**
3. Number of SIUs in SNC at any time during calendar year **1**
4. Number of SIUs in SNC that were also in SNC during the previous calendar year **0**
5. Number of NSCIUs that violated any standards or requirements **0**

IV. Enforcement Actions

1. Notices/Letters of Violation issued to SIUs **30**
2. Enforceable compliance schedules issued to SIUs ..... **(one issued 2012, completed 2013)** **0**
3. Civil/criminal suits filed **0**
4. Number of SIUs from which penalties have been collected **0**
5. Other actions (sewer bans, etc.) **0**

I certify that the information contained in this report and attachments is complete and accurate to the best of my knowledge. (See Part B.V of the instructions).

Andrew Jantzer — Name of the Authorized Representative

General Manager of Wastewater Facilities — Title (print)

Signature

Date

7.5. Section I, General Information Attachments

A list of categorical industrial users (CIU) and significant non-categorical industrial users (SNIU), which matches the industries referenced in Section I of the Pretreatment Performance Summary, is provided in Table 7.1-1. Categorical industrial users with the potential to discharge are identified in the "classification" column with "CIU". The federal regulation reference and industrial category are provided in the two immediately following columns. Both the previous and current permit dates are listed to cover the entire 2013 year.

There were no new facilities and no facilities that closed. Some changes to the industrial user list were made since the 2012 annual report submission.

- **AMZ Corp., 2206 Pennsylvania Avenue**, was reclassified as a Non-Significant Categorical Industrial User due to USEPA approval of pretreatment program streamlining changes. (The facility is still a zero-discharge facility and is therefore listed Section II, but not Section I).
- **CP Industries, 785 West Philadelphia Street,** is changed on the list to a permitted facility that is currently zero-discharge.
- **Frito Lay, 3553 Gillespie Drive,** used to be under an administrative order to address BOD concentration increases (without mass loading increases) due to implemented water conservation measures. Progressive enforcement against the industry for BOD violations would have essentially punished a large water-using industry for implementing water resource conservation measures. This was not reissued in 2013 because the facility made production and pretreatment process changes. (Note for 2014: In the latter part of 2013 and into 2014 the industry severely reduced process water usage, so this issue will have to be re-examined. For example, average daily wastewater discharge has dropped from roughly 250,000 gpd to 160,000 gpd - which is a 36% percent decrease - since the most recent water conservation measures were implemented.)

Table 7.1-1: Categorical and Significant Noncategorical Industrial Users, 2013

ID#	Industrial User		Classification	Categorical Reference	Category	Control Document Issue/ Effective Date	Control Document Expiration Date	Control Document Issue/ Effective Date	Control Document Expiration Date
0088	American Ash Recycling	1072 Roosevelt Av	SI			10/1/2012	9/30/2015*	4/1/2013	3/31/2016
0047	Bickel's Snack Foods – College Av	1000-1050 W College Av	SI					10/1/2012	9/30/2015
0045	Bickel's Snack Foods – Zinn's Quarry Rd	1120 Zinn's Quarry Rd	SI					10/1/2012	9/30/2015
0100	Cintas Corp.	1111 Smile Way	SI					7/1/2011	6/30/2014
0083	Columbia Gas of Pennsylvania, Inc.	201 Grant St	SI					10/1/2012	9/30/2015
0019	Coyne Textile Services	3500 W Market St	SI					10/1/2012	9/30/2015
0104	CP Industries	785 W Philadelphia St	CIU	40 CFR 417	soap and detergent			5/8/2013	3/31/2016
0021	Dentsply International Inc.	470 W College Av	CIU	40 CFR 433	metal finishing			10/1/2012	9/30/2015
0099	Dentsply Int'l. Professional Division	1301 Smile Way	SI					1/1/2012	12/31/2014
0005	EQ Pennsylvania	730 Vogelsong Rd	CIU	40 CFR 437	centralized waste treatment			10/1/2012	9/30/2015
0105	First Capital Powder Coating	215 Herman St	CIU	40 CFR 433	metal finishing			10/1/2012	9/30/2015
0006	Frito-Lay, Inc.	3553 Gillespie Dr	SI					10/1/2012	9/30/2015
0106	Gamlet, Inc.	1750 Toronita St	CIU	40 CFR 433	metal finishing			10/1/2013	9/30/2016
0098	Hess Gas Station 38254	253 S Queen St	SI			12/22/2010	9/30/2013	4/1/2013	3/31/2016
0095	Johnson Controls Inc.- Grantley Campus	631 S Richland Av	SI			4/1/2010	3/31/2013	10/1/2012	9/30/2015
0041	New York Wire Company-Weaving Facility	441 E Market St	CIU	40 CFR 433	metal finishing			10/1/2012	9/30/2015
0069	New York Wire Company-Wire Facility	829 Loucks Mill Rd	CIU	40 CFR 433	metal finishing			10/1/2012	9/30/2015
0013	North Metal & Chemical Company	609 E King St	SI					10/1/2012	9/30/2015
0038	Osram Sylvania, Inc.	1128 Roosevelt Av	CIU	40 CFR 433	metal finishing			10/1/2012	9/30/2015
0089	Protech Powder Coatings Inc.	939 Monocacy Rd	SI					10/1/2012	9/30/2015
0085	RecOil, Inc.	280 North East St	CIU	40 CFR 437	centralized waste treatment			10/1/2012	9/30/2015
0018	Rutter's Dairy, Inc.	2100 N George St	SI					10/1/2012	9/30/2015
0092	Surtech Industries Inc	915 Borom Rd	CIU	40 CFR 433	metal finishing			10/1/2012	9/30/2015
0039	Warrell Classic Company, The	231 West College Av	SI					7/1/2012	6/30/2015
0103	WC Manufacturing Co LLC	615 South Pine St	SI					7/1/2011	6/30/2014
0035	YGS Group, The	3650 W Market St	SI					10/1/2012	9/30/2015
0059	York County Solid Waste & Refuse Auth.	2651 Blackbridge Rd	SI					10/1/2012	9/30/2015
0070	York Newspaper Company	1891 Loucks Rd	SI					10/1/2012	9/30/2015
0034	York Wallcoverings Inc.- Linden Av	750 Linden Av	SI					10/1/2012	9/30/2015
0084	York Wallcoverings Loucks Rd Facility	2075 Loucks Road	SI					1/1/2012	12/31/2014

CIU – Categorical Industrial User. SI – Significant Non-Categorical Industrial User. NSCIU – Non-Significant Categorical Industrial User.

* New permit issued before expiration date due to new process at facility.

7.6. Section II, Compliance Monitoring Program Attachments

Permits

As shown in Table 7.1-2, there were thirty (30) significant industrial users with current individual control documents (i.e., permits) in 2013. The City of York does not issue general permits. There are no lapsed or administratively extended permits. All permitted industries submitted the required self-monitoring reports. AMZ Manufacturing Corp. was reclassified as a Non-Significant Categorical Industrial User due to USEPA approval of pretreatment program streamlining changes, and no longer has a zero-discharge permit. CP Industries' compliance order and notice issued on September 21, 2009 and requiring annual certification regarding wastewater generation and disposal was effectively terminated with issuance of an industrial wastewater discharge permit with an effective date of May 8, 2013.

The City of York did not assign any mass-based limits in place of concentration-based limits to any categorical industrial users, nor were any monitoring waivers granted under 40 CFR 403.12(e)(2) for any categorically regulated pollutant. The City of York required all permitted industrial users that can discharge to self-monitor their wastewater. The City of York did not have any "middle tier" categorical industrial users. There was one zero-discharge non-significant categorical industrial user (NSCIU) in 2013.

Inspections

All facilities were inspected in 2013. A summary of 2013 inspection activities is provided in Table 7.1-2. A comprehensive annual inspection is conducted once per year. Observations are recorded using the annual inspection form. All facilities received an annual inspection.

All three zero-discharge facilities were inspected in 2013: AMZ Manufacturing Corp., located at 2206 Pennsylvania Avenue; CP Industries, located at 785 West Philadelphia Street; and, RecOil, Inc., located at 260 North East Street. AMZ Manufacturing Corp. is a metal finisher under 40 CFR 433, CP industries is a soap and detergent manufacturer under 40 CFR 417, and RecOil, Inc. is a centralized waste treatment facility under 40 CFR 437. AMZ Manufacturing Corp. evaporates wastewater and hauls evaporator solids off-site. CP Industries holds an industrial wastewater discharge permit, but does not currently discharge. RecOil, Inc. holds an industrial wastewater discharge permit, but hauls all wastewater for off-site disposal.

Sampling

Wastewater samples were collected from twenty-nine (29) facilities**.** A summary of 2013 sampling activities is provided in Table 7.1-2. The number of industrial user sampling events, number of City of York sampling events, and the minimum required number of industrial user samples are shown. The City of York required all permitted industrial users that discharge to self-monitor their wastewater.

Two industries were not sampled by the City of York in 2013 due to zero-discharge status. CP Industries did not discharge in 2013. RecOil, Inc.'s wastewater is hauled off-site. Sanitary waste samples were obtained from AMZ Manufacturing Corp., a zero-discharge metal finisher.

Table 7.1-2: Compliance Monitoring Summary, 2013

ID#	Industrial User	Site Address	IU Sample Results	City of York Sample Results	Total Samples	Required IU Samples	Annual Inspections	Compliance Inspections	Total Inspections
0088	American Ash Recycling	1072 Roosevelt Av, York PA 17404	13	14	27	4	1	0	1
0057	AMZ Corp.[1]	2206 Pennsylvania Av, York PA 17404	0	3	3	0	1	0	1
0047	Bickel's Snack Foods - College Av	1000-1050 W College Av, York PA 17405	14	15	29	4	1	0	1
0045	Bickel's Snack Foods - Zinns Quarry Rd	1120 Zinn's Quarry Rd, York PA 17405	16	15	31	4	1	0	1
0100	Cintas Corp.	1111 Smile Way, York PA 17404	4	14	18	4	1	0	1
0083	Columbia Gas of Pennsylvania, Inc.	201 Grant St, York PA 17401	4	9	13	4	1	0	1
0019	Coyne Textile Services	3500 W Market St, York PA 17404	22	14	36	4	1	0	1
0104	CP Industries[2]	785 W Philadelphia St, York PA 17404	0	0	0	0	1	1	2
0021	Dentsply International Inc.	470 W College Av, York PA 17404	12	12	24	4	1	0	1
0099	Dentsply Int'l. Professional Division	1301-1311 Smile Way, York PA 17404	4	8	12	4	1	0	1
0005	EQ Pennsylvania[3]	730 Vogelsong Rd, York PA 17404	76	12	88	12	1	0	1
0105	First Capital Powder Coating	215 Herman St, York, PA 17404	4	12	16	4	1	0	1
0006	Frito-Lay, Inc.	3553 Gillespie Dr, York PA 17404	50	51	101	4	1	0	1
0106	Gamlet, Inc.	1750 Toronita St, York PA 17402	5	12	17	4	1	2	3
0098	Hess Gas Station 38254	253 S Queen St, York PA 17403	12	4	16	4	1	0	1
0095	Johnson Controls Inc.- Grantley Campus	631 S Richland Av, York PA 17405	4	12	16	4	1	1	2
0041	New York Wire Company - Weaving Facility	441 E Market St, York PA 17405	4	12	16	4	1	0	1
0069	New York Wire Company - Wire Facility	829 Loucks Mill Rd, York PA 17405	4	9	13	4	1	0	1
0013	North Metal & Chemical Company	609 E King St, York PA 17405	5	5	10	4	1	0	1
0038	Osram Sylvania, Inc.	1128 Roosevelt Av, York PA 17404	12	12	24	4	1	0	1
0089	Protech Powder Coatings Inc.	939 Monocacy Rd, York PA 17404	4	8	12	4	1	0	1
0085	RecOil, Inc.[4]	280 North East St, York PA 17403	0	0	0	0	1	0	1
0018	Rutter's Dairy, Inc.	2100 N George St, York PA 17404	12	13	25	4	1	2	3
0092	Surtech Industries Inc	915 Borom Rd, York PA 17404	10	9	19	4	1	0	1
0039	Warrell Classic Company, The	231 West College Av, York PA 17401	8	23	31	8	1	0	1
0103	WC Manufacturing Co LLC	615 South Pine St, York PA 17403	4	8	12	4	1	0	1
0035	YGS Group, The	3650 W Market St, York PA 17404	4	8	12	4	1	0	1
0059	York County Solid Waste & Refuse Authority	2651 Blackbridge Rd, York PA 17406	8	12	20	4	1	0	1
0070	York Newspaper Company	1891 Loucks Rd, York PA 17408	11	12	23	4	1	0	1
0034	York Wallcoverings Inc. - Linden Av	750 Linden Av, York PA 17405	5	12	17	4	1	0	1
0084	York Wallcoverings Loucks Rd Facility	2075 Loucks Rd, York PA 17402	5	13	18	4	1	1	2
	Total		**336**	**363**	**699**	**124**	**31**	**7**	**38**

[1]-Industry is a zero-discharge non-significant categorical industrial user facility (not permitted) and is not required to sample. Sanitary wastewater samples were collected by staff.
[2]-Facility did not discharge.
[3]-Samples that were split by this industry and sent to two independent laboratories are counted as two samples.
[4]-This facility has a permit, but all wastewater is hauled off-site: therefore, no wastewater samples are required.

7.7. Section III, Significant Industrial User Compliance Attachments

There was one significant industrial user in significant noncompliance (SNC) during the 2013 reporting period. Table 7.1-3 summarizes the review period evaluation. There were no facilities in SNC for this reporting year that were also in SNC for the last reporting year. A copy of the 2013 public notice is located in Exhibit 7.1-1.

Table 7.1-3 Significant Industrial Users in SNC During 2013

Review Period	Industry	Criteria
1st review period October 2012 to March 2013	Bickels Snack Foods 1120 Zinns Quarry Road	Chronic BOD violations.
2nd review period January 2013 to June 2013	No industries in significant non-compliance.	
3rd review period April 2013 to September 2013	No industries in significant non-compliance.	
4th review period July 2013 to December 2013	No industries in significant non-compliance.	

There was one industrial user classified as a non-significant categorical industrial user (NSCIU) in 2013. The AMZ Manufacturing Corp. was reclassified as a Non-Significant Categorical Industrial User due to USEPA approval of pretreatment program streamlining changes. There were no designated NSCIUs previous to 2013.

There were no significant industrial users on written "informal" compliance schedules.

Two significant industrial users were under formal compliance schedules. Facilities were in compliance with their formal compliance schedules. CP Industries was issued a standing compliance order and notice on September 21, 2009, which included a revocation of their then industrial wastewater discharge permit. The order was effectively terminated with issuance of an industrial wastewater discharge permit with an effective date of May 8, 2013. Rutter's Dairy, Inc.'s permit was amended to include slug discharge control interim and final corrective action plans to address floor drains in a new fructose and sucrose storage room: compliance due dates were included in the permit amendment. Rutter's Dairy, Inc. met the interim corrective action plan deadlines, and the floor drains in the storage room were rerouted to the pretreatment system by the April 30, 2013 due date as a final corrective action. Details of the permit amendment were discussed in the 2012 Section IV, Enforcement Actions Attachments.

Proof of Publication
State of Pennsylvania

Ad # 0001433274-01

The York Dispatch/York Sunday News and York Daily Record is the name of the daily newspaper(s) of general circulation published continuously for more than six months at its principal place of business, 1891 Loucks Road, York, PA 17408.

The printed copy of the advertisement hereto attached is a true copy, exactly as printed and published, of an advertisement printed in the regular issues of the said **The York Dispatch/York Sunday News and York Daily Record** published on the

03/22/2014

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF YORK

Before me, a Notary Public, personally came Linda Smith who being duly sworn deposes and says that she is the Layout Supervisor of The York Dispatch/York Sunday News and York Daily Record and her personal knowledge of the publication of the advertisement mentioned in the foregoing statement as to the time, place and character of publications are true, and that the affiant is not interested in the subject matter of the above mentioned advertisement.

Sworn and subscribed to before me, on
this 22 day of March 2014

Notary Public

NOTARIAL SEAL
BRIAN C LAUGHLIN
Notary Public
WEST MANCHESTER TWP., YORK COUNTY
My Commission Expires Apr 1, 2016

The charge for the following publication of above mentioned advertisement and the expense of the affidavit.

Advertisement Cost	$224.40
Affidavit Fee	$5.00
Total Cost	$229.40

NOTICE OF INDUSTRIES IN SIGNIFICANT NON-COMPLIANCE

The City of York reports, in accordance with the United States Environmental Protection Agency regulation of 40 CFR 403.8(f)(2(viii), that the following industry was in Significant Non-Compliance (SNC) of environmental wastewater pretreatment requirements or pretreatment standards during the calendar year 2013. The City of York Wastewater Treatment Plant services North York Borough, West York Borough, the City of York, and portions of Manchester, Spring Garden, West Manchester and York Townships.

1st review period: October 1, 2012 to March 31, 2013.
Bickels Snack Foods, 1120 Zinns Quarry Road, York PA 17404 located in West Manchester Township for chronic biochemical oxygen demand (BOD) violations.

2nd review period: January 1, 2013 to June 30, 2013.
No industries in significant non-compliance.

3rd review period: April 1, 2013 to September 30, 2013.
No industries in significant non-compliance.

4th review period: July 1, 2013 to December 31, 2013.
No industries in significant non-compliance.

Andrew Jantzer
General Manager of Wastewater Facilities
City of York Wastewater Treatment Plant

7.8. Section IV, Enforcement Actions Attachments

Enforcement Actions Summary

A list of significant industrial users that received written notices of violation in 2013 and the number of violations issued to each user is provided in Table 7.1-4. Parameter violations are listed first, followed by other types of permit violations. Each non-compliance event is issued a separate notice of violation. For example, if a wastewater sample shows that both lead and copper exceeded permit limits, two separate notices of violation are sent to the industrial user, one for lead and one for copper. In 2013, 30 notices of violation were sent to industrial users (24 NOVs in 2012, 31 NOVs in 2011, 38 NOVs in 2010, 56 NOVs in 2009, 64 NOVs in 2008 and 110 NOVs in 2007).

Industries in SNC Not Subject to Additional Enforcement

Bickels Snack Foods, located at 1120 Zinns Quarry Rd, was in significant non-compliance for the first review period (October 2013 through March 2013) for chronic BOD violations. The facility produces potato chips, extruded snack foods, and specialty fried snack foods. MIPP staff met with the pretreatment contact regarding SNC status, wastewater pretreatment, and compliance. Permit requirements, sampling, and reporting were reviewed in detail, and biochemical oxygen demand and SNC status were discussed. During the meeting staff were informed that the contact was scheduled to meet with a wastewater contractor the following week regarding treatment improvement options. (The City of York Right-To-Know Officer subsequently received an information request regarding the industry from the consultant: MIPP staff provided the information). Staff requested a plan of action from the industry. Based on the meeting with the consultant, the facility made some immediate changes and submitted information for other more expensive changes to corporate for review (installation of storage/equalization tanks). The facility became compliant with no parameter violations in the nine months following.

Administrative Orders

No administrative orders were issued in 2013.

Standing Compliance Order and Notice, Terminated

As previously discussed, CP Industries was issued a standing compliance order and notice on September 21, 2009, which included a revocation of their then industrial wastewater discharge permit. The order was effectively terminated on May 7, 2013 with issuance of an industrial wastewater discharge permit with an effective date of May 8, 2013.

Permit Amendment for Potential Slug Discharge Control (Requirements Met)

Rutter's Dairy, Inc.'s was issued an amended permit December 21, 2012 to include slug discharge control interim and final corrective action plans to address floor drains in a new fructose and sucrose storage room: compliance due dates were included in the permit amendment. No spill occurred at the facility: the slug discharge control action plans were required to prevent such an occurrence. Interim corrective actions included instituting temporary measures to prevent slug discharges to the sanitary sewer through physical and procedural actions and preventing sweetener material spillage. Rutter's Dairy, Inc. met the interim corrective action written plan and implementation deadline of December 28, 2012. Final corrective actions addressed permanently redirecting potential spill and wash waters from the sanitary sewer lateral to the pretreatment system, and permanently capping/rendering inoperable the sanitary sewer lateral drains. The facility submitted a written final corrective action plan by the January 31, 2013. Final corrective actions were completed on April 4, 2013, which was before the deadline of April 30, 2013.

Penalties Assessed and Collected, Criminal Citations

No penalties were assessed or collected and no criminal citations were filed in 2013.

Table 7.1-4: Enforcement Actions Summary, 2013

		Parameter Violations							Other Permit Violations		Enforcement Actions			
ID#	Industrial User	Biochemical Oxygen Demand	Copper, total	Lead, total	Molybdenum, total	Oil & Grease (Hexane)	pH	Zinc, total	Reporting	Other	NOVs Issued	Citations Issued	Orders Issued	Penalties Collected
0088	American Ash Recycling						1				1			
0047	Bickel's Snack Foods - W College Av								1	1	1			
0045	Bickel's Snack Foods - Zinns Quarry Rd	2				1			1	1	5			
0100	Cintas Corp.					1					1			
0019	Coyne Textile Services			4		1					5			
0104	CP Industries								1		1			
0005	EQ Pennsylvania		1		1						2			
0105	First Capital Powder Coating								1		1			
0006	Frito-Lay, Inc.	8									8			
0041	New York Wire Company - Weaving Facility								1		1			
0092	Surtech Industries, Inc.							1			1			
0035	YGS Group, The							1			1			
0084	York Wallcoverings - Loucks Rd Facility		1								1			
	Total	10	2	4	1	3	1	2	5	2	30	0	0	$0.00

N.B. - There were no violations for the following local limits: arsenic, cadmium, chromium, cyanide, mercury, nickel, selenium, silver, temperature, and flashpoint.
Each parameter violation is issued a separate notice of violation.
Some NOVs may not have been enforced until 2014.

7.9. Part B: Pretreatment Developments

7.9.1. Summary of POTW Operations

Interference, Upset, Permit Violations

There were no upsets or interferences attributable to industrial causes at the City of York Wastewater Treatment Plant during 2013. This statement is qualified by the following discussion - it was first speculated that a substance may have entered the treatment plant and caused the upset - however, further investigation determined that it was what the treatment plant was *not* receiving that caused the issue (reduced biochemical oxygen demand loadings).

Permit excursions occurred in January through March for the monthly average ammonia-nitrogen concentrations, and in February for the average monthly ammonia-nitrogen pounds. The treatment plant experienced a nitrifier upset causing a diminished ability for removing ammonia. Early speculation indicated that an inhibitory compound may have been received from the collection system. However, one process treatment train was initially affected while the other was not, further complicating trouble-shooting of the event. A laboratory test of interference compounds was negative, and investigation of possible commercial or industrial sources yielded no information. Internal plant process return flows were also evaluated.

The treatment plant process was upgraded for enhanced nitrogen and phosphorus removal to comply with more stringent Chesapeake Bay nutrient reduction requirements: the new biologic nutrient reduction (BNR) treatment system went on-line in the fall of 2012, a few months before the nitrifier upset. The new Kruger treatment process is much more sensitive to process control factors and influent changes. Full treatment process data were evaluated after initial correspondence was submitted to PADEP (located in Appendix K). An examination of December 2012 data shows that ammonia effluent results had some higher than typical values: it is possible that precursors to the nitrifier upset occurred in December 2012. Of note is that additional subsequent treatment plant performance issues occurred during 2013, which did not result in permit excursions. Due to the fluctuation in plant performance MIPP staff examined industrial production data and were able to correlate decreases in ammonia and phosphorus removal with production shut-downs in a particular food-producing industry.

Therefore, it appears that the cause of imbalances at the plant, including the nitrifier upset during the cold weather, were caused by what the new Kruger plant system was *not* receiving from the collection system – namely BOD and in particular soluble BOD - rather than receiving an inhibitory compound. During industrial food production shut-downs, the total BOD loading at the plant decreases an average of 23% and, critically, soluble BOD loading decreases an average of 68%. Test trials of feeding soluble carbon sources (methanol, glycerin) to plant treatment trains just prior to the expected denitrification zone during industrial food production shut-downs have shown preservation of treatment processes. MIPP staff continue to receive weekly production schedule updates: information is shared with treatment plant staff so process changes and/or soluble carbon source dosing rates and feed times can be implemented. The treatment plant has included a more permanent carbon source feed system evaluation in its capital improvements plan. Many advance BNR systems find they require such additional readily available food sources to meet performance/permit criteria after initial installation.

The City of York continues to produce a high quality effluent. Biosolids are land applied for beneficial reuse.

The York City Wastewater Treatment Plant met all permit requirements in 2013 with the following exceptions. The January, February and March 2013 monthly average ammonia concentrations and the February 2013 monthly average ammonia loading were exceeded due to loss of nitrifying bacteria (discussed above). Variously during a October 10-12, 2013 storm event the treatment plant discharged

partially treated sewage (non-disinfected) as some treatment plant tanks were overtopped due to high flows caused by a stalled low pressure system that dropped over nine inches of rain during a 32-hour period. Treatment plant influent on October 11, 2013 was 68.154 mgd. The final clarifier scum box in Train 3 overflowed causing non-disinfected flow to enter Lightners Run: test results indicate that the non-disinfected overflow did not have an adverse impact on the stream in terms of fecal coliform. The Train 2 aeration tank influent flumes were overtopped and the Train 2 aeration tank effluent overtopped a portion of the Train 2 aeration tanks. These flows were captured and combined with stormwater flow, and were pumped to the Codorus Creek *via* outfall 001 after chlorination with sodium hypochlorite. During the event there was a two-hour delay between the start of the Train 2 process overflows and the time disinfection was started. The maximum average weekly total suspended solids (TSS) limit was exceeded in October 2013 due to this storm event. The reader is referred to Appendix K for more detailed information regarding the October 2013 storm event.

POTW Influent, Effluent and Biosolids Priority Pollutant Data, and Local Limit Data

The USEPA sets influent, effluent and biosolids goals for certain pollutants based on the most recently approved local limits evaluation. In general, these goals are based on the maximum amount of pollutants the treatment plant can receive without harming treatment plant processes, exceeding the water quality criteria of the Codorus Creek (the receiving stream), or exceeding the USEPA exceptional quality standards for land application of biosolids. The data associated with these goals are summarized in Table 7.1-5 through Table 7.1-77. Influent, effluent, and biosolids analytical results are included in Appendix J. Monthly average influent concentrations are provided for BOD, ammonia-nitrogen, phosphorus, and total suspended solids. The City of York Wastewater Treatment Plant met influent and biosolids goals in 2013. One PCB influent sample had an insufficient minimum detection limit. EPA Method 608, which can obtain a minimum detection limit of 0.000065 mg/l, was used; however, due to sample matrix interference the laboratory used a sample dilution, which in turn resulted in an increased minimum detection limit as per method protocol. Technical literature regarding Method 608 PCB analysis interferences focuses on laboratory practices, glassware, and meticulous clean-up procedures to eliminate or decrease interference, with introduction of interferences possible from everything from reagents to glassware to plastic. The literature examined did not mention constituents in the wastewater itself as a possible interference source that could be corrected. An alternate laboratory will be contacted regarding their typical consistent minimum detection limits for this analysis.

Table 7.1-5: Priority Pollutant Influent Goals Data Summary, 2013*

York City Wastewater Treatment Plant

Parameter Code	Influent Pollutant	Goal	Frequency Per Year	2/6/2013	4/24/2013	5/15/2013	8/21/2013	11/21/2013	1/2012	2/2012	3/2012	4/2012
34506	1-1-1-Trichloroethane	Monitor	1			<0.0010						
01002	Arsenic – Total	0.017	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
34030	Benzene	Monitor	1			<0.0010						
39100	Bis (2-ethylhexyl) Phthalate	0.5058	1	0.0096	0.0193	0.0194	0.107	0.0185				
00310	BOD- 5-day	699.772	4						238	193	195	268
01027	Cadmium – Total	0.0041	4	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010				
32106	Chloroform	Monitor	1			0.0026						
01034	Chromium – Total	0.1616	4	0.0027	0.0023	0.0031	0.0025	0.0026				
01042	Copper – Total	0.183	4	0.043	0.063	0.050	0.052	0.061				
00720	Cyanide – Total	0.057	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
34371	Ethylbenzene	Monitor	1			<0.0010						
01051	Lead – Total	0.0407	4	0.0072	0.0086	0.011	0.0087	0.014				
71900	Mercury – Total	0.0014	4	0.00035	0.00046	<0.00050	<0.00020	0.00034				
34423	Methylene Chloride	Monitor	1			<0.0010						
01062	Molybdenum – Total	0.04	4	0.027	0.017		0.037	0.021				
01067	Nickel – Total	0.1059	4	0.0071	0.0039	<0.010	0.0033	0.0037				
00610	Nitrogen – Ammonia	60.3248	0						17.3	17.4	15.7	18.1
00630	Nitrogen – Total	72.5	0									
04166	PCB- Total	0.0005	1			<0.0024						
34694	Phenol – Single Compound	Monitor	1			<0.0075						
00665	Phosphorus – Total	19.2959	0						4.1	3.8	3.8	4.7
01147	Selenium – Total	0.028	4	<0.0020	<0.0020	<0.010	<0.0020	<0.0020				
01077	Silver - Total	0.1374	4	<0.0010	<0.0010	<0.0020	<0.0010	0.0013				
00530	Solids – Total Suspended	723.898	0						223	199	226	270
34475	Tetrachloroethylene	Monitor	1			<0.0010						
34010	Toluene	Monitor	1			0.0072						
39180	Trichloroethylene	Monitor	1			0.0015						
01092	Zinc – Total	0.5234	4	0.084	0.13	0.14	0.12	0.14				

Notes: Samples are flow proportionate 24-hour composite samples. Results are reported in mg/l.

Non-detectable results are reported as "<" less than the test detection limit. Bolded results indicate goal exceedance, or test insufficient minimum detection limit.

Dates represented by month and year only (i.e., '3/2012') reflect monthly averages as per EPA annual report guidance.

* Table continued on next page.

Table 7.1-5 continued: Priority Pollutant Influent Goals Data Summary, 2013

York City Wastewater Treatment Plant

Parameter Code	Influent Pollutant	Goal	Frequency Per Year	5/2012	6/2012	7/2012	8/2012	9/2012	10/2012	11/2012	12/2012
34506	1-1-1-Trichloroethane	Monitor	1								
01002	Arsenic – Total	0.017	4								
34030	Benzene	Monitor	1								
39100	Bis (2-ethylhexyl) Phthalate	0.5058	1								
00310	BOD- 5-day	699.772	4	275	246	221	230	285	215	259	206
01027	Cadmium – Total	0.0041	4								
32106	Chloroform	Monitor	1								
01034	Chromium – Total	0.1616	4								
01042	Copper – Total	0.183	4								
00720	Cyanide – Total	0.057	4								
34371	Ethylbenzene	Monitor	1								
01051	Lead – Total	0.0407	4								
71900	Mercury – Total	0.0014	4								
34423	Methylene Chloride	Monitor	1								
01062	Molybdenum – Total	0.04	4								
01067	Nickel – Total	0.1059	4								
00610	Nitrogen – Ammonia	60.3248	0	18.9	16.2	16.8	17.7	23.3	16.2	20.1	14.0
00630	Nitrogen – Total	72.5	0								
04166	PCB- Total	0.0005	1								
34694	Phenol – Single Compound	Monitor	1								
00665	Phosphorus – Total	19.2959	0	4.8	4.4	4.4	4.2	5	3.8	4.7	3.7
01147	Selenium – Total	0.028	4								
01077	Silver - Total	0.1374	4								
00530	Solids – Total Suspended	723.898	0	254	255	228	242	256	237	264	220
34475	Tetrachloroethylene	Monitor	1								
34010	Toluene	Monitor	1								
39180	Trichloroethylene	Monitor	1								
01092	Zinc – Total	0.5234	4								

Notes: Samples are flow proportionate 24-hour composite samples. Results are reported in mg/l.
Non-detectable results are reported as "<" less than the test detection limit. Bolded results indicate goal exceedance, or test insufficient minimum detection limit.
Dates represented by month and year only (i.e., '3/2012') reflect monthly averages as per EPA annual report guidance.

Table 7.1-6: Priority Pollutant Effluent Goals Data Summary, 2013
York City Wastewater Treatment Plant

Parameter Code	Effluent Pollutant	Goal	Frequency By Year	2/6/2013	4/24/2013	8/21/2013	11/21/2013
34506	1-1-1-Trichloroethane	No Goal	0				
01002	Arsenic – Total	0.034	4	<0.0050	<0.0050	<0.0050	<0.0050
34030	Benzene	No Goal	0				
39100	Bis (2-ethylhexyl) Phthalate	0.0339	0				
00310	BOD- 5-day	No Goal	0				
01027	Cadmium – Total	0.0014	4	<0.0010	<0.0010	<0.0010	<0.0010
32106	Chloroform	No Goal	0				
01034	Chromium – Total	0.034	4	0.0019	<0.0010	<0.0010	<0.0010
01042	Copper – Total	0.0497	4	<0.0050	<0.0050	<0.0050	<0.0050
00720	Cyanide – Total	0.0177	4	<0.0050	<0.0050	<0.0050	<0.0050
34371	Ethylbenzene	No Goal	0				
01051	Lead – Total	0.021	4	<0.0030	<0.0030	<0.0030	<0.0030
71900	Mercury – Total	0.0002	4	<0.00020	<0.00020	<0.00020	<0.00020
34423	Methylene Chloride	No Goal	0				
01062	Molybdenum – Total	Monitor	4	0.028	0.025	0.028	0.028
01067	Nickel – Total	0.2764	4	0.0050	<0.0025	<0.0025	<0.0025
00610	Nitrogen – Ammonia	1.7	0				
00630	Nitrogen – Total	14.5	0				
04166	PCB- Total	0.0012	0				
34694	Phenol – Single Compound	No Goal	0				
00665	Phosphorus – Total	1.9	0				
01147	Selenium – Total	0.017	4	<0.0020	<0.0020	<0.0020	<0.0020
01077	Silver - Total	0.0317	4	<0.0010	<0.0010	<0.0010	<0.0010
00530	Solids – Total Suspended	No Goal	0				
34475	Tetrachloroethylene	No Goal	0				
34010	Toluene	No Goal	0				
39180	Trichloroethylene	No Goal	0				
01092	Zinc – Total	0.6353	4	0.025	0.036	0.029	0.044

Notes: Samples are flow proportionate 24-hour composite samples. Results are reported in mg/l.
Non-detectable results are reported as "<" less than the test detection limit. Bolded results indicate goal exceedance, or test insufficient minimum detection limit.

Table 7.1-7: Priority Pollutant Biosolids Goal Data Summary, 2013
York City Wastewater Treatment Plant

Parameter Code	Effluent Pollutant	Goal	Frequency By Year	1/9/13	2/7/13	3/1/13	4/24/13	5/1/13	5/15/13	7/2/13	8/20/13	9/4/13	11/5/13	11/19/13
34506	1-1-1-Trichloroethane	Monitor	1						<0.616					
01002	Arsenic – Total	41	4	2.35	<8.5	2.91	<10.4	2.52	<10.7	3.07	<9.5	2.95	3.64	<10.2
34030	Benzene	Monitor	1						<0.616					
39100	Bis (2-ethylhexyl) Phthalate	Monitor	1		23.700		26.700		14.300		15.100			13.400
00310	BOD- 5-day	No Goal	0											
01027	Cadmium – Total	39	4	1.93	2.3	2.39	2.8	2.66	2.9	3.08	<2.4	2.45	2.97	3.1
32106	Chloroform	Monitor	1						<0.616					
01034	Chromium – Total	Monitor	4	19.2	18.8	18.2	26.7	23.8	21.1	19.7	<4.8	27.1	34.1	31.8
01042	Copper – Total	1500	4	380.7	337	389.7	482	493.4	459	466.9	168	441.0	526.5	485
00720	Cyanide – Total	Monitor	4	<1	<1.3	<1	<1.4	<1	<1.5	<1	<1.2	<1	<1	2.1
34371	Ethylbenzene	Monitor	1						<0.616					
01051	Lead – Total	300	4	57.3	49.8	54.4	64.8	62.5	55.2	76.5	18.4	85.5	101.4	91.4
71900	Mercury – Total	17	4	0.82	1.2	1.48	0.80	1.37	1.5	0.99	1.4	1.21	2.06	1.4
34423	Methylene Chloride	Monitor	1						<0.616					
01062	Molybdenum – Total	75	4	19.33	19.3	20.32	26.9	24.93		25.46	<9.5	20.76	27.17	28.1
01067	Nickel – Total	420	4	22.9	21.9	19.6	26.4	24.4	26.1	20.3	<9.5	19.8	24.3	25.2
00610	Nitrogen – Ammonia	No Goal	0											
00630	Nitrogen – Total	No Goal	0											
04166	PCB- Total	4	1	<0.15		<0.37		<0.44	<0.20	<0.42		<0.61	<0.39	
34694	Phenol – Single Compound	Monitor	1		<13.700				<16.100					
00665	Phosphorus – Total	No Goal	0											
01147	Selenium – Total	100	4	5.47	<21.3	6.37	<26.1	7.71	<26.7	8.1	<23.8	4.71	7.41	<25.5
01077	Silver - Total	Monitor	4		8.6		12.6		11.8		<2.4			8.4
00530	Solids – Total Suspended	No Goal	0											
34475	Tetrachloroethylene	Monitor	1						<0.616					
34010	Toluene	Monitor	1						<0.616					
39180	Trichloroethylene	Monitor	1						<0.616					
01092	Zinc – Total	2800	4	578.5	523	567.3	653	654.8	603	715.8	267	739.2	900.2	858

Notes: Data reflect testing of composited centrifuge cake. Data reflect dry weight in mg/kg.
Non-detectable results are reported as "<" less than the test detection limit. Bolded results indicate goal exceedance, or test insufficient minimum detection limit.

7.9.2. Trucked or Hauled Wastewater

The City of York does not accept trucked or hauled industrial or non-industrial wastewater at the treatment plant or other places within the collection system.

Significant industrial users in the wastewater service area that hauled wastewater in 2013 to somewhere other than the City of York wastewater treatment plant are: AMZ Manufacturing, CP Industries, Johnson Controls, New York Wire-Wire Facility, and RecOil, Inc.

AMZ Corporation is a zero-discharge metal finisher (40 CFR 433) that generates wastewater from its plating operations. Wastewater is usually evaporated on-site; however, during times of increased production excess wastewater was hauled off-site by EQ Pennsylvania.

CP Industries performs two distinct operations: liquid soap and detergent manufacturing (40 CFR 417) and road salt preparation and packaging. The facility submitted a self-monitoring report stating that molasses wastewater (from an old basement tank in use when the property was a feed mill) and dye wastewater in totes was hauled off-site by MAT Transportation, Inc. in 2013.

Johnson Controls, Inc. is permitted to discharge wastewater to the collection system and usually does not have wastewater hauled off-site. Most of their wastewater is generated from chiller testing and vessel testing. Propylene glycol wastewaters and dilute ethylene glycol solution were hauled off-site by Environmental Recovery Corp.

New York Wire-Wire Facility is a metal finisher (40 CFR 433). Steel wire is copper plated before final drawing. Process wastewater is discharged to the sanitary sewer system. However, oily wastewater from floor washing is directed to an outdoor storage tank. The tank wastewater was hauled by Clean Venture, Inc./CycleChem, Inc.

RecOil, Inc. is a zero-discharge centralized waste treatment facility for oils treatment and recovery (40 CFR 437 subpart B). Oily waters were received on-site and were hauled off-site Spirit Services.

Increasingly, brine wastes from oil and gas drilling are becoming more important in Pennsylvania. EQ Pennsylvania receives hauled wastes, which it then de-lists and de-characterizes. EQ Pennsylvania did not receive any brine wastes at its York facility in 2013. Therefore, no brine wastes were discharged to the sewer system, and no brine wastes were re-manifested out to another facility for disposal.

7.9.3. Pretreatment Program Changes

Staffing in 2013 remained unchanged from 2012. Staffing in 2013 included one Pretreatment Permit and Compliance Manager and one Pretreatment Compliance Officer. The General Manager of Wastewater Facilities supervises pretreatment staff.

The City of York continues to use Linko CTS to manage its industrial information. The software is networked between the pretreatment program and the wastewater treatment plant laboratory. The City of York continues to update its Standard Operating Procedures (SOP) and policies as the need arises.

The City of York Wastewater Treatment Plant received its renewed National Pollution Discharge Elimination System (NPDES) permit, which became effective February 1, 2008. In accordance with the permit, the local limits sampling plan was submitted on April 18, 2008, and was approved by USEPA on May 1, 2008. The local limits reevaluation document was submitted to USEPA January 29, 2009. Multiple communications between the City of York and the USEPA occurred, and on April 21, 2011 USEPA accepted the proposed local limits, with the exception of BOD, and on October 18, 2011 accepted

retaining the existing BOD limit. A public meeting was held June 22, 2011, and passage of the amended local limits by the Council of the City of York occurred on October 4, 2011 within the six-month timeframe allowed under the NPDES permit. All municipalities adopted the new local limits in late 2011 through early 2012: the last ordinance was received in July 2012. The City of York forwarded proof of ordinance amendments to the USEPA on July 23, 2012. USEPA approved the local limits in correspondence dated November 15, 2012. All industrial wastewater discharge permits were amended by page replacement to reflect the new local limits. For categorical industrial users whose permit limits were derived using the combined wastestream formula, parameter values were compared to ensure the more stringent limit was applied in the permits.

The City of York wastewater treatment plant's NPDES discharge permit expired January 13, 2013: the new permit has not been issued as of late-March 2014. The local limits sampling plan is required to be submitted to EPA within three months of permit issuance.

On December 20, 2013 USEPA approved the streamlining regulations induced modifications to the enforcement response plan, which was accepted by USEPA on October 7, 2010.

7.9.4. Miscellaneous Developments

Activities

In 2013 MIPP engaged in the following activities:

- Attended multiple pretreatment program and MS4 trainings.
- Continued to search for other significant industrial users.
- Evaluated industrial-sourced BOD loading decreases and correlated its effect on ammonia and phosphorus removal at the treatment plant
- Assisted with MS4 field mapping, illicit discharge detection and elimination, regional Chesapeake Bay Pollutant Reduction Plan outfall water sampling, and ordinance revisions and public input process, and co-presented at regional stormwater workshops.
- Completed one of three Sacramento State Office of Water Programs training stormwater best management practices courses (of which there are three).
- One staff member completed, and the other enrolled in, the Sacramento State Office of Water Programs Operation of Wastewater Treatment Plants, Volume 1 course.

On July 23-24, 2013 USEPA conducted a field audit inspection to assess the procedures and techniques used by staff during sample collection. The inspector recommended that cyanide samples should be collected using a cup and pole instead of the sampler peristaltic pump: this recommendation was implemented immediately after the inspection exit discussion. In addition, residual chlorine has not been discovered in the grab samples from dischargers that are sampled by batch using the Hach AquaCheck colorimetric test for total chlorine and free chlorine. The colorimetric test will be used for the remaining non-batch discharge industries to determine if ascorbic acid is required for dechlorination.

In 2014 MIPP intends to:

- Update Linko software and computer systems once the wastewater treatment plant server platform is updated.
- Attend pretreatment program and MS4 training.
- Continue to search for other significant industrial users.
- Assist with the above mentioned MS4 activities, and co-present at regional stormwater workshops
- Enroll one staff member in the Sacramento State Office of Water Programs Operation of Wastewater Treatment Plants, Volume 2 course.

Environmental Investigations
The pretreatment program is relied upon to provide environmental investigation assistance. Typically, a citizen complaint is lodged either directly or through PADEP to investigate a release to the Codorus Creek, storm sewer system, or public roadway. It is appropriate that pretreatment staff, which are familiar with industrial sources, sanitary sewer system infrastructure and general environmental knowledge, respond to these situations. MIPP staff has received some training to provide reliable and safe assistance to area fire and emergency response units as well as state agencies.

Municipal Separate Storm Sewer System (MS4) NPDES Permit
Staff was brought into the City of York's MS4 NPDES program during the 2010 USEPA MS4 program audit, and from that point forward has been involved in some of the required MS4 activities. The MIPP Pretreatment Permit and Compliance Manger sits on the MS4 task force. MIPP staff are responsible for: documenting all illicit discharge events in the City of York for annual reporting to the PADEP and USEPA; creating quarterly illicit discharge reports; developing and maintaining an illicit discharge event database; assisting in illicit discharge investigation as needed; addressing illicit discharge complaints submitted by citizens to the MS4 "hotline' number or website link; assisting with dry-weather storm system sampling and outfall inspection; and, coordinating with other departments to ensure all illicit discharge events are reported.

In 2013 there were thirty-seven (37) illicit discharge investigations: of those, six (6) were not illicit discharges as defined by the City of York MS4 permit, and two (2) were located in other municipalities. Although the City of York NPDES permit covers only the municipal boundaries, MIPP responds to and assists in events throughout the entire sewershed. Pollution events and watercourses don't heed municipal boundaries: tracing discharge sources may lead to source locations outside the City of York. In 2013 MIPP staff also attended MS4 related training sessions and co-presented at MS4 workshops.

In 2013 staff conducted dry-weather stormwater sampling for the Codorus Creek mainstem and assisted with the stormwater outfall mapping and field inventory.

Industrial Property Records
In 2010 MIPP instituted a permanent property address file for all properties researched in the sanitary sewer system. The files house important past and current site information such as site plans, manufacturing uses, chemical storage, photographs, state and federal environmental notifications, and results from MIPP inspections and investigations. All information from the systematic search of industrial users, whether the users were found to be significant or not, is added to the permanent property address. There are three sections in the address file system: files for each property located in the sanitary sewer system for which there is current or historic information, by address; properties not currently served by any the treatment plant system, but which will come to the City of York wastewater treatment plant in the future given logical extensions of the sanitary sewer system; and, a file for properties researched and found to be outside the current and future City of York treatment plant service area, grouped by municipality and then address The address file is permanently housed in the MIPP office as an "active" information resource. Historic information is being retrieved from the last set of MIPP archived files and new information will be continually added.

Appendix J
York City WWTP NPDES Quarterly Local Limits Analyses, Annual Priority Pollutant Scan, Semimonthly Sludge Results

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

February 25, 2013

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	**PP SCANS AND LOCAL LIMITS -**	Workorder:	**1011520**
Purchase Order:	**13-100389/13-100392**	Workorder ID:	**Centrifuge Cake 02/07/13**

Dear Mr. Concino,

Enclosed are the analytical results for samples received by the laboratory on Monday, February 11, 2013.

The ALS Environmental laboratory in Middletown, Pennsylvania (formerly Analytical Laboratory Services, Inc.) is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Shannon Butler (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 1011520 Centrifuge Cake 02/07/13 Discard Date: 03/11/2013

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
1011520001	Centrifuge Cake	Solid	2/7/13 15:00	2/11/13 09:49	Customer

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 1011520 Centrifuge Cake 02/07/13

Lab ID: **1011520001** Date Collected: 2/7/2013 15:00 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 2/11/2013 09:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
Acenaphthene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Acenaphthylene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Anthracene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Benzidine	ND		ug/kg	27400	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Benzo(a)anthracene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Benzo(a)pyrene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Benzo(b)fluoranthene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Benzo(g,h,i)perylene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Benzo(k)fluoranthene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
4-Bromophenyl-phenylether	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Butylbenzylphthalate	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
4-Chloro-3-methylphenol	ND		ug/kg	13700	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
bis(2-Chloroethoxy)methane	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
bis(2-Chloroethyl)ether	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
bis(2-Chloroisopropyl)ether	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2-Chloronaphthalene	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2-Chlorophenol	ND		ug/kg	13700	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
4-Chlorophenyl-phenylether	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Chrysene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Di-n-Butylphthalate	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Di-n-Octylphthalate	ND		ug/kg	13700	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Dibenzo(a,h)anthracene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
1,2-Dichlorobenzene	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
1,3-Dichlorobenzene	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
1,4-Dichlorobenzene	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
3,3-Dichlorobenzidine	ND		ug/kg	7620	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2,4-Dichlorophenol	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Diethylphthalate	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2,4-Dimethylphenol	ND		ug/kg	13700	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Dimethylphthalate	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2,4-Dinitrophenol	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2,4-Dinitrotoluene	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2,6-Dinitrotoluene	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
1,2-Diphenylhydrazine	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
bis(2-Ethylhexyl)phthalate	23700		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Fluoranthene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Fluorene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Hexachlorobenzene	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Hexachlorobutadiene	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Hexachlorocyclopentadiene	ND		ug/kg	13700	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B

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ANALYTICAL RESULTS

Workorder: 1011520 Centrifuge Cake 02/07/13

Lab ID: **1011520001** Date Collected: 2/7/2013 15:00 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 2/11/2013 09:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Hexachloroethane	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Indeno(1,2,3-cd)pyrene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Isophorone	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2-Methyl-4,6-dinitrophenol	ND		ug/kg	13700	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Naphthalene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Nitrobenzene	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2-Nitrophenol	ND		ug/kg	13700	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
4-Nitrophenol	ND		ug/kg	13700	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
N-Nitrosodimethylamine	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
N-Nitroso-di-n-propylamine	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
N-Nitrosodiphenylamine	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Pentachlorophenol	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Phenanthrene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Phenol	ND		ug/kg	13700	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Pyrene	ND		ug/kg	2540	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
1,2,4-Trichlorobenzene	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2,4,6-Trichlorophenol	ND		ug/kg	5080	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	82		%	37-123	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2-Fluorobiphenyl (S)	88.2		%	45-105	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
2-Fluorophenol (S)	82.8		%	35-104	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Nitrobenzene-d5 (S)	82.4		%	41-110	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Phenol-d5 (S)	87.6		%	40-100	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
Terphenyl-d14 (S)	88.8		%	38-113	SW846 8270D	2/13/13	RMP	2/13/13 22:44	DHF	B
WET CHEMISTRY										
Cyanide, Total	ND	1	mg/kg	1.3	SW846 9012B	2/12/13	SYB	2/13/13 13:26	JEP	A1
Hexane Extractable Material	34400		mg/kg	1010	SW846 9071B			2/25/13 02:30	MPP	A
Moisture	80.4		%	0.1	SM20-2540 G			2/14/13 17:30	CF	A
Silica Gel Treated HEM	132000		mg/kg	1010	SW846 9071B			2/25/13 02:30	MPP	A
Total Solids	19.6		%	0.1	SM20-2540 G			2/14/13 17:30	CF	A
METALS										
Arsenic, Total	ND		mg/kg	8.5	SW846 6010C	2/12/13	KMK	2/15/13 12:23	SRT	B1
Cadmium, Total	2.3		mg/kg	2.1	SW846 6010C	2/12/13	KMK	2/15/13 12:23	SRT	B1
Chromium, Total	18.8		mg/kg	4.3	SW846 6010C	2/12/13	KMK	2/15/13 12:23	SRT	B1
Copper, Total	337		mg/kg	8.5	SW846 6010C	2/12/13	KMK	2/15/13 12:23	SRT	B1
Lead, Total	49.8		mg/kg	8.5	SW846 6010C	2/12/13	KMK	2/15/13 12:23	SRT	B1
Mercury, Total	1.2		mg/kg	0.25	SW846 7471B	2/22/13	MNP	2/22/13 11:30	MNP	A2
Molybdenum, Total	19.3		mg/kg	8.5	SW846 6010C	2/12/13	KMK	2/15/13 12:23	SRT	B1

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ANALYTICAL RESULTS

Workorder: 1011520 Centrifuge Cake 02/07/13

Lab ID: **1011520001** Date Collected: 2/7/2013 15:00 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 2/11/2013 09:49

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Nickel, Total	21.9		mg/kg	8.5	SW846 6010C	2/12/13	KMK	2/15/13 12:23	SRT	B1
Selenium, Total	ND		mg/kg	21.3	SW846 6010C	2/12/13	KMK	2/15/13 12:23	SRT	B1
Silver, Total	8.6		mg/kg	2.1	SW846 6010C	2/12/13	KMK	2/15/13 12:23	SRT	B1
Zinc, Total	523		mg/kg	8.5	SW846 6010C	2/12/13	KMK	2/15/13 12:23	SRT	B1

Sample Comments:

Anna G Milliken
Technical Manager

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 1011520 Centrifuge Cake 02/07/13

PARAMETER QUALIFIERS\FLAGS

[1] The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/ SAMPLER INSTRUCTIONS ON THE BACK

Page 1 of 1
Courier:
Tracking #:

1011520

Co. Name: YORK CITY WWTP
Contact (Report to): JOSEPH CONCINO **Phone:** 8452794
Address: 1701 BLACK BRIDGE ROAD YORK PA 17402

Bill to (if different than Report to):
PO#: 13-P00389 13-100392 235673
ALS Quote #: 206063

Project Name/#:

TAT: [X] Normal-Standard TAT is 10 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? [X] Y JCONCINO@YORKCITY.ORG
Fax? [ ] Y No.:

							Analysis 1	Analysis 2	Analysis 3	Analysis 4	Analysis 5
***Container Type							GL	GL	GL	GL	GL
***Container Size							1L	1L	1L	1L	1L
***Preservative							—	—	—	—	—
ANALYSES/METHOD REQUESTED							TOTAL As, Cd, Cu, Mn, Pb Zn, Ag, Cr, Ni, Se, Hg	CYANIDE	TOTAL SOLIDS	OIL + GREASE 9071B	BIS-2 ETHYL HEXYL PHTHALATE
Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix		Enter Number of Containers Per Analysis				
1 CENTRIFUGE CAKE	1 BOTTLE	2/7/13	0900-1300	C	SL		X	X	X	X	X
2											
3											
4											
5											
6											
7											
8											

Receipt Information (completed by Sample Receiving)
Performed by: Initials DQ
Cooler Temp: 6°
Therm. ID: 58717
No. of Coolers:
Notes:

Circle appropriate Y or N.
Correct containers? (Y) N
Correct sample volume? (Y) N
Correct preservation? (Y) N
Headspace/Volatiles? Y N (crossed out)
Custody seals Present? Y (N)
(If present) Seals intact? Y N (crossed out)
Received on ice? (Y) N
COC/Labels complete/accurate? (Y) N
Container in good condition? (Y) N

SAMPLED BY (Please Print):
LOGGED BY(signature): [signature] DATE: 2-11-13 TIME: 1130
REVIEWED BY(signature): DATE: TIME:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature] YORK CITY	2/11/13	0949	2	[signature] ALS	2/11/13	0949
3	[signature] ALS	2/11/13		4	[signature]	2-11-13	1740
5	SRB	2-11-13	2000	6	[signature]	2/11/13	2000
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)
SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ]
State Samples Collected In? MD [ ] NJ [ ] NY [ ] PA [ ]
EDDs Required? [ ] If yes, format type: Other
DOD Criteria Required?

ALS FIELD SERVICES
[ ] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

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February 19, 2013

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	**2011-ADDITIONAL TESTING**	Workorder:	**1011045**
Purchase Order:	**13-100392**	Workorder ID:	**Add'l Local Limits 02/07/13**

Dear Mr. Concino,

Enclosed are the analytical results for samples received by the laboratory on Thursday, February 07, 2013.

The ALS Environmental laboratory in Middletown, Pennsylvania (formerly Analytical Laboratory Services, Inc.) is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Shannon Butler (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental

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SAMPLE SUMMARY

Workorder: 1011045 Add'l Local Limits 02/07/13 Discard Date: 03/05/2013

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
1011045001	Raw Influent	Waste Water	2/6/13 00:00	2/7/13 14:10	Customer
1011045002	GBT Thick Sludge	Solid	2/6/13 00:00	2/7/13 14:10	Customer
1011045003	T2 Mixed Liquor	Waste Water	2/6/13 00:00	2/7/13 14:10	Customer

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are performed in the laboratory and are therefore analyzed out of hold time.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
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ANALYTICAL RESULTS

Workorder: 1011045 Add'l Local Limits 02/07/13

Lab ID: **1011045001** Date Collected: 2/6/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent** Date Received: 2/7/2013 14:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
bis(2-Ethylhexyl)phthalate	9.6		ug/L	2.9	EPA 625	2/12/13	LEH	2/15/13 07:51	DHF	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	84.4		%	38-134	EPA 625	2/12/13	LEH	2/15/13 07:51	DHF	A1
2-Fluorobiphenyl (S)	85.8		%	37-113	EPA 625	2/12/13	LEH	2/15/13 07:51	DHF	A1
2-Fluorophenol (S)	46.2		%	17-73	EPA 625	2/12/13	LEH	2/15/13 07:51	DHF	A1
Nitrobenzene-d5 (S)	86.8		%	37-124	EPA 625	2/12/13	LEH	2/15/13 07:51	DHF	A1
Phenol-d5 (S)	23		%	11-53	EPA 625	2/12/13	LEH	2/15/13 07:51	DHF	A1
Terphenyl-d14 (S)	145	1	%	33-125	EPA 625	2/12/13	LEH	2/15/13 07:51	DHF	A1

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 1011045 Add'l Local Limits 02/07/13

Lab ID:	**1011045002**	Date Collected:	2/6/2013 00:00	Matrix:	Solid
Sample ID:	**GBT Thick Sludge**	Date Received:	2/7/2013 14:10		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	ND		mg/kg	5.9	SW846 9012B	2/10/13	RPE	2/11/13 12:16	JEP	A1
Moisture	95.6		%	0.1	SM20-2540 G			2/11/13 20:30	CF	A
Total Solids	4.4		%	0.1	SM20-2540 G			2/11/13 20:30	CF	A

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 1011045 Add'l Local Limits 02/07/13

Lab ID: **1011045003** Date Collected: 2/6/2013 00:00 Matrix: Waste Water

Sample ID: **T2 Mixed Liquor** Date Received: 2/7/2013 14:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
METALS										
Copper, Total	0.51		mg/L	0.0050	EPA 200.7	2/11/13	KMK	2/19/13 10:12	JWK	A1
Silver, Total	0.016		mg/L	0.0020	EPA 200.7	2/11/13	KMK	2/19/13 10:12	JWK	A1
Zinc, Total	0.62		mg/L	0.010	EPA 200.7	2/11/13	KMK	2/19/13 10:12	JWK	A1

Sample Comments:

Anna G Milliken
Technical Manager

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 1011045 Add'l Local Limits 02/07/13

PARAMETER QUALIFIERS\FLAGS

[1] The surrogate Terphenyl-d14 for method EPA 625 was outside of control limits. The % Recovery was reported as 145 and the control limits were 33 to 125. This result was reported at a dilution of 1.

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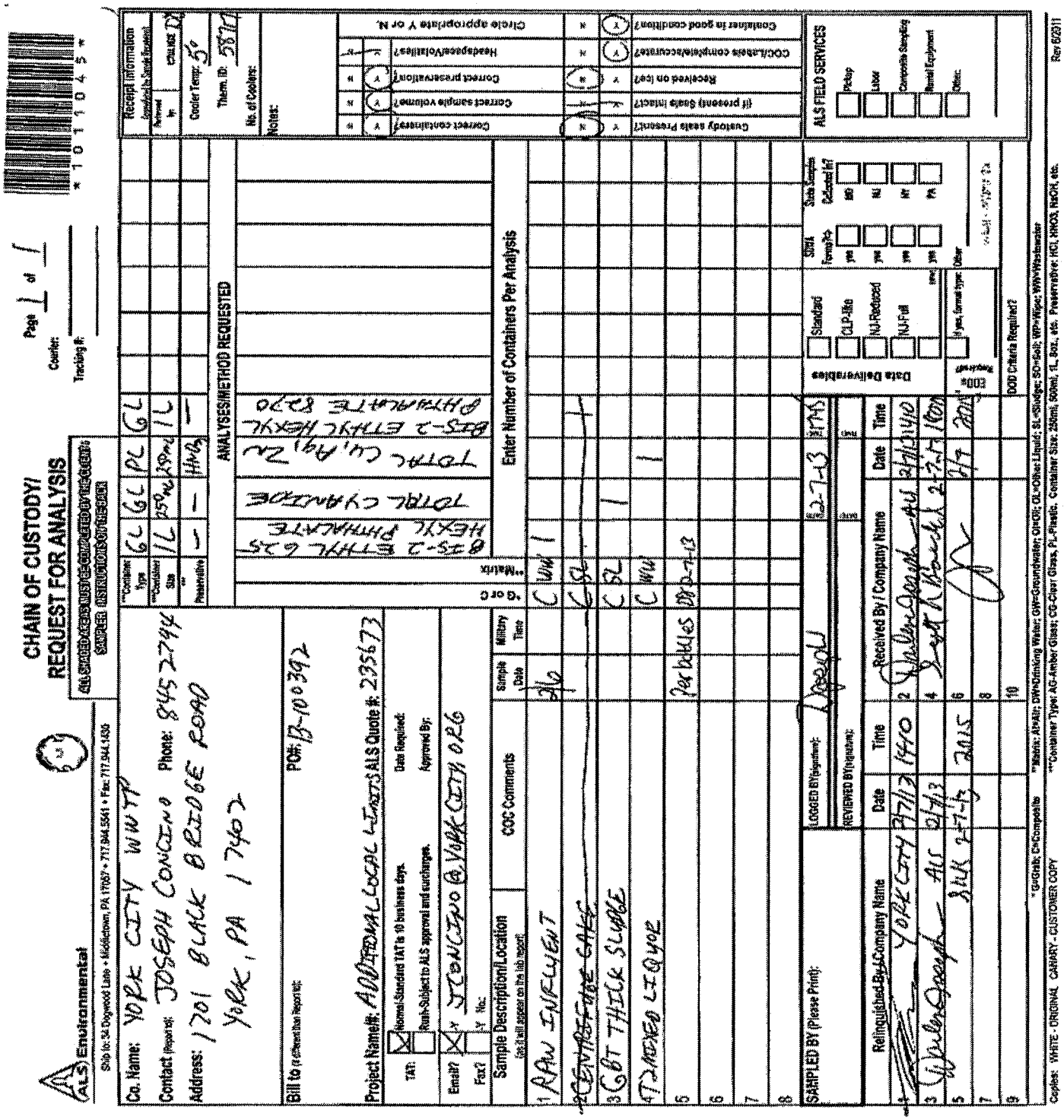

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February 22, 2013

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	**PP SCANS AND LOCAL LIMITS -**	Workorder:	**1011044**
Purchase Order:	**13-100389**	Workorder ID:	**WW Local Limits 02/07/13**

Dear Mr. Concino,

Enclosed are the analytical results for samples received by the laboratory on Thursday, February 07, 2013.

The ALS Environmental laboratory in Middletown, Pennsylvania (formerly Analytical Laboratory Services, Inc.) is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Shannon Butler (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

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State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 1011044 WW Local Limits 02/07/13 Discard Date: 03/08/2013

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
1011044001	Raw Influent	Waste Water	2/6/13 00:00	2/7/13 14:10	Customer
1011044002	002 Effluent	Waste Water	2/6/13 00:00	2/7/13 14:10	Customer
1011044003	Raw Influent Grab	Waste Water	2/6/13 00:00	2/7/13 00:00	Customer
1011044004	002 Effluent	Waste Water	2/6/13 00:00	2/7/13 14:10	Customer

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 1011044 WW Local Limits 02/07/13

Lab ID: **1011044001** Date Collected: 2/6/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent** Date Received: 2/7/2013 14:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	2/12/13	SYB	2/13/13 13:26	JEP	A2
METALS										
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	2/11/13	KMK	2/19/13 10:04	JWK	B2
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	2/11/13	KMK	2/19/13 10:04	JWK	B2
Chromium, Total	0.0027		mg/L	0.0010	EPA 200.8	2/11/13	KMK	2/12/13 01:59	MWO	B1
Copper, Total	0.043		mg/L	0.0050	EPA 200.7	2/11/13	KMK	2/19/13 10:04	JWK	B2
Lead, Total	0.0072		mg/L	0.0030	EPA 200.7	2/11/13	KMK	2/19/13 10:04	JWK	B2
Mercury, Total (Low-level)	0.00035		mg/L	0.00020	EPA 245.1	2/22/13	MNP	2/22/13 14:52	MNP	B3
Molybdenum, Total	0.027		mg/L	0.010	EPA 200.7	2/11/13	KMK	2/19/13 10:04	JWK	B2
Nickel, Total	0.0071		mg/L	0.0025	EPA 200.8	2/11/13	KMK	2/12/13 01:59	MWO	B1
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	2/11/13	KMK	2/12/13 01:59	MWO	B1
Silver, Total	ND		mg/L	0.0010	EPA 200.8	2/11/13	KMK	2/12/13 01:59	MWO	B1
Zinc, Total	0.084		mg/L	0.010	EPA 200.7	2/11/13	KMK	2/19/13 10:04	JWK	B2

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 1011044 WW Local Limits 02/07/13

Lab ID: **1011044002** Date Collected: 2/6/2013 00:00 Matrix: Waste Water

Sample ID: **002 Effluent** Date Received: 2/7/2013 14:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	2/8/13	RPE	2/11/13 10:14	JEP	A1
METALS										
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	2/11/13	KMK	2/19/13 10:08	JWK	B2
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	2/11/13	KMK	2/19/13 10:08	JWK	B2
Chromium, Total	0.0019		mg/L	0.0010	EPA 200.8	2/11/13	KMK	2/12/13 02:03	MWO	B1
Copper, Total	ND		mg/L	0.0050	EPA 200.7	2/11/13	KMK	2/19/13 10:08	JWK	B2
Lead, Total	ND		mg/L	0.0030	EPA 200.7	2/11/13	KMK	2/19/13 10:08	JWK	B2
Mercury, Total (Low-level)	ND		mg/L	0.00020	EPA 245.1	2/22/13	MNP	2/22/13 14:53	MNP	B3
Molybdenum, Total	0.028		mg/L	0.010	EPA 200.7	2/11/13	KMK	2/19/13 10:08	JWK	B2
Nickel, Total	0.0050		mg/L	0.0025	EPA 200.8	2/11/13	KMK	2/12/13 02:03	MWO	B1
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	2/11/13	KMK	2/12/13 02:03	MWO	B1
Silver, Total	ND		mg/L	0.0010	EPA 200.8	2/11/13	KMK	2/12/13 02:03	MWO	B1
Zinc, Total	0.025		mg/L	0.010	EPA 200.7	2/11/13	KMK	2/19/13 10:08	JWK	B2

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 1011044 WW Local Limits 02/07/13

Lab ID: **1011044003** Date Collected: 2/6/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent Grab** Date Received: 2/7/2013 00:00

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	48.2		mg/L	2.4	EPA 1664B			2/14/13 00:03	JJS	A

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 1011044 WW Local Limits 02/07/13

Lab ID: **1011044004** Date Collected: 2/6/2013 00:00 Matrix: Waste Water

Sample ID: **002 Effluent** Date Received: 2/7/2013 14:10

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	ND		mg/L	2.2	EPA 1664B			2/12/13 10:30	MPP	A

Sample Comments:

Anna G Milliken
Technical Manager

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALS Environmental
Ship to: 34 Dogwood Lane • Middletown, PA 17057 • 717.944.5541 • Fax: 717.944.1430

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/ SAMPLER INSTRUCTIONS ON THE BACK

Page 1 of 1
Courier:
Tracking #:
* 1 0 1 1 0 4 4 *

Co. Name: YORK CITY WWTP
Contact (Report to): JOSEPH CONCINO Phone: 8452794
Address: 1701 BLACK BRIDGE ROAD YORK, PA 17402

Bill to (if different than Report to):
PO#: 13-100389

Project Name/#: LOCAL LIMITS ALS Quote #: 206062

TAT: [X] Normal-Standard TAT is 10 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? [X] Y JCONCINO@YORKCITY.ORG
Fax? [ ] Y No.:

***Container Type	PL	PL	GL	GL	GL
***Container Size	0.5L	0.5L	1L	1L	1L
***Preservative	HNO_3	NAOH	H_2SO_4	—	—
ANALYSES/METHOD REQUESTED	TOTAL As, Cd, Cu, Mo, Pb, Zn, Ag, Cr, Ni, SE, Hg	CYANIDE	OIL & GREASE 1664	TOTAL SOLIDS	OIL & GREASE 9071B

Enter Number of Containers Per Analysis

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	TOTAL As, Cd, Cu, Mo, Pb, Zn, Ag, Cr, Ni, SE, Hg	CYANIDE	OIL & GREASE 1664	TOTAL SOLIDS	OIL & GREASE 9071B
1 RAW INFLUENT		2/6		C	WW	1	1			
2 002 EFFLUENT				C	WW	1	1			
3 RAW INFLUENT				G	WW			1		
4 002 EFFLUENT				G	WW			1		
5 ~~CENTRIFUGE CAKE / BOTTLE~~				C	SL	X	X		X	X
6		per bottles 2-7-13 DJ								
7										
8										

SAMPLED BY (Please Print):
LOGGED BY (signature): D Joseph DATE: 2-7-13 TIME: 1445
REVIEWED BY (signature): DATE: TIME:

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature] YORK CITY	2/7/13	1409	2	Darlene Joseph ALS	2/7/13	1410
3	Darlene Joseph ALS	2/7/13		4	Scott R [signature]	2-7-13	1800
5	SIU	2-7-13	2015	6	[signature]	2/7	2015
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)
EDDs Required? [ ] If yes, format type:
DOD Criteria Required?
SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ] Other
State Samples Collected In? MD [ ] NJ [ ] NY [ ] PA [ ]

Receipt Information (completed by Sample Receiving)
Performed by: Initial here: DJ
Cooler Temp: 5°
Therm. ID: 58717
No. of Coolers:
Notes:

Correct containers?	(Y) N
Correct sample volume?	(Y) N
Correct preservation?	(Y) N
Headspace/Volatiles?	—
Custody seals Present?	Y (N)
(If present) Seals intact?	—
Received on ice?	Y (N)
COC/Labels complete/accurate?	(Y) N
Container in good condition?	(Y) N

Circle appropriate Y or N.

ALS FIELD SERVICES
[ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite **Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.
Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY Rev 6/2011

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May 8, 2013

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	**2011-ADDITIONAL TESTING**	Workorder:	**1023709**
Purchase Order:		Workorder ID:	**Add'l Local Limits 04/24/13**

Dear Mr. Concino,

Enclosed are the analytical results for samples received by the laboratory on Thursday, April 25, 2013.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Shannon Butler (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

ALS York: 978 Loucks Mill Road, York, PA 17402 717-505-5280

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental

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State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 1023709 Add'l Local Limits 04/24/13 Discard Date: 05/22/2013

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
1023709001	Raw Influent	Waste Water	4/24/13 00:00	4/25/13 21:40	Customer
1023709002	T2 Mixed Liquor	Waste Water	4/24/13 00:00	4/25/13 21:40	Customer
1023709003	Centrifuge Cake	Solid	4/24/13 12:30	4/25/13 21:40	Customer

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 1023709 Add'l Local Limits 04/24/13

Lab ID: **1023709001** Date Collected: 4/24/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent** Date Received: 4/25/2013 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
bis(2-Ethylhexyl)phthalate	19.3		ug/L	2.8	EPA 625	4/26/13	PDK	4/30/13 01:09	DHF	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	96.2		%	38-134	EPA 625	4/26/13	PDK	4/30/13 01:09	DHF	A
2-Fluorobiphenyl (S)	74.7		%	37-113	EPA 625	4/26/13	PDK	4/30/13 01:09	DHF	A
2-Fluorophenol (S)	47		%	17-73	EPA 625	4/26/13	PDK	4/30/13 01:09	DHF	A
Nitrobenzene-d5 (S)	66.5		%	37-124	EPA 625	4/26/13	PDK	4/30/13 01:09	DHF	A
Phenol-d5 (S)	32		%	11-53	EPA 625	4/26/13	PDK	4/30/13 01:09	DHF	A
Terphenyl-d14 (S)	93		%	33-125	EPA 625	4/26/13	PDK	4/30/13 01:09	DHF	A

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 1023709 Add'l Local Limits 04/24/13

Lab ID: **1023709002** Date Collected: 4/24/2013 00:00 Matrix: Waste Water

Sample ID: **T2 Mixed Liquor** Date Received: 4/25/2013 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
METALS										
Copper, Total	0.69		mg/L	0.0050	EPA 200.7	5/5/13	ZMC	5/8/13 12:10	JWK	A
Silver, Total	0.0035		mg/L	0.0020	EPA 200.7	5/5/13	ZMC	5/8/13 12:10	JWK	A
Zinc, Total	0.98		mg/L	0.010	EPA 200.7	5/5/13	ZMC	5/8/13 12:10	JWK	A

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 1023709 Add'l Local Limits 04/24/13

Lab ID: **1023709003** Date Collected: 4/24/2013 12:30 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 4/25/2013 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
bis(2-Ethylhexyl)phthalate	26700		ug/kg	5870	SW846 8270D	4/30/13	JCS	5/1/13 18:02	DHF	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	72.5		%	37-123	SW846 8270D	4/30/13	JCS	5/1/13 18:02	DHF	A
2-Fluorobiphenyl (S)	79.7		%	45-105	SW846 8270D	4/30/13	JCS	5/1/13 18:02	DHF	A
2-Fluorophenol (S)	80.4		%	35-104	SW846 8270D	4/30/13	JCS	5/1/13 18:02	DHF	A
Nitrobenzene-d5 (S)	78.3		%	41-110	SW846 8270D	4/30/13	JCS	5/1/13 18:02	DHF	A
Phenol-d5 (S)	88		%	40-100	SW846 8270D	4/30/13	JCS	5/1/13 18:02	DHF	A
Terphenyl-d14 (S)	79.1		%	38-113	SW846 8270D	4/30/13	JCS	5/1/13 18:02	DHF	A
WET CHEMISTRY										
Moisture	83.7		%	0.1	SM20-2540 G			4/26/13 10:26	NV	A
Total Solids	16.3		%	0.1	SM20-2540 G			4/26/13 10:26	NV	A

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1
Courier:
Tracking #:

1023709

Co. Name: YORK CITY WWTP
Contact (Report to): JOSEPH CONCINO Phone: 8452744
Address: 1701 BLACK BRIDGE ROAD, YORK, PA 17402

Bill to (if different than Report to):
PO#: 13-100392

Project Name/#: ADDITIONAL LOCAL LIMITS ALS Quote #: 235673

TAT: [X] Normal-Standard TAT is 10 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? [X] Y JCONCINO@YORKCITY.ORG
Fax? [ ] Y No.:

	***Container Type	GL	PL	GL
	***Container Size	1L	250mL	8OZ
	***Preservative	—	HNO3	—

ANALYSES/METHOD REQUESTED: BIS 2 ETHYL HEXYL PHTHALATE 625; TOTAL Cu, Ag, Zn; BIS 2 ETHYL HEXYL PHTHALATE 8270

Enter Number of Containers Per Analysis

	Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	BIS 2 ETHYL HEXYL PHTHALATE 625	TOTAL Cu, Ag, Zn	BIS 2 ETHYL HEXYL PHTHALATE 8270
1	RAW INFLUENT		4/24/13	0000-2400	C	WW	1		
2	T2 MIXED LIQUOR		4/24/13	0000-2400	C	WW		1	
3	CENTRIFUGE CAKE		4/24/13	0730-1230	C	SL			1
4									
5									
6									
7									
8									

Receipt Information (completed by Sample Receiving)
Performed by: [signature] 4/25
Cooler Temp: 1
Therm. ID: 7
No. of Coolers:
Notes:

	Y	N
Correct containers?	Y (circled)	N
Correct sample volume?	Y (circled)	N
Correct preservation?	Y (circled)	N
Headspace/Volatiles?		
Custody seals Present?	Y	N (circled)
(if present) Seals intact?	Y	N
Received on ice?	Y (circled)	N
COC/Labels complete/accurate?	Y (circled)	N
Container in good condition?	Y (circled)	N

Circle appropriate Y or N.

SAMPLED BY (Please Print):
LOGGED BY (signature): [signature] DATE: 4/26/13 TIME: 0854
REVIEWED BY (signature): SRB

	Relinquished By / Company Name	Date	Time		Received By / Company Name	Date	Time
1	[signature] YORK CITY	4/25/13	1036	2	Darlene Joseph ALS	4/25/13	1036
3	Darlene Joseph ALS	4/25/13		4	[signature]	4/25/13	21:40
5	[signature]	4/25/13	21:40	6	[signature]	4/25/13	[illegible]
7				8			
9				10			

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)
EDDs Required? [ ] If yes, format type: Other
SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ]
State Samples Collected In? MD [ ] NJ [ ] NY [ ] PA [ ]
DOD Criteria Required?

ALS FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite
**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

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ALS Environmental

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State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

May 8, 2013

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	**PP SCANS AND LOCAL LIMITS -**	Workorder:	**1023708**
Purchase Order:	**13-100389**	Workorder ID:	**WW Local Limits 04/24/13**

Dear Mr. Concino,

Enclosed are the analytical results for samples received by the laboratory on Thursday, April 25, 2013.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Shannon Butler (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS York: 978 Loucks Mill Road, York, PA 17402 717-505-5280

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental

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SAMPLE SUMMARY

Workorder: 1023708 WW Local Limits 04/24/13 Discard Date: 05/22/2013

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
1023708001	Raw Influent Composite	Waste Water	4/24/13 00:00	4/25/13 21:40	Customer
1023708002	002 Effluent	Waste Water	4/24/13 00:00	4/25/13 21:40	Customer
1023708003	Raw Influent Grab	Waste Water	4/24/13 07:42	4/25/13 21:40	Customer
1023708004	002 Effluent Grab	Waste Water	4/24/13 07:35	4/25/13 21:40	Customer
1023708005	Centrifuge Cake	Solid	4/24/13 12:30	4/25/13 21:40	Customer

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 1023708 WW Local Limits 04/24/13

Lab ID: **1023708001** Date Collected: 4/24/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent Composite** Date Received: 4/25/2013 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	4/30/13	SYB	5/1/13 13:20	JEP	A1
METALS										
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	5/5/13	ZMC	5/7/13 14:47	JWK	B
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	5/5/13	ZMC	5/7/13 14:47	JWK	B
Chromium, Total	0.0023		mg/L	0.0010	EPA 200.8	4/30/13	ZMC	5/7/13 12:48	MWO	B1
Copper, Total	0.063		mg/L	0.0050	EPA 200.7	5/5/13	ZMC	5/7/13 14:47	JWK	B
Lead, Total	0.0086		mg/L	0.0030	EPA 200.7	5/5/13	ZMC	5/7/13 14:47	JWK	B
Mercury, Total (Low-level)	0.00046		mg/L	0.00020	EPA 245.1	5/7/13	MNP	5/7/13 10:01	MNP	B2
Molybdenum, Total	0.017		mg/L	0.010	EPA 200.7	5/5/13	ZMC	5/7/13 14:47	JWK	B
Nickel, Total	0.0039		mg/L	0.0025	EPA 200.8	4/30/13	ZMC	5/7/13 12:48	MWO	B1
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	4/30/13	ZMC	5/7/13 12:48	MWO	B1
Silver, Total	ND		mg/L	0.0010	EPA 200.8	4/30/13	ZMC	5/7/13 12:48	MWO	B1
Zinc, Total	0.13		mg/L	0.010	EPA 200.7	5/5/13	ZMC	5/7/13 14:47	JWK	B

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 1023708 WW Local Limits 04/24/13

Lab ID: **1023708002** Date Collected: 4/24/2013 00:00 Matrix: Waste Water

Sample ID: **002 Effluent** Date Received: 4/25/2013 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	4/30/13	SYB	5/1/13 13:20	JEP	A1
METALS										
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	5/5/13	ZMC	5/7/13 14:51	JWK	B
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	5/5/13	ZMC	5/7/13 14:51	JWK	B
Chromium, Total	ND		mg/L	0.0010	EPA 200.8	4/30/13	ZMC	5/7/13 12:51	MWO	B1
Copper, Total	ND		mg/L	0.0050	EPA 200.7	5/5/13	ZMC	5/7/13 14:51	JWK	B
Lead, Total	ND		mg/L	0.0030	EPA 200.7	5/5/13	ZMC	5/7/13 14:51	JWK	B
Mercury, Total (Low-level)	ND		mg/L	0.00020	EPA 245.1	5/7/13	MNP	5/7/13 10:02	MNP	B2
Molybdenum, Total	0.025		mg/L	0.010	EPA 200.7	5/5/13	ZMC	5/7/13 14:51	JWK	B
Nickel, Total	ND		mg/L	0.0025	EPA 200.8	4/30/13	ZMC	5/7/13 12:51	MWO	B1
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	4/30/13	ZMC	5/7/13 12:51	MWO	B1
Silver, Total	ND		mg/L	0.0010	EPA 200.8	4/30/13	ZMC	5/7/13 12:51	MWO	B1
Zinc, Total	0.036		mg/L	0.010	EPA 200.7	5/5/13	ZMC	5/7/13 14:51	JWK	B

Sample Comments:

Anna G Milliken
Technical Manager

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ANALYTICAL RESULTS

Workorder: 1023708 WW Local Limits 04/24/13

Lab ID: **1023708003** Date Collected: 4/24/2013 07:42 Matrix: Waste Water

Sample ID: **Raw Influent Grab** Date Received: 4/25/2013 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	10.1		mg/L	2.6	EPA 1664B			5/8/13 14:00	MPP	A

Sample Comments:

Anna G Milliken
Technical Manager

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State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 1023708 WW Local Limits 04/24/13

Lab ID: **1023708004** Date Collected: 4/24/2013 07:35 Matrix: Waste Water

Sample ID: **002 Effluent Grab** Date Received: 4/25/2013 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	3.2		mg/L	2.1	EPA 1664B			5/8/13 14:00	MPP	A

Sample Comments:

Anna G Milliken
Technical Manager

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 1023708 WW Local Limits 04/24/13

Lab ID: **1023708005** Date Collected: 4/24/2013 12:30 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 4/25/2013 21:40

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	ND		mg/kg	1.4	SW846 9012B	4/26/13	RPE	4/29/13 13:55	JEP	A2
Hexane Extractable Material	42900		mg/kg	1180	SW846 9071B			5/7/13 01:00	MPP	A
Moisture	83.2		%	0.1	SM20-2540 G			4/29/13 12:31	NV	A
Silica Gel Treated HEM	17000		mg/kg	1180	SW846 9071B			5/7/13 01:00	MPP	A
Total Solids	16.8		%	0.1	SM20-2540 G			4/29/13 12:31	NV	A
METALS										
Arsenic, Total	ND		mg/kg	10.4	SW846 6010C	4/26/13	SRT	4/26/13 11:42	SRT	A1
Cadmium, Total	2.8		mg/kg	2.6	SW846 6010C	4/26/13	SRT	4/26/13 11:42	SRT	A1
Chromium, Total	26.7		mg/kg	5.2	SW846 6010C	4/26/13	SRT	4/26/13 11:42	SRT	A1
Copper, Total	482		mg/kg	10.4	SW846 6010C	4/26/13	SRT	4/26/13 11:42	SRT	A1
Lead, Total	64.8		mg/kg	10.4	SW846 6010C	4/26/13	SRT	4/26/13 11:42	SRT	A1
Mercury, Total	0.80		mg/kg	0.28	SW846 7471B	5/7/13	MNP	5/7/13 13:51	MNP	A3
Molybdenum, Total	26.9		mg/kg	10.4	SW846 6010C	4/26/13	SRT	4/26/13 11:42	SRT	A1
Nickel, Total	26.4		mg/kg	10.4	SW846 6010C	4/26/13	SRT	4/26/13 11:42	SRT	A1
Selenium, Total	ND		mg/kg	26.1	SW846 6010C	4/26/13	SRT	4/26/13 11:42	SRT	A1
Silver, Total	12.6		mg/kg	2.6	SW846 6010C	4/26/13	SRT	4/26/13 11:42	SRT	A1
Zinc, Total	653		mg/kg	10.4	SW846 6010C	4/26/13	SRT	4/26/13 11:42	SRT	A1

Sample Comments:

Anna G Milliken
Technical Manager

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

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ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1
Courier:
Tracking #: [signature]

1023708

Co. Name: YORK CITY WWTP
Contact (Report to): JOSEPH CONCINO Phone: 8452794
Address: 1701 BLACK BRIDGE ROAD YORK, PA 17402
Bill to (if different than Report to):
PO#: 13-100389
Project Name/#: LOCAL LIMITS ALS Quote #: 206062
TAT: [X] Normal-Standard TAT is 10 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:
Email? [X] Y JCONCINO@YORKCITY.ORG
Fax? Y No.:

(completed by Sample Receiving) Performed by: [signature]
Cooler Temp:
Therm. ID:
No. of Coolers:
Notes:

ANALYSES/METHOD REQUESTED

					TOTAL As, Cd, Cu, Mo, Pb, Zn, Ag, Cr, Ni, Se, Hg	CYANIDE	OIL & GREASE 1664	TOTAL SOLIDS	OIL & GREASE 9071B
***Container Type					PL	PL	GL	GL	GL
***Container Size					0.5L	0.5L	1L	1L	1L
***Preservative					HNO3	NaOH	H2SO4	—	—
Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C / **Matrix	Enter Number of Containers Per Analysis				
1 RAW INFLUENT		4/24/13	0000-2400	C WW	1	1			
2 002 EFFLUENT		4/24/13	0000-2400	C WW	1	1			
3 RAW INFLUENT		4/24/13	0742	G WW			1		
4 002 EFFLUENT		4/24/13	0735	G WW			1		
5 CENTRIFUGE CAKE		4/24/13	0730-1230	C SL	X	X		X	X — 1 BOTTLE
6									
7									
8									

Circle appropriate Y or N.
Correct containers? Y / N
Correct sample volume? Y / N
Correct preservation? Y / N
Headspace/Volatiles? Y / N
Custody seals Present? Y / N
(If present) Seals intact? Y / N
Received on ice? Y / N
COC/Labels complete/accurate? Y / N
Container in good condition? Y / N

SAMPLED BY (Please Print):
LOGGED BY (signature): [signature] DATE: 4/26/13 TIME: 0840
REVIEWED BY (signature): [signature]

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature] YORK CITY	4/25/13	1036	2 [signature] ALS	4/25/13	1036
3 [signature] ALS	4/25/13		4 [signature]	4/25/13	21:00
5 [signature]	4/25/13	21:40	6 [signature]	4/25/13	21:40
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)
EDDs Required? [ ] If yes, format type:
SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ] Other
State Samples Collected In? MD [ ] NJ [ ] NY [ ] PA [ ]
DOD Criteria Required?

ALS FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite **Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY Rev 6/2011

ALS Environmental

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May 31, 2013

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	**PP SCANS AND LOCAL LIMITS -**	Workorder:	**1027255**
Purchase Order:	**13-100390**	Workorder ID:	**Priority Pollutants 05/15/13**

Dear Mr. Concino,

Enclosed are the analytical results for samples received by the laboratory on Thursday, May 16, 2013.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Shannon Butler (Project Coordinator) or Anna G Milliken (Technical Manager) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS York: 978 Loucks Mill Road, York, PA 17402 717-505-5280

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Anna G Milliken
Technical Manager

ALS Environmental

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State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 1027255 Priority Pollutants 05/15/13 Discard Date: 06/13/2013

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
1027255001	Raw Influent Comp	Waste Water	5/15/13 00:00	5/16/13 19:20	Customer
1027255002	Raw Influent Grab	Waste Water	5/15/13 07:38	5/16/13 19:20	Customer
1027255003	Centrifuge Cake	Solid	5/15/13 06:30	5/16/13 19:20	Customer

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder: 1027255 Priority Pollutants 05/15/13

Lab ID: **1027255001** Date Collected: 5/15/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent Comp** Date Received: 5/16/2013 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
Acenaphthene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Acenaphthylene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Anthracene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Benzidine	ND		ug/L	46.7	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Benzo(a)anthracene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Benzo(a)pyrene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Benzo(b)fluoranthene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Benzo(g,h,i)perylene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Benzo(k)fluoranthene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
4-Bromophenyl-phenylether	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Butylbenzylphthalate	4.1		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
4-Chloro-3-methylphenol	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
bis(2-Chloroethoxy)methane	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
bis(2-Chloroethyl)ether	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
bis(2-Chloroisopropyl)ether	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
2-Chloronaphthalene	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
2-Chlorophenol	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
4-Chlorophenyl-phenylether	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Chrysene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Di-n-Butylphthalate	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Di-n-Octylphthalate	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Dibenzo(a,h)anthracene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
3,3-Dichlorobenzidine	ND		ug/L	15.0	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
2,4-Dichlorophenol	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Diethylphthalate	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
2,4-Dimethylphenol	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Dimethylphthalate	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
2,4-Dinitrophenol	ND		ug/L	15.0	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
2,4-Dinitrotoluene	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
2,6-Dinitrotoluene	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
1,2-Diphenylhydrazine	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
bis(2-Ethylhexyl)phthalate	19.4		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Fluoranthene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Fluorene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Hexachlorobenzene	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Hexachlorobutadiene	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Hexachlorocyclopentadiene	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Hexachloroethane	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Indeno(1,2,3-cd)pyrene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Isophorone	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A

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State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 1027255 Priority Pollutants 05/15/13

Lab ID: **1027255001** Date Collected: 5/15/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent Comp** Date Received: 5/16/2013 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
2-Methyl-4,6-dinitrophenol	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Naphthalene	2.9		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Nitrobenzene	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
2-Nitrophenol	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
4-Nitrophenol	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
N-Nitrosodimethylamine	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
N-Nitroso-di-n-propylamine	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
N-Nitrosodiphenylamine	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Pentachlorophenol	ND		ug/L	15.0	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Phenanthrene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Phenol	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Pyrene	ND		ug/L	1.4	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
1,2,4-Trichlorobenzene	ND		ug/L	2.8	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
2,4,6-Trichlorophenol	ND		ug/L	7.5	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	84.8		%	38-134	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
2-Fluorobiphenyl (S)	67.1		%	37-113	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
2-Fluorophenol (S)	23.8		%	17-73	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Nitrobenzene-d5 (S)	88.9		%	37-124	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Phenol-d5 (S)	25.9		%	11-53	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Terphenyl-d14 (S)	247	1	%	33-125	EPA 625	5/22/13	LEH	5/30/13 06:40	DHF	A
Pesticides and PCBs										
Aldrin	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
alpha-BHC	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
beta-BHC	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
delta-BHC	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
gamma-BHC	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Chlordane	ND		ug/L	2.4	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
4,4'-DDD	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
4,4'-DDE	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
4,4'-DDT	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Dieldrin	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Endosulfan I	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Endosulfan II	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Endosulfan Sulfate	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Endrin	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Endrin Aldehyde	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Heptachlor	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Heptachlor Epoxide	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C

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State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 1027255 Priority Pollutants 05/15/13

Lab ID: **1027255001** Date Collected: 5/15/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent Comp** Date Received: 5/16/2013 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Mirex	ND		ug/L	0.12	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Toxaphene	ND		ug/L	4.8	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Aroclor-1016	ND		ug/L	2.4	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Aroclor-1221	ND		ug/L	2.4	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Aroclor-1232	ND		ug/L	2.4	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Aroclor-1242	ND		ug/L	2.4	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Aroclor-1248	ND		ug/L	2.4	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Aroclor-1254	ND		ug/L	2.4	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Aroclor-1260	ND		ug/L	2.4	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyl (S)	45.4		%	30-150	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
Tetrachloro-m-xylene (S)	43		%	36-112	EPA 608	5/20/13	CAC	5/22/13 14:26	KJH	C
WET CHEMISTRY										
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	5/22/13	SYB	5/23/13 11:47	JEP	F2
Phenolics	0.04		mg/L	0.01	EPA 420.4	5/28/13	JPA	5/29/13 15:50	JPA	G
METALS										
Antimony, Total	ND		mg/L	0.010	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2
Beryllium, Total	ND		mg/L	0.0020	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2
Chromium, Total	0.0031		mg/L	0.0025	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2
Copper, Total	0.050		mg/L	0.0050	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2
Lead, Total	0.011		mg/L	0.0030	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2
Mercury, Total	ND		mg/L	0.00050	EPA 245.1	5/28/13	MNP	5/28/13 13:38	MNP	E1
Nickel, Total	ND		mg/L	0.010	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2
Selenium, Total	ND		mg/L	0.010	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2
Silver, Total	ND		mg/L	0.0020	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2
Thallium, Total	ND		mg/L	0.010	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2
Zinc, Total	0.14		mg/L	0.010	EPA 200.7	5/22/13	KMK	5/29/13 18:12	JWK	E2

Sample Comments:

This sample was analyzed at a dilution in the 608 analysis due to sample matrix interference. Reporting limits were adjusted accordingly.

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ANALYTICAL RESULTS

Workorder: 1027255 Priority Pollutants 05/15/13

Lab ID:	**1027255001**	Date Collected:	5/15/2013 00:00	Matrix:	Waste Water
Sample ID:	**Raw Influent Comp**	Date Received:	5/16/2013 19:20		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Anna G Milliken
Technical Manager

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 1027255 Priority Pollutants 05/15/13

Lab ID: **1027255002** Date Collected: 5/15/2013 07:38 Matrix: Waste Water

Sample ID: **Raw Influent Grab** Date Received: 5/16/2013 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acrolein	ND		ug/L	30.0	EPA 624			5/21/13 07:01	GLQ	A
Acrylonitrile	ND		ug/L	5.0	EPA 624			5/21/13 07:01	GLQ	A
Benzene	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Bromodichloromethane	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Bromoform	ND		ug/L	2.0	EPA 624			5/21/13 07:01	GLQ	A
Bromomethane	ND		ug/L	2.0	EPA 624			5/21/13 07:01	GLQ	A
Carbon Tetrachloride	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Chlorobenzene	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Chlorodibromomethane	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Chloroethane	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
2-Chloroethylvinyl ether	ND		ug/L	2.0	EPA 624			5/21/13 07:01	GLQ	A
Chloroform	2.6		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Chloromethane	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
1,2-Dichlorobenzene	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
1,3-Dichlorobenzene	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
1,4-Dichlorobenzene	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
1,1-Dichloroethane	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
1,2-Dichloroethane	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
1,1-Dichloroethene	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
trans-1,2-Dichloroethene	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
1,2-Dichloropropane	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
cis-1,3-Dichloropropene	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
trans-1,3-Dichloropropene	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
1,3-Dichloropropene, Total	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Ethylbenzene	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Methylene Chloride	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
1,1,2,2-Tetrachloroethane	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Tetrachloroethene	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Toluene	7.2		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
1,1,1-Trichloroethane	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
1,1,2-Trichloroethane	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Trichloroethene	1.5		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Trichlorofluoromethane	ND		ug/L	1.0	EPA 624			5/21/13 07:01	GLQ	A
Vinyl Chloride	ND		ug/L	2.0	EPA 624			5/21/13 07:01	GLQ	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	82.2		%	72-142	EPA 624			5/21/13 07:01	GLQ	A
4-Bromofluorobenzene (S)	82.2		%	73-119	EPA 624			5/21/13 07:01	GLQ	A
Dibromofluoromethane (S)	85.8		%	74-132	EPA 624			5/21/13 07:01	GLQ	A
Toluene-d8 (S)	97.1		%	75-133	EPA 624			5/21/13 07:01	GLQ	A

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ANALYTICAL RESULTS

Workorder: 1027255 Priority Pollutants 05/15/13

Lab ID:	**1027255002**	Date Collected:	5/15/2013 07:38	Matrix:	Waste Water
Sample ID:	**Raw Influent Grab**	Date Received:	5/16/2013 19:20		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

Anna G Milliken
Technical Manager

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ANALYTICAL RESULTS

Workorder: 1027255 Priority Pollutants 05/15/13

Lab ID: **1027255003** Date Collected: 5/15/2013 06:30 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 5/16/2013 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
VOLATILE ORGANICS										
Acrolein	ND		ug/kg	15400	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Acrylonitrile	ND		ug/kg	3080	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Benzene	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Bromodichloromethane	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Bromoform	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Bromomethane	ND	2	ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
2-Butanone	ND		ug/kg	6160	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Carbon Tetrachloride	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Chlorobenzene	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Chlorodibromomethane	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Chloroethane	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
2-Chloroethylvinyl ether	ND		ug/kg	1230	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Chloroform	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Chloromethane	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
1,1-Dichloroethane	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
1,2-Dichloroethane	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
1,1-Dichloroethene	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
trans-1,2-Dichloroethene	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
1,2-Dichloropropane	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
1,3-Dichloropropene, Total	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Ethylbenzene	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Methylene Chloride	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
1,1,2,2-Tetrachloroethane	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Tetrachloroethene	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Toluene	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
1,1,1-Trichloroethane	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
1,1,2-Trichloroethane	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Trichloroethene	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Vinyl Chloride	ND		ug/kg	616	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
1,2-Dichloroethane-d4 (S)	86.9		%	71-146	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
4-Bromofluorobenzene (S)	79.9		%	46-138	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Dibromofluoromethane (S)	76.8		%	42-143	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
Toluene-d8 (S)	96.9		%	54-141	8260/5035	5/17/13	TMP	5/17/13 16:55	TMP	A1
SEMIVOLATILES										
Acenaphthene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Acenaphthylene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Anthracene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B

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ANALYTICAL RESULTS

Workorder: 1027255 Priority Pollutants 05/15/13

Lab ID: **1027255003** Date Collected: 5/15/2013 06:30 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 5/16/2013 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Benzidine	ND		ug/kg	32100	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Benzo(a)anthracene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Benzo(a)pyrene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Benzo(b)fluoranthene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Benzo(g,h,i)perylene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Benzo(k)fluoranthene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
4-Bromophenyl-phenylether	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Butylbenzylphthalate	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
4-Chloro-3-methylphenol	ND		ug/kg	16100	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
bis(2-Chloroethoxy)methane	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
bis(2-Chloroethyl)ether	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
bis(2-Chloroisopropyl)ether	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2-Chloronaphthalene	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2-Chlorophenol	ND		ug/kg	16100	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
4-Chlorophenyl-phenylether	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Chrysene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Di-n-Butylphthalate	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Di-n-Octylphthalate	ND		ug/kg	16100	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Dibenzo(a,h)anthracene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
1,2-Dichlorobenzene	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
1,3-Dichlorobenzene	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
1,4-Dichlorobenzene	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
3,3-Dichlorobenzidine	ND		ug/kg	8930	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2,4-Dichlorophenol	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Diethylphthalate	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2,4-Dimethylphenol	ND		ug/kg	16100	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Dimethylphthalate	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2,4-Dinitrophenol	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2,4-Dinitrotoluene	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2,6-Dinitrotoluene	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
1,2-Diphenylhydrazine	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
bis(2-Ethylhexyl)phthalate	14300		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Fluoranthene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Fluorene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Hexachlorobenzene	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Hexachlorobutadiene	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Hexachlorocyclopentadiene	ND		ug/kg	16100	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Hexachloroethane	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Indeno(1,2,3-cd)pyrene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Isophorone	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2-Methyl-4,6-dinitrophenol	ND		ug/kg	16100	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B

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ANALYTICAL RESULTS

Workorder: 1027255 Priority Pollutants 05/15/13

Lab ID: **1027255003** Date Collected: 5/15/2013 06:30 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 5/16/2013 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
Naphthalene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Nitrobenzene	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2-Nitrophenol	ND		ug/kg	16100	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
4-Nitrophenol	ND		ug/kg	16100	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
N-Nitrosodimethylamine	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
N-Nitroso-di-n-propylamine	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
N-Nitrosodiphenylamine	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Pentachlorophenol	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Phenanthrene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Phenol	ND		ug/kg	16100	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Pyrene	ND		ug/kg	2980	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
1,2,4-Trichlorobenzene	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2,4,6-Trichlorophenol	ND		ug/kg	5950	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	73.2		%	37-123	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2-Fluorobiphenyl (S)	70.2		%	45-105	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
2-Fluorophenol (S)	83.2		%	35-104	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Nitrobenzene-d5 (S)	70		%	41-110	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Phenol-d5 (S)	81.5		%	40-100	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
Terphenyl-d14 (S)	80.5		%	38-113	SW846 8270D	5/17/13	RMP	5/21/13 17:35	DHF	B
PCBs										
Total Polychlorinated Biphenyl	ND		mg/kg	0.20	SW846 8082A	5/23/13	RMP	5/23/13 18:21	EGO	B
Aroclor-1016	ND		mg/kg	0.20	SW846 8082A	5/23/13	RMP	5/23/13 18:21	EGO	B
Aroclor-1221	ND		mg/kg	0.20	SW846 8082A	5/23/13	RMP	5/23/13 18:21	EGO	B
Aroclor-1232	ND		mg/kg	0.20	SW846 8082A	5/23/13	RMP	5/23/13 18:21	EGO	B
Aroclor-1242	ND		mg/kg	0.20	SW846 8082A	5/23/13	RMP	5/23/13 18:21	EGO	B
Aroclor-1248	ND		mg/kg	0.20	SW846 8082A	5/23/13	RMP	5/23/13 18:21	EGO	B
Aroclor-1254	ND		mg/kg	0.20	SW846 8082A	5/23/13	RMP	5/23/13 18:21	EGO	B
Aroclor-1260	ND		mg/kg	0.20	SW846 8082A	5/23/13	RMP	5/23/13 18:21	EGO	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyl (S)	77.8		%	30-150	SW846 8082A	5/23/13	RMP	5/23/13 18:21	EGO	B
Tetrachloro-m-xylene (S)	64.2		%	30-150	SW846 8082A	5/23/13	RMP	5/23/13 18:21	EGO	B
PESTICIDES										
Aldrin	ND		ug/kg	50.2	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
alpha-BHC	ND		ug/kg	50.2	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
beta-BHC	ND		ug/kg	50.2	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
delta-BHC	ND		ug/kg	50.2	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B

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ANALYTICAL RESULTS

Workorder: 1027255 Priority Pollutants 05/15/13

Lab ID: **1027255003** Date Collected: 5/15/2013 06:30 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 5/16/2013 19:20

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
gamma-BHC	ND		ug/kg	50.2	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Chlordane	ND		ug/kg	2070	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
4,4'-DDD	ND		ug/kg	97.5	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
4,4'-DDE	ND		ug/kg	97.5	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
4,4'-DDT	ND		ug/kg	97.5	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Dieldrin	ND		ug/kg	97.5	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Endosulfan I	ND		ug/kg	50.2	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Endosulfan II	ND		ug/kg	97.5	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Endosulfan Sulfate	ND		ug/kg	97.5	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Endrin	ND		ug/kg	97.5	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Endrin Aldehyde	ND		ug/kg	97.5	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Heptachlor	ND		ug/kg	50.2	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Heptachlor Epoxide	ND		ug/kg	50.2	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Toxaphene	ND		ug/kg	2070	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
Decachlorobiphenyl (S)	106		%	30-150	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
Tetrachloro-m-xylene (S)	84		%	30-131	SW846 8081B	5/23/13	RMP	5/29/13 15:04	KJH	B
WET CHEMISTRY										
Cyanide, Total	ND		mg/kg	1.5	SW846 9012B	5/22/13	SYB	5/22/13 17:17	JEP	B2
Moisture	83.3		%	0.1	SM20-2540 G			5/20/13 10:21	CF	A
Phenolics	28.2		mg/kg	2.9	SW846 9066	5/23/13	SYB	5/23/13 16:30	JPA	B
Total Solids	16.7		%	0.1	SM20-2540 G			5/20/13 10:21	CF	A
METALS										
Antimony, Total	ND		mg/kg	10.7	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1
Arsenic, Total	ND		mg/kg	10.7	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1
Beryllium, Total	ND		mg/kg	5.3	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1
Cadmium, Total	2.9		mg/kg	2.7	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1
Chromium, Total	21.1		mg/kg	5.3	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1
Copper, Total	459		mg/kg	10.7	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1
Lead, Total	55.2		mg/kg	10.7	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1
Mercury, Total	1.5		mg/kg	0.29	SW846 7471B	5/28/13	MNP	5/28/13 15:26	MNP	B3
Nickel, Total	26.1		mg/kg	10.7	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1
Selenium, Total	ND		mg/kg	26.7	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1
Silver, Total	11.8		mg/kg	2.7	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1
Thallium, Total	ND		mg/kg	16.0	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1
Zinc, Total	603		mg/kg	10.7	SW846 6010C	5/21/13	ZMC	5/28/13 09:49	SRT	B1

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ANALYTICAL RESULTS

Workorder: 1027255 Priority Pollutants 05/15/13

Lab ID:	**1027255003**	Date Collected:	5/15/2013 06:30	Matrix:	Solid
Sample ID:	**Centrifuge Cake**	Date Received:	5/16/2013 19:20		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr

Sample Comments:

This sample was analyzed at a dilution in the 8081 Pesticide analysis due to sample matrix interference. Reporting limits were adjusted accordingly.

Anna G Milliken
Technical Manager

ALS Environmental

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 1027255 Priority Pollutants 05/15/13

PARAMETER QUALIFIERS\FLAGS

[1] The surrogate Terphenyl-d14 for method EPA 625 was outside of control limits. The % Recovery was reported as 247 and the control limits were 33 to 125. This result was reported at a dilution of 1.

[2] The QC sample type LCS for method 8260/5035 was outside the control limits for the analyte Bromomethane. The % Recovery was reported as 38.8 and the control limits were 41 to 143.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALS Environmental

Ship to: 34 Dogwood Lane • Middletown, PA 17057 • 717.944.5541 • Fax: 717.944.1430

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1

Courier:

Tracking #:

* 1 0 2 7 2 5 5 *

Co. Name: YORK CITY WWTP

Contact (Report to): JOSEPH CONCINO Phone: 845-2794

Address: 1701 BLACK BRIDGE ROAD YORK, PA 17402

Bill to (if different than Report to):

PO#: 13-100390

Project Name/#: PRIORITY POLLUTANTS ALS Quote #: 206062

TAT: [X] Normal-Standard TAT is 10 business days. [ ] Rush-Subject to ALS approval and surcharges.

Date Required:

Approved By:

Email? [X] Y JCONCINO@YORKCITY.ORG

Fax? [ ] Y No.:

***Container Type					GL	GL	PL	GL	GL	GL	[illegible]	[illegible]	GL	PL
***Container Size					40ml	1L	0.5L	0.5L	1L	1L	[illegible]	[illegible]	1L	0.5L
***Preservative					HCl	—	NaOH	H_2SO_4	—	—	[illegible]	[illegible]	—	HNO_3
ANALYSES/METHOD REQUESTED					VOC's 624	SVOC's 625	CYANIDE	PHENOLICS	PESTICIDES & PCB's 608	BNA's 8270	VOC's 8260	PRIORITY POLLUTANT METALS + As, Hg		
Sample Description/Location (as it will appear on the lab report)	Sample Date	Military Time	*G or C	**Matrix	Enter Number of Containers Per Analysis									
1 RAW INFLUENT	5/15/13	0200-2400	C	WW		2	1	1	2			1		
2 RAW INFLUENT	5/15/13	0738	G	WW	2									
3 CENTRIFUGE CAKE	5/15/13	0000-0630	C	SL	X		X	X	X	X	X	X -2-1L BOTTLES		
4														
5														
6														
7														
8														

COC Comments:

Receipt Information (completed by Sample Receiving): Performed by: Initial Here: [initials]

Cooler Temp: 6°

Therm. ID: 58717

No. of Coolers:

Notes:

Circle appropriate Y or N:

Correct containers?	Y	N
Correct sample volume?	Y	N
Correct preservation?	Y	N
Headspace/Volatiles?		N
Custody seals Present?	Y	N
(if present) Seals Intact?	Y	N
Received on ice?	Y	N
COC/Labels complete/accurate?	Y	N
Container in good condition?	Y	N

SAMPLED BY (Please Print):

LOGGED BY (signature): [signature] Date: 5/17/13 Time: 0845

REVIEWED BY (signature): [signature]

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature] YORK CITY	5/16/13	0947	2 [signature] ALS	5/16/13	0947
3 [signature] ALS	5/16/13		4 [signature]	5/16/13	11:15
5 [signature]	5/16/13	1920	6 [signature] /ALS	5/16/13	1920
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)

EDDs Required? [ ] If yes, format type:

SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ] Other

State Samples Collected In? MD [ ] NJ [ ] NY [ ] PA [ ]

Enter PWSID No.

DOD Criteria Required?

ALS FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite

**Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.

Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY

Rev 6/2011

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September 11, 2013

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	**PP SCANS AND LOCAL LIMITS -**	Workorder:	**1044162**
Purchase Order:		Workorder ID:	**WW Local Limits 08/21/13**

Dear Mr. Concino,

Enclosed are the analytical results for samples received by the laboratory on Thursday, August 22, 2013.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Shannon Butler (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS York: 978 Loucks Mill Road, York, PA 17402 717-505-5280

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Shannon Butler
Project Coordinator

ALS Environmental

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SAMPLE SUMMARY

Workorder 1044162 WW Local Limits 08/21/13 Discard Date: 09/25/2013

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
1044162001	Raw Influent	Waste Water	8/21/13 00:00	8/22/13 16:50	Customer
1044162002	002 Effluent	Waste Water	8/21/13 00:00	8/22/13 16:50	Customer
1044162003	Raw Influent Grab	Waste Water	8/21/13 13:05	8/22/13 16:50	Customer
1044162004	002 Effluent Grab	Waste Water	8/21/13 12:50	8/22/13 16:50	Customer
1044162005	Centrifuge Cake	Solid	8/20/13 13:00	8/22/13 16:50	Customer

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" not listed under the header "Field Parameters" are performed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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ANALYTICAL RESULTS

Workorder 1044162 WW Local Limits 08/21/13

Lab ID: **1044162001** Date Collected: 8/21/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent** Date Received: 8/22/2013 16:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	8/30/13	JEP	8/30/13 15:41	SYB	A1
METALS										
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	8/27/13	KMK	8/30/13 09:47	JWK	B2
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	8/27/13	KMK	8/30/13 09:47	JWK	B2
Chromium, Total	0.0025		mg/L	0.0010	EPA 200.8	8/26/13	KMK	8/28/13 13:11	MWO	B1
Copper, Total	0.052		mg/L	0.0050	EPA 200.7	8/27/13	KMK	8/30/13 09:47	JWK	B2
Lead, Total	0.0087		mg/L	0.0030	EPA 200.7	8/27/13	KMK	8/30/13 09:47	JWK	B2
Mercury, Total (Low-level)	ND		mg/L	0.00020	EPA 245.1	9/3/13	MNP	9/3/13 13:09	MNP	B3
Molybdenum, Total	0.037		mg/L	0.010	EPA 200.7	8/27/13	KMK	8/30/13 09:47	JWK	B2
Nickel, Total	0.0033		mg/L	0.0025	EPA 200.8	8/26/13	KMK	8/28/13 13:11	MWO	B1
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	8/26/13	KMK	8/28/13 13:11	MWO	B1
Silver, Total	ND		mg/L	0.0010	EPA 200.8	8/26/13	KMK	8/28/13 13:11	MWO	B1
Zinc, Total	0.12		mg/L	0.010	EPA 200.7	8/27/13	KMK	8/30/13 09:47	JWK	B2

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder 1044162 WW Local Limits 08/21/13

Lab ID: **1044162002** Date Collected: 8/21/2013 00:00 Matrix: Waste Water

Sample ID: **002 Effluent** Date Received: 8/22/2013 16:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	8/30/13	JEP	8/30/13 15:41	SYB	A1
METALS										
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	8/27/13	KMK	8/30/13 09:51	JWK	B2
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	8/27/13	KMK	8/30/13 09:51	JWK	B2
Chromium, Total	ND		mg/L	0.0010	EPA 200.8	8/26/13	KMK	8/28/13 13:51	MWO	B1
Copper, Total	ND		mg/L	0.0050	EPA 200.7	8/27/13	KMK	8/30/13 09:51	JWK	B2
Lead, Total	ND		mg/L	0.0030	EPA 200.7	8/27/13	KMK	8/30/13 09:51	JWK	B2
Mercury, Total (Low-level)	ND		mg/L	0.00020	EPA 245.1	9/3/13	MNP	9/3/13 13:10	MNP	B3
Molybdenum, Total	0.028		mg/L	0.010	EPA 200.7	8/27/13	KMK	8/30/13 09:51	JWK	B2
Nickel, Total	ND		mg/L	0.0025	EPA 200.8	8/26/13	KMK	8/28/13 13:51	MWO	B1
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	8/26/13	KMK	8/28/13 13:51	MWO	B1
Silver, Total	ND		mg/L	0.0010	EPA 200.8	8/26/13	KMK	8/28/13 13:51	MWO	B1
Zinc, Total	0.029		mg/L	0.010	EPA 200.7	8/27/13	KMK	8/30/13 09:51	JWK	B2

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder 1044162 WW Local Limits 08/21/13

Lab ID: **1044162003** Date Collected: 8/21/2013 13:05 Matrix: Waste Water

Sample ID: **Raw Influent Grab** Date Received: 8/22/2013 16:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	24.8		mg/L	2.4	EPA 1664A			8/29/13 13:46	AT	A

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder 1044162 WW Local Limits 08/21/13

Lab ID: **1044162004** Date Collected: 8/21/2013 12:50 Matrix: Waste Water

Sample ID: **002 Effluent Grab** Date Received: 8/22/2013 16:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	ND		mg/L	2.2	EPA 1664A			8/29/13 13:46	AT	A

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder 1044162 WW Local Limits 08/21/13

Lab ID: **1044162005** Date Collected: 8/20/2013 13:00 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 8/22/2013 16:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	ND		mg/kg	1.2	SW846 9012B	9/3/13	JEP	9/4/13 08:54	SYB	A3
Hexane Extractable Material	31500		mg/kg	969	SW846 9071B			8/27/13 16:42	AT	A
Moisture	79.4		%	0.1	S2540G-97			8/26/13 09:41	LEW	A
Silica Gel Treated HEM	16300		mg/kg	969	SW846 9071B			8/27/13 16:42	AT	A
Total Solids	20.6		%	0.1	S2540G-97			8/26/13 09:41	LEW	A
METALS										
Arsenic, Total	ND		mg/kg	9.5	SW846 6010C	8/27/13	KMK	9/3/13 12:44	SRT	A2
Cadmium, Total	ND		mg/kg	2.4	SW846 6010C	8/27/13	KMK	9/3/13 12:44	SRT	A2
Chromium, Total	ND		mg/kg	4.8	SW846 6010C	8/27/13	KMK	9/3/13 12:44	SRT	A2
Copper, Total	168		mg/kg	9.5	SW846 6010C	8/27/13	KMK	9/3/13 12:44	SRT	A2
Lead, Total	18.4		mg/kg	9.5	SW846 6010C	8/27/13	KMK	9/3/13 12:44	SRT	A2
Mercury, Total	1.4		mg/kg	0.24	SW846 7471B	9/5/13	MNP	9/5/13 15:13	MNP	A4
Molybdenum, Total	ND		mg/kg	9.5	SW846 6010C	8/27/13	KMK	9/3/13 12:44	SRT	A2
Nickel, Total	ND		mg/kg	9.5	SW846 6010C	8/27/13	KMK	9/3/13 12:44	SRT	A2
Selenium, Total	ND		mg/kg	23.8	SW846 6010C	8/27/13	KMK	9/3/13 12:44	SRT	A2
Silver, Total	ND		mg/kg	2.4	SW846 6010C	8/27/13	KMK	9/3/13 12:44	SRT	A2
Zinc, Total	267		mg/kg	9.5	SW846 6010C	8/27/13	KMK	9/3/13 12:44	SRT	A2

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental
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September 17, 2013

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	**2011-ADDITIONAL TESTING**	Workorder:	**1044161**
Purchase Order:	**13-100392**	Workorder ID:	**Add'l Local Limits 08/21/13**

Dear Mr. Concino,

Enclosed are the analytical results for samples received by the laboratory on Thursday, August 22, 2013.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Shannon Butler (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

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Shannon Butler
Project Coordinator

ALS Environmental

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 1044161 Add'l Local Limits 08/21/13 Discard Date: 10/01/2013

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
1044161001	Raw Influent	Waste Water	8/21/13 00:00	8/22/13 16:50	Customer
1044161002	T2 Mixed Liquor	Waste Water	8/21/13 00:00	8/22/13 16:50	Customer
1044161003	Centrifuge Cake	Solid	8/20/13 13:00	8/22/13 16:50	Customer

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

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State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 1044161 Add'l Local Limits 08/21/13

Lab ID: **1044161001** Date Collected: 8/21/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent** Date Received: 8/22/2013 16:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
bis(2-Ethylhexyl)phthalate	107		ug/L	2.9	EPA 625	8/26/13	RMP	8/27/13 00:44	CGS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	115		%	38-134	EPA 625	8/26/13	RMP	8/27/13 00:44	CGS	A
2-Fluorobiphenyl (S)	83.2		%	37-113	EPA 625	8/26/13	RMP	8/27/13 00:44	CGS	A
2-Fluorophenol (S)	45.3		%	17-73	EPA 625	8/26/13	RMP	8/27/13 00:44	CGS	A
Nitrobenzene-d5 (S)	81.4		%	37-124	EPA 625	8/26/13	RMP	8/27/13 00:44	CGS	A
Phenol-d5 (S)	23.3		%	11-53	EPA 625	8/26/13	RMP	8/27/13 00:44	CGS	A
Terphenyl-d14 (S)	158	1	%	33-125	EPA 625	8/26/13	RMP	8/27/13 00:44	CGS	A

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 1044161 Add'l Local Limits 08/21/13

Lab ID: **1044161002** Date Collected: 8/21/2013 00:00 Matrix: Waste Water

Sample ID: **T2 Mixed Liquor** Date Received: 8/22/2013 16:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
METALS										
Copper, Total	1.2		mg/L	0.010	EPA 200.7	8/27/13	KMK	8/30/13 09:41	JWK	A1
Silver, Total	0.021		mg/L	0.0040	EPA 200.7	8/27/13	KMK	8/30/13 09:41	JWK	A1
Zinc, Total	2.0		mg/L	0.020	EPA 200.7	8/27/13	KMK	8/30/13 09:41	JWK	A1

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

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ANALYTICAL RESULTS

Workorder: 1044161 Add'l Local Limits 08/21/13

Lab ID: **1044161003** Date Collected: 8/20/2013 13:00 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 8/22/2013 16:50

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
bis(2-Ethylhexyl)phthalate	15100		ug/kg	475	SW846 8270D	8/27/13	PDK	8/28/13 16:03	DRS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	102		%	37-123	SW846 8270D	8/27/13	PDK	8/28/13 16:03	DRS	A
2-Fluorobiphenyl (S)	107	2	%	45-105	SW846 8270D	8/27/13	PDK	8/28/13 16:03	DRS	A
2-Fluorophenol (S)	70.5		%	35-104	SW846 8270D	8/27/13	PDK	8/28/13 16:03	DRS	A
Nitrobenzene-d5 (S)	79.6		%	41-110	SW846 8270D	8/27/13	PDK	8/28/13 16:03	DRS	A
Phenol-d5 (S)	63		%	40-100	SW846 8270D	8/27/13	PDK	8/28/13 16:03	DRS	A
Terphenyl-d14 (S)	102		%	38-113	SW846 8270D	8/27/13	PDK	8/28/13 16:03	DRS	A
WET CHEMISTRY										
Moisture	79.6		%	0.1	S2540G-97			9/16/13 15:54	AMH	A
Total Solids	20.4		%	0.1	S2540G-97			9/16/13 15:54	AMH	A

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 1044161 Add'l Local Limits 08/21/13

PARAMETER QUALIFIERS\FLAGS

[1] The surrogate Terphenyl-d14 for method EPA 625 was outside of control limits. The % Recovery was reported as 158 and the control limits were 33 to 125. This result was reported at a dilution of 1.

[2] The surrogate 2-Fluorobiphenyl for method SW846 8270D was outside of control limits. The % Recovery was reported as 107 and the control limits were 45 to 105. This result was reported at a dilution of 1.

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ALS Environmental
34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F.717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

Page 1 of 1
Courier:
Tracking #:

1044161

Co. Name: YORK CITY WW. T.P.
Contact (Report to): JOSEPH CONCINO Phone: 845 2794
Address: 1701 BLACK BRIDGE ROAD YORK, PA 17402

Bill to (if different than Report to):
PO#: 13-100392

Project Name/#: ADDITIONAL LOCAL LIMITS ALS Quote #: 235673

TAT: [X] Normal-Standard TAT is 10-12 business days. Date Required:
[ ] Rush-Subject to ALS approval and surcharges. Approved By:

Email? [X] Y JCONCINO@YORKCITY.ORG
Fax? [ ] Y No.:

	***Container Type	***Container Size	***Preservative
BIS 2 ETHYL HEXYL PHTHALATE 625	GL	1L	—
TOTAL Cu, Ag, Zn	PL	0.5L	HNO_3
BIS 2 ETHYL HEXYL PHTHALATE 8270	GL	1L	—

ANALYSES/METHOD REQUESTED — Enter Number of Containers Per Analysis

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	BIS 2 ETHYL HEXYL PHTHALATE 625	TOTAL Cu, Ag, Zn	BIS 2 ETHYL HEXYL PHTHALATE 8270
1 RAW INFLUENT		8/21/13	0000-2400	C	WW	2		
2 T2 MIXED LIQUOR		8/21/13	0000-2400	C	WW		1	
3 CENTRIFUGE CAKE		8/20/13	0800-1300	C	SL			1
4								
5								
6								
7								
8								

Performed by: INITIAL HERE DD
Cooler Temp: 6°
Therm. ID: 58717
No. of Coolers:
Notes:

	Y	N
Correct containers?	(Y)	N
Correct sample volume?	(Y)	N
Correct preservation?	(Y)	N
Headspace/Volatiles?	—	—
Custody seals Present?	Y	(N)
(if present) Seals Intact?	Y	N
Received on ice?	(Y)	N
COC/Labels complete/accurate?	(Y)	N
Container in good condition?	(Y)	N

Circle appropriate Y or N.

SAMPLED BY (Please Print):

Project Comments: ENTERED AT 8/23/13 0344 SLB

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature] - YORK CITY	8/22/13	1101	2 Darlene Joseph ALS	8/22/13	11:01
3 Darlene Joseph ALS	8/22/13		4 Scott A Roeder	8/22/13	1535
5 SLB	9-2?-13	1030	6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)
EDDs Required? [ ] If yes, format type:
SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ] Other
State Samples Collected In? MD [ ] NJ [ ] NY [ ] PA [ ]
DOD Criteria Required?

ALS FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite **Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.
Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY
Rev 01-2013

ALS Environmental

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

December 4, 2013

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	**2011-ADDITIONAL TESTING**	Workorder:	**1060221**
Purchase Order:	**13-100392**	Workorder ID:	**Add. Local Limits 11/21/19**

Dear Mr. Concino,

Enclosed are the analytical results for samples received by the laboratory on Friday, November 22, 2013.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Shannon Butler (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS York: 978 Loucks Mill Road, York, PA 17402 717-505-5280

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

Shannon Butler

Shannon Butler
Project Coordinator

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 1060221 Add. Local Limits 11/21/19 Discard Date: 12/18/2013

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
1060221001	Raw Influent	Waste Water	11/21/13 00:00	11/22/13 21:05	Customer
1060221002	Centrifinge Cake	Solid	11/19/13 23:00	11/22/13 21:05	Customer

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

ALS Environmental

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State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 1060221 Add. Local Limits 11/21/19

Lab ID: **1060221001** Date Collected: 11/21/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent** Date Received: 11/22/2013 21:05

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
bis(2-Ethylhexyl)phthalate	18.5		ug/L	2.8	EPA 625	11/26/13	PDK	12/2/13 22:27	DRS	A

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

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State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 1060221 Add. Local Limits 11/21/19

Lab ID: **1060221002** Date Collected: 11/19/2013 23:00 Matrix: Solid

Sample ID: **Centrifinge Cake** Date Received: 11/22/2013 21:05

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
SEMIVOLATILES										
bis(2-Ethylhexyl)phthalate	13400		ug/kg	2240	SW846 8270D	11/27/13	MMM	11/29/13 08:29	DRS	A
Surrogate Recoveries	*Results*	*Flag*	*Units*	*Limits*	*Method*	*Prepared*	*By*	*Analyzed*	*By*	*Cntr*
2,4,6-Tribromophenol (S)	89.4		%	37-123	SW846 8270D	11/27/13	MMM	11/29/13 08:29	DRS	A
2-Fluorobiphenyl (S)	73.2		%	45-105	SW846 8270D	11/27/13	MMM	11/29/13 08:29	DRS	A
2-Fluorophenol (S)	73		%	35-104	SW846 8270D	11/27/13	MMM	11/29/13 08:29	DRS	A
Nitrobenzene-d5 (S)	75.2		%	41-110	SW846 8270D	11/27/13	MMM	11/29/13 08:29	DRS	A
Phenol-d5 (S)	76.5		%	40-100	SW846 8270D	11/27/13	MMM	11/29/13 08:29	DRS	A
Terphenyl-d14 (S)	86		%	38-113	SW846 8270D	11/27/13	MMM	11/29/13 08:29	DRS	A
WET CHEMISTRY										
Moisture	82.2		%	0.1	S2540G-97			11/25/13 11:30	OA	A
Total Solids	17.8		%	0.1	S2540G-97			11/25/13 11:30	OA	A

Sample Comments:

Shannon Butler
Project Coordinator

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ALS Environmental
34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK

Page 1 of 1
Courier: SA
Tracking #:

1060221

Co. Name: YORK CITY WWTP
Contact (Report to): JOSEPH CONCINO Phone: 845 2794
Address: 1701 BLACK BRIDGE ROAD
YORK, PA 17402

Bill to (if different than Report to): PO#: 13-100392

Project Name/#: AOD, LOCAL LIMITS ALS Quote #: 235673

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? [X] Y JCONCINO@YORKCITY.ORG
Fax? Y No.:

	Container Type	Container Size	Preservative
BIS 2 ETHYL HEXYL PHTHALATE 625	GL	1L	—
TOTAL Cu, Ag, Zn	PL		HNO3
BIS 2 ETHYL HEXYL PHTHALATE 8270	GL	1L	—

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	BIS 2 ETHYL HEXYL PHTHALATE 625	TOTAL Cu, Ag, Zn	BIS 2 ETHYL HEXYL PHTHALATE 8270
1 RAW INFLUENT		11/21/13	0000-2400	C	WW	2		
2 T2 MIXED LIQUOR		11/21/13	0000-2400	C	WW		1	
3 CENTRIFUGE CAKE		11/19/13	1530-2300	C	SL			1
4								
5								
6								
7								
8								

Enter Number of Containers Per Analysis

AT 11/23/13 0315
SLB 11/27/13

Performed by: [illegible]
Cooler Temp: 2
Therm. ID: 7725
No. of Coolers:
Notes:

	Y	N
Correct containers?	(Y)	N
Correct sample volume?	(Y)	N
Correct preservation?	(Y)	N
Headspace/Volatiles?		
Custody seals Present?	Y	(N)
(if present) Seals Intact?	Y	N
Received on ice?	(Y)	N
COC/Labels complete/accurate?	(Y)	N
Container in good condition?	(Y)	N

Circle appropriate Y or N.

SAMPLED BY (Please Print):
Project Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature] YORK CITY	11/22/13	0949	2 Darlene Joseph ALS	11/22/13	0949
3 Darlene Joseph ALS	11/22/13		4 [signature]	11-22-13	1726
5 SGB	11-22-13	2105	6 [signature]	11/22/13	2105
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)
EDDs Required? [ ] If yes, format type:
SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ] Other
State Samples Collected In? MD [ ] NJ [ ] NY [ ] PA [ ]
DOD Criteria Required?

ALS FIELD SERVICES: [ ] Pickup [ ] Labor [ ] Composite Sampling [ ] Rental Equipment [ ] Other:

* G=Grab; C=Composite **Matrix: AI=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.
Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY Rev 01-2013

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

December 12, 2013

Mr. Joe Concino
York, City of (WWTP)
1701 Blackridge Road
York, PA 17405

Certificate of Analysis

Project Name:	**PP SCANS AND LOCAL LIMITS -**	Workorder:	**1060220**
Purchase Order:	**13-100389**	Workorder ID:	**Local Limits 11/22/13**

Dear Mr. Concino,

Enclosed are the analytical results for samples received by the laboratory on Friday, November 22, 2013.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Shannon Butler (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS York: 978 Loucks Mill Road, York, PA 17402 717-505-5280

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

Shannon Butler

Shannon Butler
Project Coordinator

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

ALS Environmental

34 Dogwood Lane ■ Middletown, PA 17057 ■ Phone: 717-944-5541 ■ Fax: 717-944-1430 ■ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

SAMPLE SUMMARY

Workorder: 1060220 Local Limits 11/22/13 Discard Date: 12/26/2013

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
1060220001	Raw Influent	Waste Water	11/21/13 00:00	11/22/13 21:05	Customer
1060220002	002 Effluent	Waste Water	11/21/13 00:00	11/22/13 21:05	Customer
1060220003	Raw Influent	Waste Water	11/21/13 13:30	11/22/13 21:05	Customer
1060220004	002 Effluent	Waste Water	11/21/13 13:20	11/22/13 21:05	Customer
1060220005	Centrifuge Cake	Solid	11/19/13 23:00	11/22/13 21:05	Customer

Workorder Comments:

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as “analyze immediately” require analysis within 15 minutes of collection. Any “analyze immediately” parameters not listed under the header “Field Parameters” are performed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.

Standard Acronyms/Flags

J, B	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference

ALS Environmental

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: CT PH-0224 , DE ID 11 , GA 914 , MA PA0102 , MD 128 , LA 04162 , VA 421 , WY EPA Region 8 , WV 343

ANALYTICAL RESULTS

Workorder: 1060220 Local Limits 11/22/13

Lab ID: **1060220001** Date Collected: 11/21/2013 00:00 Matrix: Waste Water

Sample ID: **Raw Influent** Date Received: 11/22/2013 21:05

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	11/25/13	JEP	11/26/13 15:50	AKC	A1
METALS										
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	12/5/13	LAM	12/6/13 15:20	SRT	B2
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	12/5/13	LAM	12/6/13 15:20	SRT	B2
Chromium, Total	0.0026		mg/L	0.0010	EPA 200.8	12/3/13	MRT	12/10/13 01:30	ZMC	B1
Copper, Total	0.061		mg/L	0.0050	EPA 200.7	12/5/13	LAM	12/6/13 15:20	SRT	B2
Lead, Total	0.014		mg/L	0.0030	EPA 200.7	12/5/13	LAM	12/6/13 15:20	SRT	B2
Mercury, Total (Low-level)	0.00034		mg/L	0.00020	EPA 245.1	12/9/13	MNP	12/9/13 13:58	MNP	B3
Molybdenum, Total	0.021		mg/L	0.010	EPA 200.7	12/5/13	LAM	12/6/13 15:20	SRT	B2
Nickel, Total	0.0037		mg/L	0.0025	EPA 200.8	12/3/13	MRT	12/10/13 01:30	ZMC	B1
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	12/3/13	MRT	12/10/13 01:30	ZMC	B1
Silver, Total	0.0013		mg/L	0.0010	EPA 200.8	12/3/13	MRT	12/10/13 01:30	ZMC	B1
Zinc, Total	0.14		mg/L	0.010	EPA 200.7	12/5/13	LAM	12/6/13 15:20	SRT	B2

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 1060220 Local Limits 11/22/13

Lab ID: **1060220002** Date Collected: 11/21/2013 00:00 Matrix: Waste Water

Sample ID: **002 Effluent** Date Received: 11/22/2013 21:05

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	ND		mg/L	0.0050	EPA 335.4	11/25/13	JEP	11/26/13 15:50	AKC	A1
METALS										
Arsenic, Total	ND		mg/L	0.0050	EPA 200.7	12/5/13	LAM	12/6/13 15:25	SRT	B2
Cadmium, Total	ND		mg/L	0.0010	EPA 200.7	12/5/13	LAM	12/6/13 15:25	SRT	B2
Chromium, Total	ND		mg/L	0.0010	EPA 200.8	12/3/13	MRT	12/10/13 01:33	ZMC	B1
Copper, Total	ND		mg/L	0.0050	EPA 200.7	12/5/13	LAM	12/6/13 15:25	SRT	B2
Lead, Total	ND		mg/L	0.0030	EPA 200.7	12/5/13	LAM	12/6/13 15:25	SRT	B2
Mercury, Total (Low-level)	ND		mg/L	0.00020	EPA 245.1	12/9/13	MNP	12/9/13 13:59	MNP	B3
Molybdenum, Total	0.028		mg/L	0.010	EPA 200.7	12/5/13	LAM	12/6/13 15:25	SRT	B2
Nickel, Total	ND		mg/L	0.0025	EPA 200.8	12/3/13	MRT	12/10/13 01:33	ZMC	B1
Selenium, Total	ND		mg/L	0.0020	EPA 200.8	12/3/13	MRT	12/10/13 01:33	ZMC	B1
Silver, Total	ND		mg/L	0.0010	EPA 200.8	12/3/13	MRT	12/10/13 01:33	ZMC	B1
Zinc, Total	0.044		mg/L	0.010	EPA 200.7	12/5/13	LAM	12/6/13 15:25	SRT	B2

Sample Comments:

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Project Coordinator

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ANALYTICAL RESULTS

Workorder: 1060220 Local Limits 11/22/13

Lab ID: **1060220003** Date Collected: 11/21/2013 13:30 Matrix: Waste Water

Sample ID: **Raw Influent** Date Received: 11/22/2013 21:05

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	48.3		mg/L	2.4	EPA 1664B			12/9/13 11:30	TDD	A

Sample Comments:

Shannon Butler
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 1060220 Local Limits 11/22/13

Lab ID: **1060220004** Date Collected: 11/21/2013 13:20 Matrix: Waste Water

Sample ID: **002 Effluent** Date Received: 11/22/2013 21:05

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Oil/Grease Hexane Extractable	ND		mg/L	2.1	EPA 1664B			12/5/13 15:30	AT	A

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 1060220 Local Limits 11/22/13

Lab ID: **1060220005** Date Collected: 11/19/2013 23:00 Matrix: Solid

Sample ID: **Centrifuge Cake** Date Received: 11/22/2013 21:05

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY										
Cyanide, Total	2.1		mg/kg	1.5	SW846 9012B	11/26/13	JEP	11/26/13 17:45	AKC	A2
Hexane Extractable Material	2450	1	mg/kg	1140	SW846 9071B			11/26/13 10:30	AT	A
Moisture	82.5		%	0.1	S2540G-97			11/25/13 11:30	OA	A
Silica Gel Treated HEM	1430	1	mg/kg	1140	SW846 9071B			11/26/13 10:30	AT	A
Total Solids	17.5		%	0.1	S2540G-97			11/25/13 11:30	OA	A
METALS										
Arsenic, Total	ND		mg/kg	10.2	SW846 6010C	11/26/13	MRT	11/27/13 02:54	SRT	A1
Cadmium, Total	3.1		mg/kg	2.5	SW846 6010C	11/26/13	MRT	11/27/13 02:54	SRT	A1
Chromium, Total	31.8		mg/kg	5.1	SW846 6010C	11/26/13	MRT	11/27/13 02:54	SRT	A1
Copper, Total	485		mg/kg	10.2	SW846 6010C	11/26/13	MRT	11/27/13 02:54	SRT	A1
Lead, Total	91.4		mg/kg	10.2	SW846 6010C	11/26/13	MRT	11/27/13 02:54	SRT	A1
Mercury, Total	1.4		mg/kg	0.25	SW846 7471B	12/9/13	MNP	12/9/13 15:34	MNP	A3
Molybdenum, Total	28.1		mg/kg	10.2	SW846 6010C	11/26/13	MRT	11/27/13 02:54	SRT	A1
Nickel, Total	25.2		mg/kg	10.2	SW846 6010C	11/26/13	MRT	11/27/13 02:54	SRT	A1
Selenium, Total	ND		mg/kg	25.5	SW846 6010C	11/26/13	MRT	11/27/13 02:54	SRT	A1
Silver, Total	8.4		mg/kg	2.5	SW846 6010C	11/26/13	MRT	11/27/13 02:54	SRT	A1
Zinc, Total	858		mg/kg	10.2	SW846 6010C	11/26/13	MRT	11/27/13 02:54	SRT	A1

Sample Comments:

Shannon Butler
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS QUALIFIERS\FLAGS

Workorder: 1060220 Local Limits 11/22/13

PARAMETER QUALIFIERS\FLAGS

[1] The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits.

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ALS Environmental
34 Dogwood Lane
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK

Page 1 of 1
Courier:
Tracking #: SA

1060220

Co. Name: YORK CITY WWTP
Contact (Report to): JOSEPH CONCINO Phone: 8452794
Address: 1701 BLACK BRIDGE ROAD
YORK, PA 17402

Bill to (if different than Report to):
PO#: 13-100389

Project Name/#: LOCAL LIMITS ALS Quote #: 206062

TAT: [X] Normal-Standard TAT is 10-12 business days. [ ] Rush-Subject to ALS approval and surcharges.
Date Required:
Approved By:

Email? [X] Y JCONCINO@YORKCITY.ORG
Fax? Y No.:

				***Container Type	PL	PL	GL	GL	GL						
				***Container Size	0.5L	0.5L	1L	1L	1L						
				*** Preservative	HNO_3	NaOH	H_2SO_4	—	—						
				ANALYSES/METHOD REQUESTED	TOTAL As, Cd, Cu, Mo, Pb, Zn, Ag, Cr, Ni, SE, Hg	CYANIDE	OIL & GREASE 1664	TOTAL SOLIDS	OIL + GREASE 9071B						
Sample Description/Location (as it will appear on the lab report)	COC Comments	Sample Date	Military Time	*G or C	**Matrix	Enter Number of Containers Per Analysis									
1 RAW INFLUENT		11/21/13	0000-2400	C	WW	1	1								
2 002 EFFLUENT		11/21/13	0000-2400	C	WW	1	1								
3 RAW INFLUENT		11/21/13	1330	G	WW			2							
4 002 EFFLUENT		11/21/13	1320	G	WW			2							
5 CENTRIFUGE CAKE	[illegible]	11/19/13	[illegible] 1530-2300	C	SL	X	X		X	X - 1 BOTTLE					
6	AT 11/23/13 0314														
7															
8	SLB 11/27														

(completed by sample receiving)
Performed by: AT
Cooler Temp: 3
Therm. ID: 17215
No. of Coolers:
Notes:

Circle appropriate Y or N.
Correct containers? (Y) N
Correct sample volume? (Y) N
Correct preservation? (Y) N
Headspace/Volatiles? Y N

Custody seals Present? Y (N)
(If present) Seals Intact? Y N
Received on ice? (Y) N
COC/Labels complete/accurate? (Y) N
Container in good condition? (Y) N

SAMPLED BY (Please Print):
Project Comments:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 [signature] YORK CITY	11/22/13	0949	2 Darlene Joseph ALS	11/22/13	0949
3 Darlene Joseph ALS	11/22/13		4 Scott [signature]	11-22-13	1730
5 [signature]	11-22-13	2105	6		
7			8		
9			10		

Data Deliverables: [ ] Standard [ ] CLP-like [ ] NJ-Reduced [ ] NJ-Full [ ] (other)
EDDs Required? [ ] If yes, format type:
SDWA Forms? yes [ ] yes [ ] yes [ ] yes [ ] Other
State Samples Collected In? MD [ ] NJ [ ] NY [ ] PA [ ]
DOD Criteria Required?

ALS FIELD SERVICES
[ ] Pickup
[ ] Labor
[ ] Composite Sampling
[ ] Rental Equipment
[ ] Other:

* G=Grab; C=Composite **Matrix: Al=Air; DW=Drinking Water; GW=Groundwater; OI=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater
Copies: WHITE - ORIGINAL CANARY - CUSTOMER COPY ***Container Type: AG-Amber Glass; CG-Clear Glass, PL-Plastic. Container Size: 250ml, 500ml, 1L, 8oz., etc. Preservative: HCl, HNO3, NaOH, etc.
Rev 01-2013

PENN STATE

Agricultural Analytical Services Laboratory
College of Agricultural Sciences
The Pennsylvania State University
University Park, PA 16802

Phone: 814-863-0841
Fax: 814-863-4540
Web: www.aasl.psu.edu

PA DEP Lab ID # 14-00588

Analysis Report for Use of Biosolids on Cropland

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E15656
Date Received: January 11, 2013
Date Sampled: 1/9/13
Report Date: 1/28/13
Sample type: Composite
County: York
Customer Sample ID: Centrifuge Cake

RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
@ 21.9 C	— % —	% (dry weight basis)										
8.2	18.54	81.87	6.52	5.63	0.89	2.08	0.44	0.37	3.11	0.06	0.86	0.34

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive CN
mg/kg (dry weight basis)												
202.3	2.35	1.93	19.2	380.7	57.3	0.82	19.3	22.9	5.47	578.5	< .15	< 1

NR-Not Requested One dry ton of this material is equivalent to 1293 gallons of wet material or 5.4 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	6.52	0.77	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	4.77	2.40	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.53		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Brooks	1/21/2013	7:08:25
As	3050B + 6010	Brooks	1/21/2013	7:08:25
Se	3050B + 6010	Brooks	1/21/2013	7:08:25
Hg	7473	Rishel	1/21/2013	2:37:51 PM
PCB[1]	8082			

[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg		Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	1.950	1.950	1.950	0.277		1.950	1.950	1.950	1.950	1.950
Analyte conc. in sample/ digest (mg/L except Hg)	0.017	0.014	2.75	0.042	ug	0.14	0.17	0.41	0.04	4.18
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010	ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis

Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:
51.46				

Sample Receipt

ID: E15656

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION

	mg/kg	*Acceptable* — *Pollutant Limit* — *Acceptable-increased monitoring* — *Ceiling Limit* — *Exceeds ceiling limits*
As	2.35	0 - - - - 41 - - - - 75 - - - -
Cd	1.93	0 - - - - 39 - - - - 85 - - - -
Cu	380.7	0 - - - - 1500 - - - - 4300 - - - -
Pb	57.3	0 - - - - 300 - - - - 840 - - - -
Hg	0.82	0 - - - - 17 - - - - 57 - - - -
Mo	19.3	0 - - - - 75 - - - -
Ni	22.9	0 - - - - 420 - - - -
Se	5.47	0 - - - - 100 - - - -
Zn	578.5	0 - - - - 2800 - - - - 7500 - - - -
PCB[1]	< .15	0 - - - - 4 - - - - 8.6 - - - -

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PA DEP Lab ID # 14-00588

Biosolids Analysis Report

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E15656
Date Received: January 11, 2013
Date Sampled: 1/9/13
County: York
Customer Sample ID: Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed	Result	Units	Sample Detection Limit
pH	8.15	—	—
Solids	18.54	%	—
Total Phosphorus	20,827	mg/kg	34.57
Total Potassium	4,380	mg/kg	69.14
Total Combustion Nitrogen	6.52	%	-
Ammonium Nitrogen	0.89	%	0.01
Nitrate	51.46	mg/kg	1.06
Cadmium	1.93	mg/kg	0.69
Copper	380.7	mg/kg	2.07
Nickel	22.9	mg/kg	1.38
Lead	57.3	mg/kg	3.46
Zinc	578.5	mg/kg	6.91
Mercury	0.82	mg/kg	0.02
Arsenic	2.35	mg/kg	2.07
Molybdenum	19.33	mg/kg	2.07
Selenium	5.47	mg/kg	3.46
PCBs	< .15	mg/kg	0.15

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University Park, PA 16802

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Fax: 814-863-4540
Web: www.aasl.psu.edu

PA DEP Lab ID # 14-00588

Analysis Report for Use of Biosolids on Cropland

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E15758
Date Received: March 5, 2013
Date Sampled: 3/1/13
Report Date: 3/26/13
Sample type: Composite
County: York
Customer Sample ID: Centrifuge Cake

RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
@ 24.4 C	— % —	% (dry weight basis)										
7.8	18.59	82.05	6.70	6.09	0.61	1.87	0.36	0.41	2.76	0.05	0.79	0.30

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive CN
mg/kg (dry weight basis)												
147.6	2.91	2.39	18.2	389.7	54.4	1.48	20.3	19.6	6.37	567.3	< .37	< 1

NR-Not Requested One dry ton of this material is equivalent to 1290 gallons of wet material or 5.4 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	6.70	0.75	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	4.29	2.67	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.44		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Brooks	3/15/2013	13:31:26
As	3050B + 6010	Brooks	3/15/2013	13:31:26
Se	3050B + 6010	Brooks	3/15/2013	13:31:26
Hg	7473	Rishel	3/14/2013	11:33:08 AM
PCB[1]	8082			

[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg		Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	1.657	1.657	1.657	0.246		1.657	1.657	1.657	1.657	1.657
Analyte conc. in sample/ digest (mg/L except Hg)	0.018	0.015	2.40	0.067	ug	0.13	0.12	0.34	0.04	3.50
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010	ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis

Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:
6.29				

Sample Receipt

ID: E15758

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION

	mg/kg	*Acceptable* — *Pollutant Limit* — *Acceptable-increased monitoring* — *Ceiling Limit* — *Exceeds ceiling limits*
As	2.91	0 - - - - 41 - - - - 75 - - - -
Cd	2.39	0 - - - - 39 - - - - 85 - - - -
Cu	389.7	0 - - - - 1500 - - - - 4300 - - - -
Pb	54.4	0 - - - - 300 - - - - 840 - - - -
Hg	1.48	0 - - - - 17 - - - - 57 - - - -
Mo	20.3	0 - - - - 75 - - - -
Ni	19.6	0 - - - - 420 - - - -
Se	6.37	0 - - - - 100 - - - -
Zn	567.3	0 - - - - 2800 - - - - 7500 - - - -
PCB[1]	< .37	0 - - - - 4 - - - - 8.6 - - - -

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PA DEP Lab ID # 14-00588

Biosolids Analysis Report

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E15758
Date Received: March 5, 2013
Date Sampled: 3/1/13
County: York
Customer Sample ID: Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed	Result	Units	Sample Detection Limit
pH	7.82	—	—
Solids	18.59	%	—
Total Phosphorus	18,729	mg/kg	40.58
Total Potassium	3,646	mg/kg	81.16
Total Combustion Nitrogen	6.70	%	-
Ammonium Nitrogen	0.61	%	0.01
Nitrate	6.29	mg/kg	1.05
Cadmium	2.39	mg/kg	0.81
Copper	389.7	mg/kg	2.43
Nickel	19.6	mg/kg	1.62
Lead	54.4	mg/kg	4.06
Zinc	567.3	mg/kg	8.12
Mercury	1.48	mg/kg	0.02
Arsenic	2.91	mg/kg	2.43
Molybdenum	20.32	mg/kg	2.43
Selenium	6.37	mg/kg	4.06
PCBs	< .37	mg/kg	0.37

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PA DEP Lab ID # 14-00588

Analysis Report for Use of Biosolids on Cropland

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E15844
Date Received: May 3, 2013
Date Sampled: 5/1/13
Report Date: 5/17/13
Sample type: Composite
County: York
Customer Sample ID: Centrifuge Cake

RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
@ 22.1 C	— % —					% (dry weight basis)						
8.2	15.61	80.10	7.91	6.98	0.93	2.30	0.23	0.44	3.37	0.06	0.86	0.35

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive CN
					mg/kg (dry weight basis)							
183.5	2.52	2.66	23.8	493.4	62.5	1.37	24.9	24.4	7.71	654.8	< .44	< 1

NR-Not Requested One dry ton of this material is equivalent to 1536 gallons of wet material or 6.4 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	7.91	0.63	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	5.26	2.18	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.28		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Brooks	5/14/2013	10:42:47
As	3050B + 6010	Brooks	5/14/2013	10:42:47
Se	3050B + 6010	Brooks	5/14/2013	10:42:47
Hg	7473	Brooks	5/14/2013	2:34:28 PM
PCB[1]	8082			

[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg		Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.710	2.710	2.710	0.328		2.710	2.710	2.710	2.710	2.710
Analyte conc. in sample/ digest (mg/L except Hg)	0.021	0.023	4.17	0.070	ug	0.21	0.21	0.53	0.07	5.54
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010	ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis

Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:
11.31				

Sample Receipt

ID: E15844

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION

	mg/kg	*Acceptable*	*Pollutant Limit*	*Acceptable-increased monitoring*	*Ceiling Limit*	*Exceeds ceiling limits*
As	2.52	0	41		75	
Cd	2.66	0	39		85	
Cu	493.4	0	1500		4300	
Pb	62.5	0	300		840	
Hg	1.37	0	17		57	
Mo	24.9	0	75			
Ni	24.4	0	420			
Se	7.71	0	100			
Zn	654.8	0	2800		7500	
PCB[1]	< .44	0	4		8.6	

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PA DEP Lab ID # 14-00588

Biosolids Analysis Report

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E15844
Date Received: May 3, 2013
Date Sampled: 5/1/13
County: York
Customer Sample ID: Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed	Result	Units	Sample Detection Limit
pH	8.20	—	—
Solids	15.61	%	—
Total Phosphorus	22,979	mg/kg	29.54
Total Potassium	2,347	mg/kg	59.09
Total Combustion Nitrogen	7.91	%	-
Ammonium Nitrogen	0.93	%	0.01
Nitrate	11.31	mg/kg	1.26
Cadmium	2.66	mg/kg	0.59
Copper	493.4	mg/kg	1.77
Nickel	24.4	mg/kg	1.18
Lead	62.5	mg/kg	2.95
Zinc	654.8	mg/kg	5.91
Mercury	1.37	mg/kg	0.02
Arsenic	2.52	mg/kg	1.77
Molybdenum	24.93	mg/kg	1.77
Selenium	7.71	mg/kg	2.95
PCBs	< .44	mg/kg	0.44

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PA DEP Lab ID # 14-00588

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

ANALYSIS REPORT

5/17/2013

Lab ID	Sample ID	Solids	Water Extractable P*	P Source Coefficient
		%	mg/kg (dry weight basis)	
E15844	Centrifuge Cake	15.61	1736.58	0.20

*1:100 (w:w, solids:water) extraction ratio

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PA DEP Lab ID # 14-00588

Analysis Report for Use of Biosolids on Cropland

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E15927
Date Received: July 3, 2013
Date Sampled: 7/2/13
Report Date: 7/19/13
Sample type: Composite
County: York
Customer Sample ID: Centrifuge Cake

RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
@ 22.3 C	— % —					% (dry weight basis)						
8.1	16.04	78.26	6.74	5.81	0.93	2.18	0.20	0.45	3.51	0.05	0.92	0.35

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive CN
					mg/kg (dry weight basis)							
170.3	3.07	3.08	19.7	466.9	76.5	0.99	25.5	20.3	8.1	715.8	< .42	< 1

NR-Not Requested One dry ton of this material is equivalent to 1495 gallons of wet material or 6.2 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	6.74	0.74	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	4.99	2.29	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.24		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Brooks	7/12/2013	12:56:39
As	3050B + 6010	Brooks	7/12/2013	12:56:39
Se	3050B + 6010	Brooks	7/12/2013	12:56:39
Hg	7473	Brooks	7/12/2013	12:47:40 PM
PCB[1]	8082			

[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	3.471	3.471	3.471	0.307	3.471	3.471	3.471	3.471	3.471
Analyte conc. in sample/ digest (mg/L except Hg)	0.034	0.034	5.20	0.049 ug	0.28	0.23	0.85	0.09	7.97
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis

Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:
49.97				

Sample Receipt

ID: E15927

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION

	mg/kg	*Acceptable*	*Pollutant Limit*	*Acceptable-increased monitoring*	*Ceiling Limit*	*Exceeds ceiling limits*
As	3.07	0	41		75	
Cd	3.08	0	39		85	
Cu	466.9	0	1500		4300	
Pb	76.5	0	300		840	
Hg	0.99	0	17		57	
Mo	25.5	0	75			
Ni	20.3	0	420			
Se	8.1	0	100			
Zn	715.8	0	2800		7500	
PCB[1]	< .42	0	4		8.6	

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PA DEP Lab ID # 14-00588

Biosolids Analysis Report

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E15927
Date Received: July 3, 2013
Date Sampled: 7/2/13
County: York
Customer Sample ID: Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed	Result	Units	Sample Detection Limit
pH	8.05	—	—
Solids	16.04	%	—
Total Phosphorus	21,803	mg/kg	22.45
Total Potassium	2,028	mg/kg	44.89
Total Combustion Nitrogen	6.74	%	-
Ammonium Nitrogen	0.93	%	0.01
Nitrate	49.97	mg/kg	1.23
Cadmium	3.08	mg/kg	0.45
Copper	466.9	mg/kg	1.35
Nickel	20.3	mg/kg	0.90
Lead	76.5	mg/kg	2.24
Zinc	715.8	mg/kg	4.49
Mercury	0.99	mg/kg	0.02
Arsenic	3.07	mg/kg	1.35
Molybdenum	25.46	mg/kg	1.35
Selenium	8.1	mg/kg	2.24
PCBs	< .42	mg/kg	0.42

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PA DEP Lab ID # 14-00588

Analysis Report for Use of Biosolids on Cropland

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E16012
Date Received: September 6, 2013
Date Sampled: 9/4/13
Report Date: 9/25/13
Sample type: Composite
County: York
Customer Sample ID: Centrifuge Cak

RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
@ 23.4 C	— % —					% (dry weight basis)						
8.0	20.50	77.11	6.08	5.38	0.70	2.34	0.32	0.52	3.02	0.05	1.85	0.40

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive CN
					mg/kg (dry weight basis)							
183.5	2.95	2.45	27.1	441.0	85.5	1.21	20.8	19.8	4.71	739.2	< .61	< 1

NR-Not Requested One dry ton of this material is equivalent to 1170 gallons of wet material or 4.9 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	6.08	0.82	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	5.35	2.14	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.39		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Stecko	9/13/2013	9:03:36
As	3050B + 6010	Stecko	9/13/2013	9:03:36
Se	3050B + 6010	Stecko	9/13/2013	9:03:36
Hg	7473	Brooks	9/13/2013	1:06:14 PM
PCB[1]	8082			

[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg		Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.004	2.004	2.004	0.412		2.004	2.004	2.004	2.004	2.004
Analyte conc. in sample/ digest (mg/L except Hg)	0.024	0.020	3.62	0.102	ug	0.17	0.16	0.70	0.04	6.07
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010	ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis

Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:
2.83				

Sample Receipt

ID: E16012

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION

	mg/kg	*Acceptable*	*Pollutant Limit*	*Acceptable-increased monitoring*	*Ceiling Limit*	*Exceeds ceiling limits*
As	2.95	0	41		75	
Cd	2.45	0	39		85	
Cu	441.0	0	1500		4300	
Pb	85.5	0	300		840	
Hg	1.21	0	17		57	
Mo	20.8	0	75			
Ni	19.8	0	420			
Se	4.71	0	100			
Zn	739.2	0	2800		7500	
PCB[1]	< .61	0	4		8.6	

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PA DEP Lab ID # 14-00588

Biosolids Analysis Report

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E16012
Date Received: September 6, 2013
Date Sampled: 9/4/13
County: York
Customer Sample ID: Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed	Result	Units	Sample Detection Limit
pH	7.95	—	—
Solids	20.50	%	—
Total Phosphorus	23,365	mg/kg	30.42
Total Potassium	3,245	mg/kg	60.84
Total Combustion Nitrogen	6.08	%	-
Ammonium Nitrogen	0.70	%	0.02
Nitrate	2.83	mg/kg	0.94
Cadmium	2.45	mg/kg	0.61
Copper	441.0	mg/kg	1.83
Nickel	19.8	mg/kg	1.22
Lead	85.5	mg/kg	3.04
Zinc	739.2	mg/kg	6.08
Mercury	1.21	mg/kg	0.01
Arsenic	2.95	mg/kg	1.83
Molybdenum	20.76	mg/kg	1.83
Selenium	4.71	mg/kg	3.04
PCBs	< .61	mg/kg	0.61

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PA DEP Lab ID # 14-00588

Analysis Report for Use of Biosolids on Cropland

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: **E16127**
Date Received: November 7, 2013
Date Sampled: 11/5/13
Report Date: 11/22/13
Sample type: Composite
County: York
Customer Sample ID: Centrifuge Cake

RESULTS

pH	Solids	Volatile	Tot-N	Org-N	NH_4N	P	K	Mg	Ca	Na	Fe	Al
@ 21.7 C	— % —	% (dry weight basis)										
8.2	17.28	75.34	6.86	6.00	0.86	2.48	0.20	0.44	3.64	0.05	1.59	0.48

Mn	As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	PCB[1]	Reactive CN
mg/kg (dry weight basis)												
202.1	3.64	2.97	34.1	526.5	101.4	2.06	27.2	24.3	7.41	900.2	< .39	< 1

NR-Not Requested One dry ton of this material is equivalent to 1387 gallons of wet material or 5.8 tons of wet material

PRIMARY NUTRIENT CONTENT

	% (dry wt basis)		
Total N	6.86	0.73	dry tons of this biosolid will supply 100 lbs of total N.
P_2O_5	5.69	2.01	dry tons of this biosolid will supply 100 lbs of P
K_2O	0.24		

ANALYSIS INFORMATION FOR EPA 503 POLLUTANTS

Analyte	EPA SW-846 Method	Analyst	Date	Time
Cd,Cu,Mo,Pb,Ni,Zn	3050B + 6010	Brooks	11/15/2013	9:26:39
As	3050B + 6010	Brooks	11/15/2013	9:26:39
Se	3050B + 6010	Brooks	11/15/2013	9:26:39
Hg	7473	Brooks	11/15/2013	2:09:59 PM
PCB[1]	8082			

[1]Subcontracted to Fairway Laboratories, Inc. (ID 7-00062)

RAW LABORATORY BENCH DATA FOR EPA 503 POLLUTANTS

	As	Cd	Cu	Hg	Mo	Ni	Pb	Se	Zn
Wet Wt. aliquot (g)	2.139	2.139	2.139	0.297	2.139	2.139	2.139	2.139	2.139
Analyte conc. in sample/ digest (mg/L except Hg)	0.027	0.022	3.89	0.106 ug	0.20	0.18	0.75	0.05	6.66
Method limit (mg/L except Hg)	0.015	0.005	0.015	0.0010 ug	0.015	0.010	0.025	0.025	0.050

Optional Analyses: Results (except soluble salts) on dry weight basis

Nitrate-N (mg/kg)	Total Carbon (%)	CCE Calcium Carbonate Equivalent (%)	Soluble Salts (mmhos/cm)	Other:
4.55				

Sample Receipt

ID: E16127

EPA REGULATIONS FOR LAND APPLICATION OF BIOSOLIDS (40 CFR Part 503) and DEP GUIDELINES FOR USE OF BIOSOLIDS FOR AGRICULTURAL UTILIZATION

	mg/kg	*Acceptable*	*Pollutant Limit*	*Acceptable-increased monitoring*	*Ceiling Limit*	*Exceeds ceiling limits*
As	3.64	0	41		75	
Cd	2.97	0	39		85	
Cu	526.5	0	1500		4300	
Pb	101.4	0	300		840	
Hg	2.06	0	17		57	
Mo	27.2	0	75			
Ni	24.3	0	420			
Se	7.41	0	100			
Zn	900.2	0	2800		7500	
PCB[1]	< .39	0	4		8.6	

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PA DEP Lab ID # 14-00588

Biosolids Analysis Report

Joseph Concino
City of York - WWTP
1701 Black Bridge Rd
York PA 17402

Lab Sample ID: E16127
Date Received: November 7, 2013
Date Sampled: 11/5/13
County: York
Customer Sample ID: Centrifuge Cake

RESULTS (Dry Weight Basis)

Parameter Analyzed	Result	Units	Sample Detection Limit
pH	8.15	—	—
Solids	17.28	%	—
Total Phosphorus	24,829	mg/kg	33.81
Total Potassium	2,014	mg/kg	67.62
Total Combustion Nitrogen	6.86	%	-
Ammonium Nitrogen	0.86	%	0.01
Nitrate	4.55	mg/kg	1.14
Cadmium	2.97	mg/kg	0.68
Copper	526.5	mg/kg	2.03
Nickel	24.3	mg/kg	1.35
Lead	101.4	mg/kg	3.38
Zinc	900.2	mg/kg	6.76
Mercury	2.06	mg/kg	0.02
Arsenic	3.64	mg/kg	2.03
Molybdenum	27.17	mg/kg	2.03
Selenium	7.41	mg/kg	3.38
PCBs	< .39	mg/kg	0.39

Appendix K
PADEP Correspondence

The City of York
Pennsylvania

101 S George St ❖ PO Box 509 ❖ York PA 17405
www.yorkcity.org
Honorable C. Kim Bracey, Mayor

Andrew L. Jantzer, PE
General Manager of Wastewater Facilities
Department of Public Works

York City Wastewater Treatment Plant
1701 Black Bridge Road
York, PA 17402

February 26, 2013

Mr. Austin Pardoe
Department of Environmental Protection
Water Management Program
150 Roosevelt Avenue
York, PA 17404

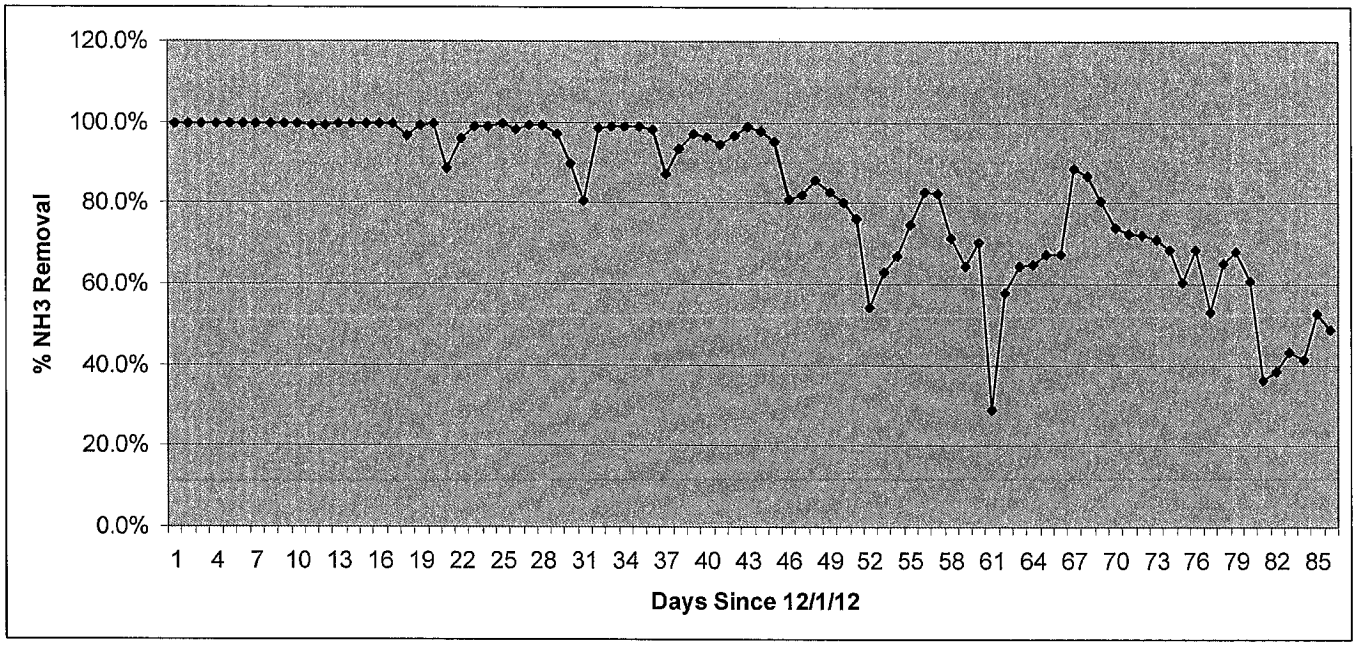
Re: York City WWTP - Nitrification Process Update

Dear Mr. Pardoe:

We are providing you with an update regarding the elevated ammonia levels at the York City treatment plant. As a general event summary, in mid-January 2013, the Train 3 nitrifiers showed signs of a process upset involving diminished capability for removing ammonia. In mid-February, this condition began to appear in Train 2 as well. Besides the ammonia removal impact, the upset includes diminished settleability in the clarifiers which is best characterized as ash bulking as opposed to filamentous bulking. Thus far the only NPDES parameter that is in exceedence due to this condition is effluent ammonia concentration. The January monthly average effluent ammonia is 3.1 mg/L versus a permit limit of 2.1 mg/L. The February monthly average effluent ammonia has so far averaged 7.4 mg/L.

On the following page is a chart that shows daily values of % NH3 Removal starting December 1, 2012. The December data is provided to show a typical month with a monthly ammonia concentration averaging 0.7 mg/L. Starting around Day-45 on the chart, it is apparent that the nitrification process is having serious problems. The ammonia removal performance has continued to steadily degrade ever since. On the positive side, the biota looks healthy and this nitrifier upset had not impacted the ability of the plant to remove the balance of the NPDES pollutants at excellent levels. For example, to date, the February monthly effluent BOD, TSS and PO4 average concentrations are 3, 3, and 0.6 mg/L respectively.

Telephone: 717-845-2794 *Facsimile: 717-845-7342* *Email: ajantzer@yorkcity.org*



As a matter of routine operation, for the purpose of process monitoring and control, the York City treatment plant tests for solids, nitrogen and phosphorus compounds in both trains seven-days per week, and emails the results to the supervisory operating staff. Accordingly, we have taken a number of actions to troubleshoot and correct the process upset since it started in mid-January.

Summary of January Activities:

1. Evaluation of loadings for plant and individual process trains, versus historical loading trends.
2. Evaluation of process control settings versus historical settings and manufacture recommendations.
3. Consultation with the process design engineer.
4. Increase flow split to Train 2 to 30% of plant total.
5. Place third path on-line at Train 3 to increase net aeration by 50%.
6. Return Train 3 to 2-path operation when the increased aeration did not improve the nitrification performance.
7. Transfer 5000 pounds of seed solids from Train 2 to Train 3.
8. Place third clarifier on-line at Train 3 to combat bulking.

Summary of February Activities:

1. Continue evaluation of loadings and process control settings and continue consultation with process design engineer.
2. Periodic microscopic examination and comparison of biota from Train 2 and Train 3 mixed liquor.
3. Commission our process design engineer to prepare BioWin process model at current process settings, in addition to predictive modeling of 3-path mode at Train 3. We elected

not to implement 3-path mode a second time based on the model results. The model and plant history indicates that process should be nitrifying at current settings.
4. Transfer another 5000 pounds of seed solids from Train 2 to Train 3.
5. For two consecutive days, blend in approximately 20% raw sewage to Train 3 (as opposed to 100% primary clarifier effluent) to increase BOD loading.
6. Change anoxic swing zone D at both flow paths in Train 3 to aerobic mode to increase net aeration by about 15%.
7. Adjust wasting rates to correct MLSS changes from previous seeding and flow path adjustments.
8. Assemble nitrification inhibitor list and sample for laboratory examination of inhibitors.

Despite extensive process and data evaluations, we have not been able to locate any specific cause or remedy of the nitrification upset. Historically the BNR process has been very robust at the York City plant. Due to consistent water temperatures that seldom drop below 50-degrees, this plant has historically not experienced nitrifier degradation due to winter temperatures. The plant is also routinely subject to occasional high-ammonia return flows from centrate and digester operations, for which the BNR process historically has accommodated without issues or exceedences.

Due to the historical consistency and stamina of the BNR process at this plant, we are tempted to assign the blame for this sudden degradation on an inhibitory compound received from the collection system, but this conclusion is entirely speculative at this point. We are currently obtaining a 24-hour composite sample of our influent, which will be sent to an analytical lab for analysis of nitrification inhibitors. We expect to have the results back in two weeks.

In the meantime, we plan to keep you informed in event that the nitrification process performance significantly changes from current conditions.

Very truly yours,

Andrew L. Jantzer
General Manager

cc: Jim Gross, Director of Public Works

Telephone: 717-845-2794 *Facsimile: 717-845-7342* *Email: ajantzer@yorkcity.org*

The City of York
Pennsylvania

101 S George St ❖ PO Box 509 ❖ York PA 17405
www.yorkcity.org
Honorable C. Kim Bracey, Mayor

Andrew L. Jantzer, PE
General Manager of Wastewater Facilities
Department of Public Works

York City Wastewater Treatment Plant
1701 Black Bridge Road
York, PA 17402

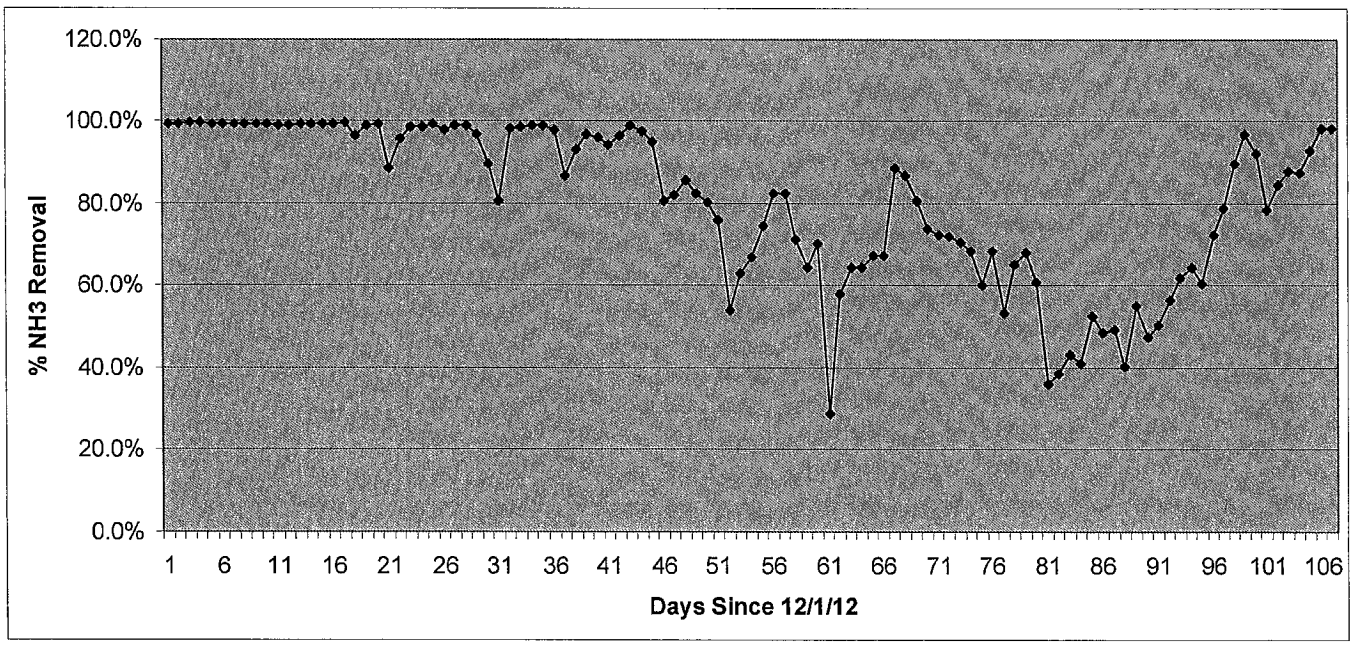
Mr. Austin Pardoe
Department of Environmental Protection
Water Management Program
150 Roosevelt Avenue
York, PA 17404

March 26, 2013

Re: York City WWTP – Nitrification Process Update
NPDES PA0026263

Dear Mr. Pardoe:

We are writing to keep you informed of the current status of the nitrification process at the York plant. Since our March 6 update, the nitrifiers have recovered and the process performance is back to normal. The following chart shows daily values of % NH3 Removal starting December 1, 2012. The chart indicates that ammonia removal efficiencies have recently recovered.



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Due to higher concentrations of ammonia during the first half of March, we are projecting that the March 2013 monthly average ammonia concentration will exceed the NPDES limit of 2.1 mg/L. In subsequent months, we expect that nutrient removals will fully comply with permit limits, based on the current favorable health of the plant process.

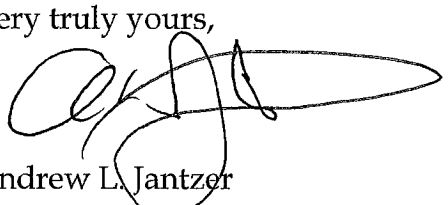
The plant upset which affected the nitrifying bacteria lasted a full 60-day period. Throughout the upset, sufficient process biology existed to remove BOD and phosphorus to normal levels. We speculate that the most likely cause of the upset is a discharge to the collection system of a compound toxic to nitrifiers. A laboratory analysis of our Train 3 influent sampled February 26 was negative for nitrification interference compounds, but a problem discharge would likely have been flushed through the system by the sample date.

As follow-up action, MIPP staff will conduct the following activities to determine an external cause to the BNR process upset. Liquid stream internal processing records for 2012 and 2013 to-date will be evaluated for trends in diminished ammonia processing and to determine if similar less-severe ammonia processing issues occurred prior to the January 2013 event. The internal processing data will also be evaluated to determine if there are data indicators that an upset is commencing so special wastewater sampling can occur immediately. The 2012 priority pollutant scan and local limit sampling data will be compared to historic results to see if parameter concentrations changed: the data will also be compared to the special Train 3 influent toxic compound sample results. Staff will evaluate general compounds that are toxic to nitrifiers, determine industrial sectors where such compounds are common, and determine if such facilities are located with the sewershed.

MIPP staff will visit industrial, commercial and institutional facilities with sizeable cooling towers that may have used larger quantities of algaecides to cause the nitrifier inhibition. Other industrial facilities will be targeted for site visits and inspections based on findings from the above liquid stream processing data, priority pollutants/local limits data, and industrial sector information evaluations.

Let me know if you have and questions regarding this matter.

Very truly yours,



Andrew L. Jantzer
General Manager

cc: Jim Gross, Director of Public Works

The City of York
Pennsylvania

101 S George St ❖ PO Box 509 ❖ York PA 17405
www.yorkcity.org
Honorable C. Kim Bracey, Mayor

Andrew L. Jantzer, PE
General Manager of Wastewater Facilities

York City Wastewater Treatment Plant
1701 Black Bridge Road, York, PA 17402

Austin N. Pardoe
Water Quality Specialist
Department of Environmental Protection
150 Roosevelt Avenue
York, PA 17404

November 27, 2013

RE: Revised Event Report - Storm of 10/10/2013
City of York WWTP

Dear Mr. Pardoe,

We are providing revised status report of the impact of the October 10, 2013 storm event upon the City of York wastewater facilities. This update report reflects additional data analysis and supersedes previous reports of this storm event.

Description of Storm Event and Impact

According to reports by the York Water Company, the York area received 9.15-inches of water over a duration spanning a little less than 32-hours. The storm began in the evening of 10/10/13 and ended in the morning of 10/12/13. Portions of the City collection system were filled with water and we received customer reports of sewage backups into basements in some areas of the City. York City issued a voluntary water curtailment request to all customers through media outlets.

The treatment plant received high sustained flows on 10/11/13 and 10/12/13, with our estimates of the daily volumes as summarized below.

Date	Plant Influent (Mgal)
10/10/2013	20.940
10/11/2013	68.154
10/12/2013	60.214
10/13/2013	27.119

We placed all of our liquid treatment trains on-line during the storm event. The high flows overtopped treatment plant tanks at four specific locations which are described in the following section of this report. The plant is configured to intercept most overflows and divert them back into the plant or to the plant

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stormwater system for chlorination and pumped discharge to Codorus Creek at Outfall 001. Some non-disinfected discharges also occurred, as discussed in the next section.

Through our high flow standard operating procedures (SOPs), we were able to retain a considerable volume of activated sludge during the storm event, so plant biological process recovered very quickly following the storm. By 10/14/13, the plant was removing ammonia and phosphorus at typical levels, which is well below permit limits.

Sewage Bypassed, Discharged Untreated or Discharged Partially Treated

There were no sewage bypasses or discharges of untreated sewage. The high flows caused partially treated process flows to overtop treatment plant tanks at four specific locations.

Sand Filter Influent Box

Final clarifier effluent overtopped the sand filter influent box and traveled directly to an adjacent empty ash lagoon. The ash lagoon drains to the head of the plant, so there was no off-site discharge associated with this tank overflow.

Event	Date Stamp
Overflow Start	10/10/13 19:04
Overflow End	10/12/13 18:30
Total Duration (hrs)	47.43

Date	Duration (hrs)	Volume (gal)
10/10/2013	4.93	29,000
10/11/2013	24	143,000
10/12/2013	18.50	110,000
Total		282,000

Outfall 005 - Train 3 Final Clarifier Scum Box

High hydraulic grade lines in the Train 3 final clarifiers caused surcharging of the final clarifier scum box located next to the Train 3 control building. The overflow from the scum box traveled along a plant driveway drainage ditch, then entered Lightner's Run at Outfall 005 on the plant site. This was a non-disinfected overflow. Some scum was pushed into the yard area and operators subsequently cleaned it up following the storm. The actual stream discharge had the appearance of final clarifier effluent, and there was no visible impact on the stream, which was a muddy torrent in flood stage at the time.

Event	Date Stamp
Overflow Start	10/10/13 22:45
Overflow End	10/12/13 22:32
Total Duration (hrs)	47.78

Date	Duration (hrs)	Volume (gal)
10/10/2013	1.25	9,000
10/11/2013	24	164,000
10/12/2013	22.53	154,000
Total		327,000

On 10/11/13 1410 hours, we sampled Lightner's Run before and after Outfall 005 to test for fecal coliform at the plant lab. Upstream fecal coliform results were 7,500 est. col./100mL and downstream fecal coliform results were 5,900 col./100mL. These results indicate that the non-disinfected overflow did not have an adverse impact on the stream in terms of fecal coliform.

Train 2 Aeration Tank Influent Flumes

Primary effluent overtopped the Train 2 aeration tank influent flumes and drained into the plant stormwater collection system via storm inlets. This is a captured flow. The plant configuration allows this process overflow to combine with stormwater, be chlorinated with sodium hypochlorite and then be pumped to the Codorus Creek via Outfall 001. This overflow is further quantified in the Outfall 001 discussion below.

Train 2 Aeration Tank Effluent

Aeration tank effluent overtopped the northeast corner of the Train 2 aeration tanks and drained into the plant stormwater collection system via storm inlets. This is a captured flow. The plant configuration allows this process overflow to combine with stormwater, be chlorinated with sodium hypochlorite and then be pumped to the Codorus Creek via Outfall 001. Portions of the aeration tank overflow also entered an adjacent final clarifier by overtopping its walls, where it subsequently was subject to sand filtration, UV disinfection and discharge to the Codorus Creek via Outfall 002. This aeration tank overflow is further quantified in the Outfall 001 discussion below.

Outfall 001 - Train 2 Discharges

The Outfall 001 discharge to Codorus Creek included a mixture of process overflows from the Train 2 aeration tank influent flumes and the Train 2 aeration tank effluent; in addition to plant site stormwater and Train 2 final clarifier effluent. The clarifier effluent is manually sent to Outfall 001 and it is the carrying agent for sodium hypochlorite, in order to disinfect the entire mixture prior to release at Outfall 001. As standard procedure, the Outfall 001 discharge was sampled and tested hourly to confirm chlorine residual. The 001 discharge was a submerged discharge with no visible impact on the stream, which was at flood stage.

On 10/11/13 1420 hours and 1430 hours, we sampled Codorus Creek before and after Outfall 001 to test for fecal coliform at the plant lab. Upstream fecal coliform results were 11,200 est. col./100mL and downstream fecal coliform results were 11,800 col./100mL. These results indicate that the 001 discharge did not have a significant impact on the stream in terms of fecal coliform.

For this storm event, there was a 2-hour delay between the start of the Train 2 process overflows and the time that the disinfection was manually started. As a result, this normally chlorinated discharge was not disinfected for an initial two hour period.

Event	Date Stamp	Duration (hrs)	Volume (Mgal)	Remarks
001 Overflow Start	10/11/13 5:30	2.00	0.848	Non-disinfected
001 Disinfection Start	10/11/13 7:30	16.50	6.995	Disinfected
001 Discharge End	10/12/13 6:00	6.00	0.670	Disinfected
Event Total		24.50	8.513	

Outfall 002 - Plant Effluent Discharges

All Outfall 002 plant effluent discharges to Codorus Creek were comprised of disinfected plant effluent. The 002 discharge plume was visibly clearer water than the stream flow, which was at flood stage.

On 10/11/13 1420 hours, we sampled Codorus Creek before and after Outfall 002 to test for fecal coliform at the plant lab. Upstream fecal coliform results were 11,800 est. col./100mL and downstream fecal coliform results were 8,700 col./100mL. These results indicate that the 002 discharge did not have an adverse impact on the stream in terms of fecal coliform.

Corrective Measures Taken and Preventative Measures for Future Storm Events

Sand Filter Influent Box

The sand filter process overflow is a captured flow returned to the head of the plant, so operators did not place a priority on corrective measures. The sand filter influent bypass channel is equipped with "logs" (segmented stop gates) which can be incrementally removed to bypass portions of the flow around the sand filters directly to UV disinfection. By the time the sand filter process overflow was observed, the sand filter loadings were too high to pull a log segment. Once the plant flows started to recede, operators were able to remove a log segment to eliminate this overflow.

In order to prevent sand filter process overflows during future floods, we will revise the high flow SOP to remove log segments before the loadings to the filter get so high as to prevent log removal. An influent flow around 60 mgd would be a good trigger point for this preventative action.

Outfall 005 - Train 3 Final Clarifier Scum Box

During the storm event, operators shut the valves on the gravity drain pipes between the final clarifier scum pits and the Train 3 central scum box, but that corrective action did not stop the scum box overflow. Operating personnel discussed the overflow with the consulting engineer as it occurred during the storm event, but a corrective measure could not be determined at the time.

As a preventative measure, plant personnel investigated the source of the uncontrolled interconnection. Plant personnel discovered that the shutoff valve on one of the clarifier scum box drain lines is failed in the open position. Repair or replacement of this valve and floor stand will involve time to order materials and execute. In the meantime, as a temporary measure, plant personnel are scheduled to install a

temporary plug into the drain line on 12/2/2013. The temporary plug and eventual valve repair will prevent future overflows from this location.

Train 2 Tank Overflows and Outfall 001

During the storm event, corrective measures included the activation of disinfection for Outfall 001 by running sodium hypochlorite feed pumps and opening a slide gate to send a portion of the Train 2 final clarifier effluent to Outfall 001. This diverted portion of the final clarifier effluent receives the sodium hypochlorite and conveys the chlorine residual to Outfall 001.

As a preventative measure, plant personnel investigated the cause of the tank overflows and reviewed strategies for reducing or eliminating the tank overflows with the consulting engineer. The consensus opinion is that the Train 2 final clarifier effluent diversion slide gates were likely setting the hydraulic grade line that resulted in all of the Train 2 tank overflows. Accordingly, Train 2 tank overflows under future high flow conditions will be prevented or minimized by further lowering the Train 2 final clarifier effluent diversion slide gates when the hydraulic grade line in the Train 2 aeration tanks approach overflow elevation. We will revise the wet weather SOP accordingly.

A preventative measure to ensure the 001 flow is disinfected involves training the operators to initiate sodium hypochlorite feed any time that Outfall 001 is used for Train 2 flow diversion, or anytime the treatment plant tanks overflow to the storm system. We plan to reinforce this provision in the high flow SOP, and follow-with up staff training of this important provision by 12/31/2013.

A sustainable preventative measure to the high flow situation is thoughtful investment in collection system policy and projects which emphasize the removal of infiltration/inflow and identified hydraulic restrictions. We are currently developing a sewer main enlargement and replacement project in the Fireside area with portions currently budgeted for 2014 implementation. As a regional facility serving eight municipalities, it is equally important to emphasize I/I removal throughout the tributary collection systems. Accordingly, we are actively meeting with Springettsbury Township and Spring Garden Township to promote an intermunicipal initiative to remove or rehabilitate the Codorus Creek Siphon of the old East York Interceptor, which is a confirmed I/I source. Finally, to address I/I from customer facilities, in November 2013 the City developed an insert for customer bills promoting the removal of downspout and sump pump connections to household plumbing and sanitary piping.

Power Outage Status

There was no power outage at the City of York WWTP associated with this storm event.

Very truly yours,

Andrew L. Jantzer, PE
General Manager

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION
CLEAN WATER PROGRAM

December 26, 2013

York City STP
Attn: Ms. Stacey MacNeal
345 E Market St
York, PA 17403

Re: NPDES Compliance Inspection Report
York City STP
City of York, York County

To Whom it may Concern:

Following your recent inspection, I am forwarding the enclosed material for your review. I hope that it will provide you with the necessary information pertaining to my visit. Please review this material carefully, and feel free to contact me if I may be of any further service. Thank you.

Sincerely,

Austin N. Pardoe

Austin N. Pardoe
Water Quality Specialist
Clean Water Program

Enclosures

3800-FM-BPNPSM0168A 9/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

NPDES COMPLIANCE INSPECTION REPORT

NPDES Permit No.	Mo/Day/Yr	Entry Time	Exit Time	Inspection Type	eFACTS Inspection ID
PA0026263	12/11/2013	~09:30		CEI	

Facility Name: York City STP	Permittee Name: York City Sewer Authority C/O Stacey R. Macneal Katherman, Heim & Perry
Physical Location/Directions: 1701 Black Bridge Road, York, PA 17402	Permit Expiration Date: 1/31/2013
Municipality: York / County: York	Permit Renewal Application Due: Renewal Received 7/30/2012

Facility Type: ■ Sewage ☐ Industrial Waste ☐ Industrial Stormwater ☐ Other:
■ Major ☐ Minor

Responsible Person: Ms. Stacey R. MacNeal Title: Recording Secretary	Certified Operator Required: ■ Yes ☐ No Certified Operator in Responsible Charge: Andrew Jantzer
Permittee Address: 345 E. Market St York, PA 17403	Client ID: 193242 Class-Subclass(es): AE 1-4 Circuit Rider: ☐Yes ■ No
Business Phone: 717-850-3708 Fax: Email:	Business Phone: 717-324-6572 Fax: Email: AJantzer@yorkcity.org

24-Hour Emergency Contact Person / Phone: Plant – 717-845-2794

VIOLATIONS: (list below) ☐ Yes ☐ No ■ Pending Sample Results

Person Interviewed:	Date:	Inspector: Austin N. Pardoe	Date: 12/11/2013
Signature: Will send copy of report.	Phone No.:	Inspector Signature: Austin N. Pardoe	Phone No.: 717-771-4466
Title:		Title: WQS	
Email:		Email: apardoe@pa.gov	

This document is official notification that a representative of the Department of Environmental Protection inspected the above facility. The findings of this inspection are shown above and on any attached pages. Any violations which were noted during the inspection are indicated. Violations may also be discovered upon examination of the results of laboratory analyses of the discharge and review of Department records.

☐ White – Regional Office ☐ Yellow – Responsible Person ☐ Pink - Inspector

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

NPDES COMPLIANCE INSPECTION REPORT

Treatment Process Units
(NPDES Permit Part B)

Water Quality Management Permit No. | All treatment units are as noted in permit: ☐ Yes ☐ No

Treatment Units	Total	On-Line	Inoperable	Comments
Mechanical Bar Screens	2	1		Ok. Use both with additional flow.
Bar Screen Bypass	2	0		Ok.
Grit Removal System	2	2		Ok.
Primary Clarifiers	8	2		Ok. # Varies with flow→want as much BOD as possible.
Treatment Trains	3	2		Train #1 "mothballed"→does not have equipment to run if wanted to.
Aeration Basins	40	24		Ok. 40 Individual aeration tanks. (5 flowpaths-each with 8). See comments for descriptions.
Secondary Clarifiers	6	5		Ok. T2 clarifiers = noticeably more suspended particulates than T3. T3 has weirs around edge of tanks vs. T2 has offset weirs. Operator states that offset weirs in T2 cause this occurrence. T3 Clarifier 3=offline.
Sand Filters	5	5		Ok. Low level tanks=backwashing. High level=filtering.
UV Units	3	1		Ok. Only channel #2 in use.
Digesters	3	2		Did not view.
GBT (gravity belt thickener)	2	1		Did not view.
Centrifuge	2	1		Did not view.

Chemical Additions: Defoamer for outfall. Sodium hypo for emergency disinfection at 001 & for cleaning sand filters. Phosphoric acid-reduces pH for ostara process. Ferric Chloride-phosphorus removal.

☐ White – Regional Office ☐ Yellow – Responsible Person ☐ Pink - Inspector

NPDES COMPLIANCE INSPECTION REPORT

Monitoring, Reporting and Recordkeeping
(NPDES Permit Part A)

On-site laboratory: ☒ Registered ☐ Accredited ☐ N/A ☐ Not Registered/Accredited

On-site analyses: ☒ pH ☒ DO ☒ TRC ☐ All NPDES parameters ☐ None
☒ Other(s): Temp, BOD, CBOD, Ammonia, Nitrate, Nitrite, PO4, TSS, Fecal,TKN

DEP Lab Registration/Accreditation #:67-00645 Lab Supervisor:Joe Concino

Comments:

Contract Laboratory Name: Penn State (for sludge) DEP Lab Accreditation #:

Address & Phone:

Parameters Analyzed:

Comments:

Sample Collection: Influent sampling location: after grit removal

Effluent sampling location: right after UV

Location(s) adequate for representative samples:	☒ Yes	☐ No
Parameters analyzed, sample frequencies and sample types meet permit requirements:	☒ Yes	☐ No
Samples properly preserved during collection, storage and shipping:	☒ Yes	☐ No
Sampler or sample temperature is recorded using NIST traceable thermometer:	☒ Yes	☐ No

Comments:

Composite samples: Being collected: ☒ Yes ☐ No Composites are: ☐ 8-hour ☒ 24-hour ☐ Other

Samples are: ☒ Flow Proportional ☐ Time Proportional

Sampler controlled by: ☒ Influent flow meter ☒ Effluent flow meter

Minimum aliquot volume greater than 100 ml: ☒ Yes (100-150) ☐ No

Composite sampler temperature during inspection? Influent=4°C. Did not verify effluent sampler temperature.

Comments:

Sample records: Available for inspection: ☒ Yes ☐ No Retained for at least three years: ☒ Yes ☐ No

Includes: Collector name: ☒ Yes ☐ No Collection date/time: ☒ Yes ☐ No Collection location: ☒ Yes ☐ No

Analyst name: ☒ Yes ☐ No Analysis date/time: ☒ Yes ☐ No Analysis Results: ☒ Yes ☐ No

Analytical methods & quantitation limits: ☒ Yes ☐ No Chain-of-Custody forms: ☒ Yes ☐ No

Comments: Analytical methods & quantitation limits included in S.O.P.'s (did not view). Reviewed CBOD and Fecal results for 10/11/2013. Fecal holding times met.

Bench sheets: Data is consistent with data on the supplemental: ☒ Yes ☐ No ☐ N/A Month(s)/year checked:

Comments: Checked CBOD on 1011/2013.

Field Testing: Completed within required hold time: ☒ Yes ☐ No pH, DO, TRC (did not verify)

Equipment is calibrated as required: pH: ☒ Yes (10/2013) DO: ☒ Yes (10/2013) TRC: ☒ Yes 10/11/2013

Other(s): ☐ Yes ☐ No

Calibration records maintained: ☒ Yes ☐ No

Comments:

DMR Submittal: DMRs are submitted as required: ☒ Yes ☐ No eDMR User: ☒ Yes ☐ No

DMR Supplemental Reports are submitted as required: ☒ Yes ☐ No

DMRs include all sample results collected and analyzed using approved methods: ☒ Yes ☐ No

Comments:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

NPDES COMPLIANCE INSPECTION REPORT

Sewage Treatment Plant

Treatment Plant Design Capacity: Hydraulic (MGD) 26 MGD Organic (PPD)

High Flow Management: Plan available: ☒ Yes ☐ No ☐ N/A Plan implemented at: 20 MGD
Comments: 2nd bar screen put into service, extra tankage available is used, additional UV is turned on??????

Sanitary Sewer Overflows: Since last inspection: ☐ Yes ☒ No Reported to DEP: ☐ Yes ☐ No
Location/cause: Notified the Department when plant overflowed.

Solids Management: Disposal records available: ☒ Yes ☐ No Retained for at least five years: ☐ Yes ☐ No
Production for calendar year: unsure
Production estimated using EPA Composite Correction Approach?: ☐ Yes ☐ No Disposal within 15% of estimate: unsure
Hauler: Synagro
Disposal locations: SEE COMMENTS PAGE
Comments: Mr. Jantzer believes that Synagro may have performed EPA composite correction approach calculations.

Collection System

Chapter 94 Report: Submitted: ☒ Yes ☐ No ☐ N/A Hydraulic or Organic Overload: ☐ Yes ☒ No ☐ N/A
Comments:

Collection system: York City owns and maintains their own collection system in their own jurisdiction, but municipalities feeding into York City own and maintain their own collection systems.
Municipalities that feed into York City: W. Manchester T., Manchester T., Spring Garden T., Springettsbury T.
Maintenance done: ☒ Regularly scheduled-entire collection system ~every 2-3 years.
(York T., W. York Borough, N. York Borough, York City.)
Type of maintenance: ☒ Televised:
☒ Jetted:
☒ Root cutting:
☒ Smoke test: As needed.
☒ Sewer Shed metering:
☒ Sewers repaired/replace:

Inflow and infiltration: Collection system has excessive ☒ Inflow ☒ Infiltration
Detail I&I Detection work done since last inspection: Flow meters installed in collection system to monitor flow.
Detail I&I Removal work done since last inspection: In 2014, they are hoping to send out education brochure regarding home I&I.
Comments:

Pump Stations: Total number: 1 Inspection frequency: quarterly.
Flow measurement: ☐ Metered ☐ Estimated Other ☐
Comments: Flow measurement unknown. Everything else is gravity fed.

Certified Operators

Certified Operators match Department Records: ☐ Yes ☐ No Total Number of certified operators: 5
Comments: did not compare records with the Department's.

Available Certified Operator: Andrew Jantzer	Client ID: 193242	Class-Subclasses: A, 1-4
Available Certified Operator: Leo Hoffman	Client ID: 196708	Class-Subclasses: A, 1 (more?)
Available Certified Operator: Jack Longstreet	Client ID: 266212	Class-Subclasses: A, 1,4

☐ White – Regional Office ☐ Yellow – Responsible Person ☐ Pink - Inspector

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

NPDES COMPLIANCE INSPECTION REPORT

Flow Measurement
(NPDES Permit Part A)

Primary flow meter and recorder: Operable: ■ Yes ☐ No Properly maintained: ■ Yes ☐ No
Measuring device type: ■ Flume (influent) ☐ Weir ■ Full Pipe (Effluent) ☐ Open Channel ☐ Other:
Meter type: ■ Doppler-Effluent. ■ Ultrasonic-Influent
Meter location: Influent and Effluent
Recorder type: ☐ Totalizer ☐ Daily Chart ☐ 7-Day Chart ■ SCADA/Electronic ☐ Other:
Capable of recording maximum flows: ☐ Yes ☐ No Calibration Range: N/A
Inspection frequency: ■ Daily ☐ Weekly ☐ Other:
Calibration frequency: Every 6 months (Control Systems 21)Date of last calibration: 9/26/2013 (effluent) 9/25/2013 (influent)
Measuring device, meter and recorder included as part of flow meter calibration: ■ Yes ☐ No ☐ N/A
Influent flow is measured before all return lines: ☐ Yes ☐ No Influent flow is measured after hauled-in wastes: N/A
Effluent flow is measured after all withdraws: ■ Yes ☐ No
Comments: Flow meter can measure up to 73 MGD, but has occasionally maxes out during very high flows.

Flumes: Flow is uniform across the channel: ☐ Yes ☐ No ☐ N/A Flume is free of debris and deposits: ☐ Yes ☐ No ☐ N/A
Comments: Influent only. Did not view.

Weirs: Clean with a visible air space below the nappe: ☐ Yes ☐ No ■ N/A
Comments:

Treatment Plant
(NPDES Permit Part B)

Treatment plant bypass: Since last inspection: ■ Yes ☐ No Reported to DEP: ☐ Yes ☐ No
Location/cause: Did not discharge during this time. Shutdown UV for gate installation. Contained all flow.

Major equipment repair/replacement: Since last inspection: ☐ Yes ☐ No Date of last inspection: 11/28/2012 - CEI
Repair List: 2 WAS pumps, UV gates-all for UV influent.

Stand-by power: ☐ Emergency generator ■ Dual power feed ☐ None ■ Other:
System operable: ■ Yes ☐ No Exercise Frequency: Natural Gas "tested" during peak shaving periods. Maintenance Frequency:contracted
Comments: use digester gas and natural gas for backup power. Digester gas used all the time for own electric. (Cogen)

Alarms: Type: ☐ None ■ SCADA ☐ Auto Dialer ☐ PLC ☐ Other:
System operable: ■ Yes ☐ No Test frequency:
Alarm triggers: High Level, Power Failure
Comments: GE-computer alarm system (SCADA). **RECOMMEND** physically testing/documenting critical alarms.

Staffing schedule: ■ 24/7 Weekday hours: ___ to ___ Weekend/Holiday hours: ___ to ___
Other: Have SOP's available. Always either a licensed operator or unlicensed operator in charge present. OIC follows SOP's.

On site Logs: Logs up-to-date: ■ Yes ☐ No ☐ N/A
Daily Log contains: ☐ Visual observations ☐ Process adjustments ☐ Problems and concerns N/A
Repair log maintained: ☐ Yes ☐ No Routine maintenance log maintained: ☐ Yes ☐ No
Comments: For repairs and routine maintenance – using MP2 Data Stream

Spare parts inventory: maintained: ■ Yes ☐ No ■ Standby units available
Comments: They don't use blowers-have mixers and surface aerators. Have spare parts for major equipment. Can switch Trains if needed.

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

NPDES COMPLIANCE INSPECTION REPORT

Process Control
(NPDES Permit Part B)

Frequency of Testing	Current Testing Results
■ Settleability 30 min daily	T2 -350 T3-100 (some solids washed out from high flow)
■ Dissolved Oxygen continuous	Data goes into SCADA system. Did not view data.
■ Sludge Blanket At least 3x/day.	Did not view data.
■ Mixed Liquor Suspended Solids ■ MLVSS Obtain when collect composite samples.	10/11/2013 MLSS- T2: 1920 T3:1090 10/11/2013 MLVSS- T2:1500 T3:870
■ Microscopic exam of MLSS As needed.	
■ Color ■ Odor	Comments/observations/results: See comments section for descriptions.

☐ Other:

Other Requirements
(NPDES Permit Part C)

Special Conditions: Next submission/action: Due Date:

☐ WETT:

☐ TRE/TIE:

■ EPA Pretreatment Program ■ Annual report submitted:

■ Stormwater requirements:

☐ Permit Schedule:

■ TMDL: Selling Credits

☐ Other:

Comments:

Emergency Response/PPC Plan: on-site: ■ Yes ☐ No ☐ N/A Last updated: Updated Annually.

Flood response plan available: **RECOMMEND** locating and familiarizing if have one or creating new one if do not.

Comments: **RECOMMEND** providing all employees with flood response training and documenting who has received said training. They have 3 onsite binders with Emergency Response plan.

Compliance History

History of noncompliance: with discharge effluent limits: ☐ Yes ■ No

Recent Compliance Actions: ☐ Yes ■ No

Comments:

Legal Agreement: Consent Order and Agreement, Consent Decree or Order: ☐ Yes ■ No Date executed:

In compliance with legal agreement: ☐ Yes ☐ No

Obligations due next:

Comments:

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

NPDES COMPLIANCE INSPECTION REPORT

Effluent/Receiving Water Evaluation

Outfall Number(s): 002 | **Stream Name:** Codorus Creek

DEP Collector #: 1642184
Sample Date/Time: 12/11/2013 ~14:20
Sample Location: 001. All but fecal collected from cascade water. Fecal collected from ~2" pipe over top of cascade from UV discharge.

Field Measurements:	Upstream	Outfall	Downstream	Units
Flow				MGD
pH		7.33		S.U.
Conductivity				µmhos/cm
Dissolved Oxygen		9.86		mg/L
Total Chlorine Residual				mg/L
Temperature		11.2		°C

Upstream Observations: Appeared OK-sun's glare made it difficult to effectively observe.

Outfall Observations: Effluent appeared mostly clear.

Downstream Observations: Appeared OK-sun's glare made it difficult to effectively observe.

Outfall Number(s): 001 | **Stream Name:** Codorus Creek

DEP Collector #:
Sample Date/Time:
Sample Location:

Field Measurements:	Upstream	Outfall	Downstream	Units
Flow				MGD
pH				S.U.
Conductivity				µmhos/cm
Dissolved Oxygen				mg/L
Total/Free Chlorine Residual				mg/L
Temperature				°F

Upstream Observations:

Outfall Observations: Did not view outfall.

Downstream Observations:

Outfall Number(s): | **Stream Name:**

DEP Collector #:
Sample Date/Time:
Sample Location:

Field Measurements:	Upstream	Outfall	Downstream	Units
Flow				MGD
pH				S.U.
Conductivity				µmhos/cm
Dissolved Oxygen				mg/L
Total/Free Chlorine Residual				mg/L
Temperature				°F

Upstream Observations:

Outfall Observations:

Downstream Observations:

☐ White – Regional Office ☐ Yellow – Responsible Person ☐ Pink - Inspector

NPDES COMPLIANCE INSPECTION REPORT

Comments

Performed inspection today. Met with operator Andrew Jantzer and lab supervisor Joe Concino.

Started inspection by discussing several topics including CBOD/Frito Lay correlation, alkalinity, plant overflow, flow feeding in from other municipalities, alleged sewage back-ups at 55 S. Fayette St. York, PA, MS4 information, and biosolids questions.

CBOD/Frito Lay Correlation:

-York is watching the correlation between outages at Frito Lay company and CBOD at the plant. Frito Lay discharge goes to York City STP. York believes that outages at Frito Lay correlate to a reduction in CBOD at STP and a subsequent degradation of ammonia and phosphorus removal.

-York is considering the use of methanol during Frito Lay outages.

Alkalinity:

-York believes there are varying ranges of alkalinity entering into the plant from unknown sources.

Plant Overflow:

-York determined that there was a broken valve at T3 scum pit, which allowed water from T3 clarifier to overwhelm scum pit.

-Valve has been fixed.

-York STP has gates at T2 clarifiers that can be opened to allow more flow to be re-directed to the permitted bypass (001). When gates are opened, some of the flow bypasses the screw pumps, sand filters, and UV system, and instead becomes treated with chlorine and then released.

-York is planning to open these gates further during high flows to also prevent plant overflows.

-Working on changing SOP's to reflect this change.

Flow from other Municipalities:

-Discussed the possibility of performing a flow-needs study of 8 feeding municipalities' interceptors.

-Mr. Jantzer said he recently met with feeding municipalities and discussed I&I issues.

-York is working on preventing infiltration via the removal of an inverted siphon, which allows sewage flow to pass underneath a stream.

-Mr. Jantzer also met with the York City Mayor to request additional funds to use toward the collection system.

-Discussed claims of insufficient capacity at York STP to receive flow from feeding municipalities, and causing some feeding municipalities to have to pump sewage out of manholes into the stream during high rain events.

-Mr. Jantzer stated that the ultimate resolution is to perform the aforementioned flow-needs study.

55 South Fayette Street:

-I raised concerns about sewage allegedly backing up at this property out of an onsite dumping pit during high rain events.

-Mr. Jantzer stated that this address/facility is in the W. York Borough and is not part of York City's collection system.

-Mr. Jantzer stated that the ultimate resolution for this issue is also to perform the aforementioned flow-needs study.

-Interim solution is for York City to contact appropriate municipality of associated collection system and/or working with York's MIPP (Municipal Industrial Pretreatment Program).

NPDES COMPLIANCE INSPECTION REPORT

Comments

MS4 Information:

-discussed spill of driveway sealant that occurred on 12/5/2013. **RECOMMENDED** improving MS4 plan of action in responding to spills or other pollution events occurring within or discharging from their collection system.

-**RECOMMENDED** York to ensure maintenance of all necessary MS4 paperwork.

Biosolids Questions:

1.What current data do you have to show you meet the land application requirements for Pollutants, Pathogen Reduction , and Vector Attraction Reduction?

-Perform bi-monthly evaluations via data from the SCADA historian system, and results of bi-monthly biosolids analyses performed by Penn State. On bi-monthly basis, a report is sent to Synagro of plant's bimonthly QA/QC evaluations and the report from Penn State.

-Bimonthly analysis of dewatered sludge by Penn State is for EPA 503/DEP PAG-08

2.Are you meeting your requirement limits?

-Yes. Checked on bi-monthly basis.

3.Are your meters calibrated?

-Yes. Flow meter is done at least annually. pH taken care of by Penn State or Cynagro.

4. Were biosolids applied this year? To what farms, do you have records?

See farms below. Records completed by Synagro.

-Rutt, Ken & Phil-Lanc Co
-Troyer, Steve-York Co
-Koepper, Joe-York Co
-Ailes, Joseph-York Co
-Johnston, Harry-Fulton Co
-Bashore, Ricki-Lebanon Co
-Martin, Jeremy-Franklin Co
-Wilson, Donald-York Co
-Crowl, Ellis-York Co
-Stambauch, Butch-York Co
-Fletcher, Harry-Adams Co
-Mowrer, Jeff-Perry Co
-Leib, Jerry-York Co
-Hoffman, Timothy J.-York Co
-Spahr, Lloyd-Adams Co
-McGilluray, Fred-Cumberland Co
-Shearer, Joseph-Franklin Co

NPDES COMPLIANCE INSPECTION REPORT

Comments

Biosolids (continued):

5. How were the application rates calculated?
   -via Synagro.
6. Are actual application rates at or below calculated rates?
   -Yes
7. Are your biosolids stored prior to land application? Where?
   -Yes. In completely enclosed bin onsite.
8. How are grit and screenings disposed?
   -Modern Landfill
9. How and how often is %TS measured of the final biosolids?
   -bi-monthly-Penn State

-~12:30-13:00-took lunch break.

-~13:00-Met with Mr. Jantzer and Joe Concino for lab-related questions and paperwork review.

-Observed documentation of a composite sample not completed by the end of the day on 11/30/2013.

-York representatives stated that there was a scheduling conflict and an internal rule that was broken, which led to the sample not getting completed. The internal rule is that employees must stay onsite until they are relieved by the next person coming on shift. This rule was not followed.

-Composite sampling that was not finished by midnight on 11/30/13 was re-initiated on 12/1/13 at 16:10 by operator Chhoeuth Yeng.

-~14:20-Collected samples

-~14:40-Began plant walk-through:

-Influent Composite Sampler=4°C.

-~14:45-Influent Flow=13.66 MGD.

-T2 Flowpath 1=offline

-T2 Flowpath 2=online. Med-choc brown. Good earthy odor.

-Defoamer-actively dripping into discharge channel after UV.

-T3 Flowpath 1=offline. Flowpaths #2 & #3=online→ Med-choc brown. Good earthy odor.