

**Gage, Hannah**

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**From:** Yates, Adam  
**Sent:** Thursday, July 13, 2017 3:04 PM  
**To:** little rock jeff davis  
**Cc:** Gage, Hannah; Johnson, Lindsay; McWilliams, Carrie; Healey, Richard; Allen-Daniel, Leslie  
**Subject:** AR0021806\_Little Rock Mar 2017 Pretreatment Program Annual Report\_20170331  
**Attachments:** Little Rock Wastewater 2016 Annual Pretreatment Program Report.pdf

Jeff,

Little Rock Wastewater's March 2017 Pretreatment Program Annual Report was received, reviewed, and deemed complete and compliant with the reporting requirements of 40 CFR 403.12(i). If you have any questions or concerns, please feel free to contact me.

Kindly,

Adam Yates  
Engineer, NPDES Permits Section  
Office of Water Quality  
Arkansas Department of Environmental Quality  
Phone: (501) 682-0617  
Fax: (501) 682-0880



March 31, 2017

Director  
Arkansas Department of Environmental Quality  
NPDES Enforcement Section  
5301 Northshore Drive  
Little Rock, AR. 72118

RE: 2016 Annual Pretreatment Program Report  
NPDES Permit AR0021806 – Adams Field WWTP  
NPDES Permit AR0040177 – Fourche Creek WWTP  
NPDES Permit AR0050849 – Little Maumelle WWTP

Gentlemen:

The purpose of this letter is to show compliance with the requirements found in General Pretreatment Regulations, 40 CFR 403.12(i), and the referenced NPDES permits issued to Little Rock Wastewater (LRW). During 2016 LRW continued activities pursuant to maintaining compliance with the General Pretreatment Regulations. Enclosed with this letter is the 2016 Annual Pretreatment Program Report.

Contained within Section II of the enclosed report is a summary of the number of industrial users that have been in significant violation or significant noncompliance since 1986. During 2016, no industry was found to be in significant noncompliance with applicable pretreatment requirements in accordance to criteria published in 40 CFR 403 and EPA, Region VI, policy on quarterly reviews of industrial user compliance.

Also included in this report is an Updated Industrial User List and LRW's Pretreatment Program Status Report outlining compliance, sampling, and inspection information. The following abbreviations are used in the Pretreatment Program Status Report: C = compliance, NC = noncompliance, SNC = significant noncompliance, RD = received, and NR = not required. LRW is also enclosing information on 2016 sampling results for the three (3) Wastewater Treatment Plants influent and effluent and biosolids as required by our NPDES permits.

If you have any questions concerning any of the information submitted, or require additional information, do not hesitate to contact Jeff Davis, Pretreatment Program Supervisor, at 688-1495, or me at 688-1486.

Sincerely,

LITTLE ROCK WASTEWATER

Stanley Suel  
Signature

3/31/17  
Date

Stanley B. Suel  
Director of Environmental Assessment  
501-688-1486

Walter B. Collins, P.E.  
Director of Operations  
501-688-1429

cc: Greg Ramon, LRW CEO  
Howell Anderson, LRW COO  
Walter Collins, Director of Operations  
Eric Wassell, Operations Superintendent  
Jeff Davis, Pretreatment Program Supervisor  
Susan Samples Ledbetter, Laboratory Supervisor  
Mikel Murders, Plan Review/Environmental Sampling Supervisor



Little Rock  
Wastewater

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**ENVIRONMENTAL  
ASSESSMENT DIVISION**

**2016 ANNUAL  
PRETREATMENT  
PROGRAM REPORT**

**Submitted March 31, 2017**

**LITTLE ROCK WASTEWATER  
2016 ANNUAL PRETREATMENT PROGRAM REPORT**

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# **SECTION**

# **I**

## LITTLE ROCK WASTEWATER ENVIRONMENTAL ASSESSMENT DIVISION

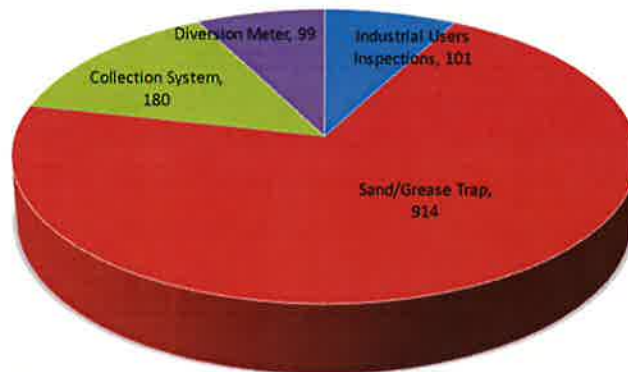
### Approved Pretreatment Program 2016 Accomplishments

The Environmental Assessment Division (EAD) Approved Pretreatment Program conducts the requirements of the Code of Federal Regulations Title 40 Part 403(40 CFR 403) General Pretreatment Regulations. Objectives of 40 CFR 403 are to prevent the introduction of pollutants that may pass through or be incompatible with the Little Rock Wastewater (LRW) Publicly Owned Treatment Works (POTW), prevent interference of treatment operations and sludge disposal, and to protect worker safety.

There were thirty-four (34) Significant Industrial Users (SIU), with active Industrial Wastewater Discharge Permits during 2016. Fourteen (14) of the thirty-four (34) are categorical; subject to federal pretreatment standards. There are an additional sixteen (16) Non-SIU facilities that also held Permits or Short Term Authorizations for controlling and monitoring discharge requirements. These permits issued by LRW provide a control mechanism for sampling, inspecting, and tracking compliance with applicable Federal, State, and Local regulations.

A total of 1,294 inspections and investigations were conducted by the LRW Pretreatment Program Inspectors in 2016. For industries subject to permit requirements, 101 inspections were conducted to evaluate wastewater sources and compliance. EAD also performed 914 Trap/Interceptor Program inspections at commercial facilities as measures to prevent discharge of prohibited solids, O&G and storm inflow. Trap/Interceptor inspections identified 157 items requiring and completing corrective action. EAD conducted 99 inspections of diversion meters, used for non-sewered flow credit on sewer charges. EAD also conducted 180 collection system new connections and user investigations.

**Environmental Assessment Division  
No. of Inspections Performed in 2016**



EAD was successful with addressing industry non-compliance and requiring necessary corrective measures to obtain a return to compliance. During 2016, seventeen (17) Violation Reports were completed to track Industrial User (IU) numeric violations for a return to compliance.

Whole Effluent Toxicity (WET) tests were conducted on final effluents at Adams Field Wastewater Treatment Plant (AF-WWTP), Fourche Creek (FC-WWTP), and Little Maumelle (LM-WWTP). No lethal or sub-lethal toxic effects were observed for either AF-WWTP, FC-WWTP or LM-WWTP final effluent at any required NPDES effluent test dilutions.

Extra strength surcharges for COD, TS, TSS, and O&G loading to the collection system from industrial users, billed during the year, totaled approximately \$1,022,517. The City of Little Rock Water Reclamation Commission's adoption of the 2016 Consolidated Fee Schedule allowed EAD to administer fees totaling \$117,480 (permits/inspection fees, special discharge fees, Trap Control Program). Additionally, Landfill Leachate billing revenue was \$311,822. (Revenues are itemized in the Funding/Expenditure Report located at the end of this Section.)

During 2016, LRW implemented and accomplished the following Pretreatment Program activities:

### **Program Development**

- Annual Pretreatment Program Report for 2015 was completed, signed, and delivered to ADEQ on March 31, 2016 as required by NPDES Permit No. AR0040177, AR0021806, and AR0050849. There were no industries in significant noncompliance in accordance to criteria published in the General Pretreatment Regulations (40 CFR 403). ADEQ responded that the report was reviewed, deemed complete and compliant with Federal Pretreatment Reporting Requirements for POTW's in 40 CFR 403.12(i).
- Stanley Suel, LRW Director of EAD, was presented the Kellogg Award at the AWW&WEA Conference Banquet held on May 3, 2016. Mr. Suel was selected for the Glen T. Kellogg Water and Wastewater Hall of Fame by the AWW&WEA for exhibiting outstanding service and dedication to the Arkansas water and wastewater industries.
- EPA issued final Pretreatment Standards for Unconventional Oil and Gas Extraction Wastewater. This final rule will prevent wastewater pollutants from unconventional oil and gas extraction from being discharged to public wastewater treatment plants. LRW does not receive extraction wastewater.
- Pretreatment Program Staff Training:



1. Stanley Suel, Director of EAD, attended the National Association of Clean Water Agencies' National Pretreatment and Pollution Prevention Workshop in Long Beach, CA May 17-20, 2016.
  2. Jeff Davis, LRW Pretreatment Program Supervisor and Stanley Suel attended EPA Region VI Pretreatment Workshop, August 2016.
  3. LRW Pretreatment staff attended the Annual AWW&WEA conference held in Hot Springs AR on May 2-3, 2016. Tony Roll, Pretreatment Inspector, served on the exhibit committee and Jeff Davis, Pretreatment Program Supervisor, provided a pretreatment overview presentation.
  4. LRW Pretreatment Inspectors attended annual Plumbing Inspectors Training Course, facilitated by the Arkansas Department of Health.
  5. LRW Pretreatment Inspectors manned the LRW booth at the annual Arkansas Hospitality Association (AHA) showroom held at the State House Convention Center and provided Fats, Oil and Grease (FOG) outreach on restaurant best management practices and Can the Grease.
  6. ArcMap upgrades were made to the EAD layer that identifies Permitted IU's, FOG and surveyed facilities within the LRW collection system.
  7. Pretreatment Inspectors participate in Wastewater Innovation Network (WIN) teams that are designed to enable employees to engage, assess, and enhance the daily workflow, communication and assets of LRW.
  8. The updated EPA Guidance *Industrial User Inspection and Sampling Manual for POTWs* was reviewed to affirm LRW compliance with Pretreatment Regulations of 40 CFR 403.
- POTW Biosolids were certified as Class A Exceptional Quality for the land application of 5,492 dry tons during 2016. (see Section VIII).

### **Industrial Relations**

- In 2016, LRW mailed out thirty-nine (39) Pretreatment Excellence Certificates Awards to permitted industries with perfect compliance for 2015.
- Special permitting activities in 2016 (new, modifications/extensions, and closures):
  1. IESI Cherokee Sanitary Landfill was issued a new permit for landfill leachate hauled liquid waste disposal to the AF-WWTP.
  2. Jefferson County Landfill was issued a new permit for landfill leachate hauled liquid waste disposal to the AF-WWTP.
  3. Little Rock Quick Rice (LRQR) met with LRW to discuss the new production line to be in operation by December 2016 with additional lines to be added later. LRQR voiced concerns with the Special Agreement limits due to upcoming added production. LRW confirmed all current and final (effective in 2018) Special Agreement effluent limitations will remain in effect as stated within the current Agreement.
  4. Progress Rail, a categorical IU with chrome plating, relocated to Alabama. Closure inspection was conducted and a permit closure letter was issued by LRW.

5. Shooting Star Beverages stopped production and sold its facility to Hiland Dairy an adjacent facility currently permitted by LRW. Closure inspection was conducted and a closure letter was issued.
  6. Arkansas Portable Toilets requested authorization for hauling liquid waste to AF-WWTP from Riverfest. A Restricted Short Term Authorization (RSTA) was issued for Riverfest hauled liquid waste disposal to AF-WWTP.
- In 2016, no industry was found to be in Significant Noncompliance in accordance to criteria published in the General Pretreatment Regulations 40 Code of Federal Regulations 403.8(f)(2)(viii).
  - Compliance enforcement action requiring corrective measures and return to compliance monitoring was conducted for all numeric violations of permit effluent limits listed in the table below:

**Reported Pretreatment Violations**

Permitted Industrial User	Sample Date	Monitoring		Test Parameter	Reported Value S.U.	Violation of Limit
		LRW	Self			
Ameripride Services	10/27/2016	X		pH	4.07	≥5.0 - ≤12.0 S.U.
Darling Ingredients	2/09/2016	X		pH	4.82	≥5.0 - ≤12.0 S.U.
Hiland Dairy	2/22/2016	X		pH	12.60	≥5.0 - ≤12.0 S.U.
Hiland Dairy	2/25/2016	X		pH	2.80	≥5.0 - ≤12.0 S.U.
I-30 Tank Wash	10/19/2016	X		pH	4.47	≥5.0 - ≤12.0 S.U.
Little Rock Quick Rice	2/22/2016	X		pH	2.93	≥5.0 - ≤12.0 S.U.
Little Rock Quick Rice	7/29/2016	X		pH	4.84	≥5.0 - ≤12.0 S.U.
Little Rock Quick Rice	12/12/2016	X		pH	4.61	≥5.0 - ≤12.0 S.U.
Skippy Foods, LLC.	10/10/2016	X		pH	4.76	≥5.0 - ≤12.0 S.U.
Skippy Foods, LLC.	10/11/2016	X		pH	4.31	≥5.0 - ≤12.0 S.U.
Skippy Foods, LLC.	10/12/2016	X		pH	4.88	≥5.0 - ≤12.0 S.U.
Skippy Foods, LLC	10/14/2016	X		pH	4.96	≥5.0 - ≤12.0 S.U.
Skippy Foods, LLC	10/18/2016	X		pH	4.68	≥5.0 - ≤12.0 S.U.
Skippy Foods, LLC	11/11/2016	X		pH	4.80	≥5.0 - ≤12.0 S.U.
Skippy Foods, LLC	12/2/2016	X		pH	4.48	≥5.0 - ≤12.0 S.U.
Skippy Foods, LLC.	12/13/2016	X		pH	4.60	≥5.0 - ≤12.0 S.U.
Welspun Tubular	10/25/2016	X		pH	11.23	≥5.0 - ≤11.0 S.U.

1. Ameripride Services laundry wastewater sampling by LRW revealed a pH violation (4.07 S.U.). LRW inspection did not identify any source for the low pH. IU returned to compliance.
2. Darling Ingredients (previously Griffin Industries- Thibault) pH violation (4.82 S.U.) occurred during the LRW sampling event. LRW investigation revealed the violation was due to stagnate flow which allowed wastewater in the pretreatment device to turn acidic. The IU returned to compliance.
3. Hiland Dairy pH violations were revealed by LRW sampling (12.60 and 2.80 S.U.). The IU responded that replacement and calibration of cleaning chemical injectors had impacted the ability of the EQ tank neutralization. The IU returned to compliance.
4. I-30 Truck Wash and Scale sampling by LRW showed a pH violation in October. Recent washings include trucks hauling clay (on approved wash list) and some city vehicles. The IU could not provide any known source for a low pH. IU has returned to compliance.
5. Little Rock Quick Rice experienced three (3) low pH violations during 2016. The IU returned to compliance for all instances. In February, IU operators inadvertently discharged a partial drum of citric acid. LRW immediate inspection showed the IU pH meters recording compliance. The IU installed locks on the process valve to prevent recurrence. In July, FC-WWTP experienced a low pH of 4.60 S.U. at the influent headworks. LRW investigation showed the LRQR total point outfall to be 4.84 S.U. A pH meter failure caused an inability to neutralize. In December, LRW sampling revealed a pH violation of 4.61 S.U. The IU outfall pH meter was out of service. New parts were ordered and the meter was fixed.
6. Skippy Foods experienced 8 pH violations by LRW sampling during the 4<sup>th</sup> quarter of 2016. A site inspection was conducted to assist with determination of the cause. A Notice of violation was issued. The IU instituted activities to correct pH values while finding a permanent solution for proper neutralization prior to discharge. A new Ecolab neutralization system using sodium hydroxide was installed by February 2017. Noncompliance rate for the quarter was 26%. The IU returned to compliance.
7. Welspun Tubular was found, during LRW investigation, to be the source of high pH that was reported at the FC-WWTP headworks. LRW inspectors tracked the high pH to the Welspun Tubular private total flow pump station and to the coating mill outfall where the pH was found at 11.23 S.U. The IU made immediate corrective action halting wastewater discharge. After neutralization, the IU was allowed to resume discharge to LRW. Site inspection, written Notice of Violation, and invoice for compliance fees were provided to address the permit violations, the cause, and corrective actions. Written corrective action response from the IU was received.

### **Inspection, Investigations, and IU Surveys**

- Permitted IU investigations and actions implemented:

1. Arkansas Children's Hospital campus sewer manhole 10H075 inspection by LRW revealed the IU discharge point had a minimal flow grade and showed residual of paint-contaminated discharge to the sanitary sewer. The inspection confirmed that only latex/water based paint-coated equipment (brushes, rollers) are brought to that one building for centralized cleaning of equipment. The hospital will use best management practices when cleaning paint equipment.
2. Arkansas Heart Hospital requested approval to use biological additives to reduce maintenance on kitchen piping. A plan of action for monitoring the outfall for effects of the additives on the sanitary sewer was requested. The IU decided to no longer use the additives.
3. Baptist Laundry requested volumetric credit on their wastewater billing. The IU sewer meter was out for several months after repair efforts failed and billing reverted to consumption values as required by LRW Rate Ordinance. Once the repairs were completed and certified, a credit was issued for the months that were billed on water usage. The credit of \$17,177.70 was based on historical ratio between usage and sewer discharge.
4. FC-WWTP reported an industrial slug discharge on July 15<sup>th</sup> was causing the headworks pH to drop below 5.0 S.U. Pretreatment Supervisor investigation showed Port Pump Station was normal and Little Rock Quick Rice wastewater outfalls were above 6 S.U. The 40" force main (F.M.) to FCTP had been shut down for two weeks and restarted on the 15<sup>th</sup>. It is believed that idle conditions of the force main and septicity caused the low pH. Additional LRW investigation confirmed no other IU sources of low pH.
5. Fiber Glass Systems submitted process wastewater sampling data to support a permit modification request to remove the aeration from the industrial pretreatment plant. Under conditions approved by LRW, Fiber Glass Systems turned off aeration in their industrial pretreatment plant on June 10, 2016. TTO levels remain low.
6. Hiland Dairy high strength surcharge billing values for the first quarter of this year were evaluated to allow for a \$17,476 credit. Howell Anderson, LRW Chief Operating Officer, met with Mike Flagg, Hiland General Manager, to respond to a written request for a surcharge adjustment. The January 2016 COD and TSS values were deemed higher than normal and not representative of the daily average discharge. A substituted value was used in the surcharge rolling average for January to adjust the high strength surcharge billing for January, February and March of 2016.
7. Hiland Dairy submitted construction plans for a new dock addition that will house their crate wash operation. Inspection confirmed the expanded dock area process sewer lines will connect through the existing permitted outfall.
8. Hillcrest Camshaft installed a sand/oil interceptor for the larger crank shafts and the machine shop wash bays. LRW developed a sampling protocol to include local limit metals monitoring at the permitted outfall. The IU remains zero discharge for metal finishing waste streams subject to federal pretreatment standards under Code of Federal Regulations Title 40 Part 433 for metal finishing (electroplating).
9. Jack Wilson Water Plant requested approval to discharge neutralized water generated from a hydrofluorosilicic acid leak into a containment basin. The acid storage tank leak was repaired. LRW pretreatment inspection confirmed the strong

acid was contained and approved a controlled discharge. Soda ash and lime were used to neutralize the 3,000 gallons of contained water. The AF-WWTP pH trend chart review confirmed no impact.

10. Little Rock Quick Rice (LRQR) flow meter/pretreatment bypass was discovered by LRW on July 20, 2016. LRW had not been notified of the bypass as required by permit. An inspection was conducted and bypass violation was corrected. Written corrective actions were received from the IU.
  11. LRQR process wastewater collection tank leakage was pumped to the FC-WWTP headworks causing abnormal flow/pH fluctuations. This wastewater normally is discharge through a force main to the POTW EQ basin. LRQR requested to divert all flow to the sanitary sewer for repair. Eric Wassell, FC-WWTP Plant Superintendent, denied the request due to loading concerns. LRQR shut down all process operations to repair the leaking tank.
  12. Rhein Chemie Additives provided a written proposal to pretreat and discharge process wastewater from the bladder press pits into the sanitary sewer. This wastewater will be subject to 40 CFR 428 Subpart F Rubber Manufacturing pretreatment standard for O&G. LRW responded by listing requirements for a baseline monitoring report and other reporting items that will be in effect once the discharge is approved and the Wastewater Discharge Permit is modified. A sand/oil interceptor with sampling/inspection manhole will be required.
- EAD completed source review material for the annual Industrial User (IU) Survey and mailed out thirty-nine (39) IU Survey Screening Forms. The following items were reviewed to identify possible IUs that may be subject to the LRW Pretreatment Program requirements:
    1. Central Arkansas Membership Directory published by the Little Rock Chamber of Commerce
    2. Central Arkansas Water
    3. The ADEQ Hazardous Waste Generators List
    4. Little Rock Manufacturers published by AEDC
    5. Newspaper Articles
    6. New construction plans as routed by City Planning
    7. Telephone Directory
    8. Drive by
    9. Survey data base
  - Inspections/evaluations for the 2016 Survey Screening Processes:
    1. 3M Industrial Mineral Products data showed an increase in gallons per day discharge to the sanitary sewer from the facility. A survey inspection and sampling was conducted at 3M. Pollutants remain at or below domestic background levels.
    2. Harcros Chemical survey inspection was conducted. The facility was once permitted in 2005 for a drum wash operation. That activity was discontinued and the permit was closed. The facility provides chemicals in bulk for a variety of

- customers locally. There are no floor drains in the warehouse. There is no direct path to discharge to the sanitary sewer other than domestic bathrooms.
3. Industrial Oils Unlimited survey inspection was performed. The IU mixes, distributes and sells oils to different companies. Oil is shipped in from corporate headquarters in Oklahoma and distributed as needed. Oils can be mixed for customer's specifications. No discharge to sanitary sewer.
  4. Lost Forty Brewing survey inspection was conducted. Filter grain used in brewing is offered up for cattle farmers. Process tank cleaning includes flushing the wastewater to the sewer with no neutralization or equalization for preventing pH spikes. LRW extra strength surcharge and pH evaluation is forth coming.
  5. O'Neal Steel survey inspection was performed. The facility manufactures, distributes and sells steel. Waterless tables are used to cut the steel before distribution.
  6. Rebel Kettle survey inspection was conducted. The small facility produces and sells beer products mainly through its restaurant. The malted grain is first milled than mixed with water and cooked. It is transferred to another tank to cool. This cooling system reuses water throughout the process. Once cooled, the brew is transferred to another tank to be mixed with yeast and fermented. There is a three-compartment sink and a floor trough that discharge to the sanitary sewer. All process and cleaning wastewater is disposed of via the sanitary sewer.
  7. Refine Ale Brewery survey inspection was conducted. The small brewery produces beer using extracts, the beer is distilled once and allowed to sit for two weeks to ferment before pasteurization. The production is contained in one small room. There are no hops used in this process and any sludge or leftover yeast that accumulates is removed and disposed of offsite.
  8. Southern Reprographics, Inc. survey inspection was conducted. The business makes copies of draft plans, laminates, and reproduces things for other businesses. Computers, commercial copiers and laminating machines are used to reproduce their products. There are not chemicals used at this location.
  9. Southern Star Concrete survey inspection was conducted. The facility mixes cement, loads it into trucks and delivers it to different jobs. The facility has a pit where water is used to mix the cement. The water is recycled and never released to the sanitary sewer.
- Grease related, Sanitary Sewer Overflows (SSO) and other Collection System Investigations
    1. Central High School storm drain manhole was identified by LRW maintenance crew and pretreatment inspector to be the location where a portable toilet pumper was dumping into the storm drain. This discharge resulted in domestic waste collecting in an open storm ditch along West 16<sup>th</sup> Street. LRW reported findings to Little Rock Public Works (LRPW). Clean up oversight was done by Nathan Charles, LRPW. A commercial portable toilet pumper assisted LRPW with cleanup as confirmed by LRW follow up.
    2. Chalamont Drive at sewer manhole -14-A011 was found by LRW maintenance crew to have solids restricting flow. LRW pretreatment inspector reviewed the

video of a ten-inch main showing build-up in the line. This investigation revealed a build of FOG material from residential sources. Preventive maintenance schedule will be conducted.

3. Eat My Catfish grease interceptor, recently put in service, was found to be source of sewer overflow at 10301 North Rodney Parham Road. Evidence showed the overflow came from a cleanout located between the interceptor and the sampling/inspection manhole. The facility manager was requirement to provide corrective action.
4. Edward's Food Giant was investigated due to a reported grease interceptor overflow. A site inspection found the interceptor and pump station to be full but not overflowing. The store manager was working on the pump station and will have the interceptors cleaned. LRW follow up confirmed grease interceptor was cleaned. The sump pump appeared to be working at the time.
5. Fulbright Elementary School was revealed to be the source of a sewer overflow into a storm water ditch. Erica McAdoo, ADEQ Water Division Inspector, contacted Jeff Davis, LRW Pretreatment Program Supervisor, regarding a sanitary sewer overflow and downstream ponding in storm drains. Immediate LRW investigation with ADEQ revealed the source. Ms. McAdoo stated she would oversee cleanup by the school district and thanked LRW for assisting with the investigation.
6. Lehigh Drive reported to have heavy solids by LRW maintenance crew. EAD inspection determined that the grease was due to domestic causes. The address is in a residential area and there are no FOG facilities that would contribute to the grease.

LRW's Trap/Interceptor Program works to reduce the discharge of fats, oils, grease, and solids to the sanitary sewer. The types of facilities inspected perform food preparation and automotive maintenance. A summary of the activities performed for this program is included at the end of this section.

EAD conducted 921 inspections of some type of interceptor or trap. Of those inspections, 17% (157) corrective action items were required to clean or repair the interceptor or trap.

A total of 81 construction plans were reviewed with 65 plan approvals issued in 2016. EAD reviews all commercial construction plans for new facilities which may require a sand, grease, or lint interceptor.

**LITTLE ROCK WASTEWATER  
 TRAP CONTROL SUMMARY**

<b>I. General Information</b>			
Control Authority Name:	Little Rock Wastewater		
Address:	11 Clearwater Drive		
City:	Little Rock	State/Zip: AR	Arkansas 72204
Contact Person/Title:	Stanley Suel, EAD Director		
Contact Telephone Number:	(501) 688-1486		
Reporting Period	January 1, 2016 through December 31, 2016		

<b>II. Trap Control Compliance Monitoring</b>		
1.	Number of Trap Inspections Performed	921
2.	Number of Traps Requiring Cleaning	84
3.	Number of Traps Requiring Cleanout Replacement or Repair	73
4.	Number of Traps Requiring Repair	0
5.	Number of Facilities New Trap Installation	26

<b>III. Enforcement Actions</b>		
1.	Number of Notice of Violations (NOV) Issued	8
2.	Number of Compliance Orders and Schedules Issued	0
3.	Number of Administrative Orders Issued	0
4.	Number of Civil Suits Filed	0
5.	Amount of Penalties Collected (Total Dollars)	0
6.	Other Actions (occurrence fees)	\$755





**LITTLE ROCK WASTEWATER  
INDUSTRIAL PRETREATMENT PROGRAM  
FUNDING/EXPENDITURE REPORT**

	2016 Actual	2017 Estimated
<b>Funding</b>		
Surcharge Program	\$1,002,517	\$1,022,567
Landfill Leachate Program	\$311,822	\$318,058
Permitted Industrial Wastewater Discharge Fees	\$70,570	\$71,981
Trap/Interceptor Control Program Fees	\$610	\$622
Domestic Septage Waste Hauler Fees	\$16,675	\$17,009
Landfill Permit Fees	\$8,950	\$9,129
Diversion / Sewer Meter Fees	\$18,170	\$18,533
HLW/Special Discharge-Restricted Short Term Fees	\$0	\$0
<b>Total Funding</b>	<b>\$1,429,314</b>	<b>\$1,457,900</b>
<b>O&amp;M Expenditures</b>		
Salary		
Employee Salaries	\$563,546	\$600,300
Employee Benefits	\$213,167	\$186,435
Supplies/Maintenance		
Supplies/Equipment Maintenance	\$40,495	\$43,157
Vehicle Maintenance	\$10,996	\$8,756
Other		
Auto Liability	\$2,210	\$2,000
Training and Development	\$3,024	\$4,140
Contract Services	\$23,359	\$22,752
Telephone	\$3,837	\$3,240
<b>Total O&amp;M Expenditures</b>	<b>\$860,634</b>	<b>\$870,780</b>
<b>Capital Expenditures</b>		
None		
<b>Total Capital Expenditures</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Expenditures</b>	<b>\$860,634</b>	<b>\$870,780</b>

# **SECTION**

# **II**

PRETREATMENT PERFORMANCE SUMMARY (PPS)

NOTE: ALL QUESTIONS REFER TO THE INDUSTRIAL PRETREATMENT PROGRAM AS APPROVED BY THE EPA. THE PERMITTEE SHOULD NOT ANSWER THE QUESTIONS BASED ON CHANGES MADE TO THE APPROVED PROGRAM WITHOUT EPA AUTHORIZATION.

I. General Information			
Control Authority Name	Little Rock Wastewater		
Address	11 Clearwater Drive		
City	Little Rock	State/Zip	AR 72204
Contact Person	Stanley Suel	Position	Director EAD
Contact Telephone Number	(501) 688-1486		
NPDES Permit No's.	AR 0040177, AR 0021806, and AR 0050849		
Reporting Period	January 1, 2016 through December 31, 2016		
Total Number of Categorical IUs	14		
Total Number of Significant Non-categorical IUs	20		

II. Significant Industrial User Compliance			
		Significant Industrial Users	
		Categorical	Noncategorical
1	No. of SIUs Submitting BMRs/Total No. Required	0 / 0	0 / 0
2	No. of SIUs Submitting 90-Day Compliance Reports/No. Required	0 / 0	0 / 0
3	No. of SIUs Submitting Semiannual Reports/Total No. Required	5 / 5	0 / 0
4	No. of SIUs Meeting Compliance Schedule/Total No. Required to Meet Schedule	0 / 0	0 / 0
5	No. of SIUs in Significant Noncompliance/Total No. of SIUs	0 / 14	0 / 20
6	Rate of Significant Noncompliance for all SIUs	0 / 34	

III. Compliance Monitoring Program			
		Significant Industrial Users	
		Categorical	Noncategorical
1	No. of Control Documents Issued or Renewed / Total Number Required 2016	<u>11 / 11</u>	<u>6 / 6</u>
2	No. of Non-sampling Inspections Conducted	<u>18</u>	<u>31</u>
3	No. of Sampling Visits Conducted	<u>103</u>	<u>568</u>
4	No. of Facilities Inspected (non-sampling)	<u>14</u>	<u>20</u>
5	No. of Facilities Sampled	<u>11*</u>	<u>20</u>

IV. Enforcement Actions			
		Significant Industrial Users	
		Categorical	Noncategorical
1	No. of Compliance Schedules Issued/No. of Schedules Required	<u>0 / 0</u>	<u>0 / 0</u>
2	No. of Notices of Violations issued to SIUs	<u>1</u>	<u>1</u>
3	No. of Administrative Orders Issued to SIUs	<u>0</u>	<u>0</u>
4	No. of Civil Suits Filed	<u>0</u>	<u>0</u>
5	No. of Criminal Suits Filed	<u>0</u>	<u>0</u>
6	No. of Significant Violators (attach newspaper publication)	<u>0</u>	<u>0</u>
7	Amount of Penalties Collected (total dollars/IUs assessed) **	<u>\$488 / 1</u>	<u>\$2,561 / 4</u>
8	Other Actions (sewer bans, etc.)	<u>0</u>	<u>0</u>

\* Categorical IU's: Four (4) sampled for regulated wastewater discharges: CertainTeed Corp., Interstate Highway Sign, Welspun Tubular, and Welspun HFW. Seven (7) sampled for unregulated wastewater only: Cameron V&M, Central Jet Flying Service, Dassault Falcon Jet, Hillcrest Camshaft, PPG Industries, Rhein Chemie Little Rock, and St. Vincent Hospital. Three (3) domestic wastewater discharge only - not sampled: ITW Global Tire Repair (Accessories Marketing), Arkansas Painting and Specialty, and Progress Rail Service.

\*\* LRW Consolidate Fee Schedule allows for non-compliance fees based on sampling, testing and inspection costs.

The following certification must be signed in order for this form to be considered complete:

In accordance with the certification statement found in the NPDES Permits issued to Little Rock Wastewater (Part II D. 11. c.): I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

*Stanley Suel*

*3-31-17*

Authorized Representative

Date

Stanley B. Suel, Director of Environmental Assessment

**LITTLE ROCK WASTEWATER  
SUMMARY OF INDUSTRIAL USER NONCOMPLIANCE  
1986 THROUGH 2016**

Year	Number of IUs In Significant Violation or Significant Noncompliance
1986	18 – Significant Violation
1987	9 – Significant Violation
1988	8 – Significant Violation
1989	4 – Significant Violation
1990	4 – Significant Noncompliance
1991	1 – Significant Noncompliance
1992	2 – Significant Noncompliance
1993	1 – Significant Noncompliance
1994	3 – Significant Noncompliance
1995	0 – Significant Noncompliance
1996	0 – Significant Noncompliance
1997	4 – Significant Noncompliance
1998	1 – Significant Noncompliance
1999	2 – Significant Noncompliance
2000	3 – Significant Noncompliance
2001	1 – Significant Noncompliance
2002	2 – Significant Noncompliance
2003	3 – Significant Noncompliance
2004	1 – Significant Noncompliance
2005	1 – Significant Noncompliance
2006	1 – Significant Noncompliance
2007	0 – Significant Noncompliance
2008	1 – Significant Noncompliance
2009	1 – Significant Noncompliance
2010 -2015	0 – Significant Noncompliance
2016	0 – Significant Noncompliance

# **SECTION**

# **III**

# LITTLE ROCK WASTEWATER 2016 PRETREATMENT PROGRAM STATUS REPORT

Facility Name	SIC	NAICS	Categorical Determination	Treatment Plant	Control Document		New User	Times Inspected	Times Sampled	Compliance Status				
					Last Action	Y/N				Reports				Effluent Limits
										BMR	90-Day Compliance	Semi-Annual	Self Monitoring	
Arkansas Painting and Specialities	3429	332510	40 CFR 433	Adams Field	RENEWED 01/01/2016	Y	N	1	0	RD 02/10/2006	RD*	RD	RD	NO 433 DISCHARGE
Cameron V&M	3491	332911	40 CFR 433	Fourche Creek	RENEWED 10/01/2016	Y	N	1	4	NR	RD*	NR	NR	C - NO 433 DISCHARGE
Central Flying Service, Little Rock	4581	488190	40 CFR 433	Adams Field	RENEWED 09/01/2016	Y	N	1	4	NR	NR	NR	NR	C - NO 433 DISCHARGE
CertainTeed Corporation	2952	324122	40 CFR 443	Adams Field	RENEWED 05/01/2016	Y	N	1	2	RD 04/14/2000	RD	RD	RD	C
Dassault Falcon Jet Corporation	3728	336413	40 CFR 433	Adams Field	RENEWED 12/01/2016	Y	N	1	7	RD 09/09/1990	RD*	NR	NR	NO 433 DISCHARGE
Hillcrest Camshaft Service, Inc.	3714	336310	40 CFR 433	Fourche Creek	RENEWED 10/01/2016	Y	N	1	6	RD 11/20/1995	RD*	NR	NR	C - NO 433 DISCHARGE
Interstate Highway Sign	3993	339950	40 CFR 433	Fourche Creek	RENEWED 02/01/2016	Y	N	1	14	RD 03/25/1992	RD	RD	RD	C
ITW Global Tire Repair	2869	325199	40 CFR 414	Fourche Creek	RENEWED 04/01/2016	Y	N	1	0	RD 03/12/2012	NR	NR	NR	NO 414 DISCHARGE
Progress Rail Services	3562 3471	332991 332813	40 CFR 433	Fourche Creek	CLOSED 9/26/2016	Y	N	2	0	NR	NR	NR	NR	NO 433 DISCHARGE
PPG Industries	2851	325510	40 CFR 446	Fourche Creek	RENEWED 07/01/2016	N	N	1	4	NR	NR	NR	NR	C - NO 446 DISCHARGE
Rhein Chemie Little Rock	3061	326291	40 CFR 428	Fourche Creek	RENEWED 01/01/2015	Y	N	1	3	NR	NR	NR	NR	C - NO 428 DISCHARGE
St. Vincent Hospital	8062 2834	622110 325412	40 CFR 439	Adams Field	RENEWED 03/01/2016	Y	N	1	8	RD 05/14/2004	RD*	NR	NR	C - NO 439 DISCHARGE
Welspun Tubular	3317	331210	40 CFR 433	Fourche Creek	RENEWED 06/01/2016	Y	N	2	27	RD 11/30/2007	RD	RD	RD	NC - pH
Welspun Tubular HFW	3317	331210	40 CFR 433	Fourche Creek	RENEWED 04/01/2015	Y	N	3	24	RD 01/17/2013	RD	RD	RD	C
Ameripride Services	7218	812332	N/A	Adams Field	RENEWED 1/01/2016	Y	N	2	15			BY POTW		NC - pH
Arkansas Children's Hospital	8062	622110	N/A	Adams Field	RENEWED 01/01/2014	Y	N	1	36			BY POTW		C
Arkansas Heart Hospital	8062	622110	N/A	Adams Field	RENEWED 02/01/2015	Y	N	1	8			BY POTW		C
Arkansas State Hospital	8063	622210	N/A	Adams Field	RENEWED 05/01/2013	Y	N	1	7			BY POTW		C
Baptist Health Laundry	7218	812332	N/A	Fourche Creek	RENEWED 06/01/2015	Y	N	1	4			BY POTW		C

Abbreviations: C = compliance, NC = noncompliance, SNC = significant noncompliance, RD = received, NR = not required, RD\* = received prior to no discharge status.



# LITTLE ROCK WASTEWATER 2016 PRETREATMENT PROGRAM STATUS REPORT

Facility Name	SIC	NAICS	Categorical Determination	Treatment Plant	Control Document		New User	Times Inspected	Times Sampled	Compliance Status				
					Last Action	Y/N				Reports			Effluent Limits	
										BMR	90-Day Compliance	Semi-Annual		Self Monitoring
Baptist Health Medical Center	8062	622110	N/A	Adams Field	RENEWED 07/01/2013	Y	N	1	24			BY POTW		C
Central AR Veterans Healthcare System	8062	622110	N/A	Adams Field	RENEWED 06/01/2014	Y	N	1	4			BY POTW		C
City of Little Rock Solid Waste	4953	562212	N/A	Fourche Creek	RENEWED 04/01/2016	Y	N	1	2			BY POTW		C
Darling Ingredients	2077 4214	311613 4844110	N/A	Fourche Creek	RENEWED 05/01/2016	Y	N	1	5			BY POTW		NC - pH
Fiber Glass Systems	3089	326122	N/A	Fourche Creek	RENEWED 12/10/2015	Y	N	1	10			BY POTW		C
G & K Services	7218	812332	N/A	Fourche Creek	ISSUED 06/15/15	Y	Y	2	4			BY POTW		C
George Fischer Sloane	3084	326122	N/A	Fourche Creek	RENEWED 11/01/2016	Y	N	1	2			BY POTW		C
Hiland Dairy	2026	311511	N/A	Fourche Creek	RENEWED 10/01/2015	Y	N	3	36			BY POTW		NC - pH (2)
Jack Wilson WTP	4941	221310	N/A	Adams Field	RENEWED 02/01/2016	Y	N	2	24			BY POTW		C
Little Rock Quick Rice	2038 2044	311212	N/A	Fourche Creek	RENEWED 10/23/2016	Y	N	5	308			BY POTW		NC - pH (3)
Ozark Point WTP	4941	221310	N/A	Adams Field	RENEWED 12/01/2015	Y	N	1	11			BY POTW		C
Porocel Corporation	2819	331311	N/A	Fourche Creek	RENEWED 07/01/2015	Y	N	1	7			BY POTW		C
Shooting Star Beverages	5149	312112	N/A	Fourche Creek	CLOSED 12/20/2016	Y	N	1	10			BY POTW		C
Skippy Foods LLC	2099	311911	N/A	Fourche Creek	RENEWED 04/01/2015	Y	N	3	47			BY POTW		NC - pH (8)
Univ. of Ark. Medical Center	8062	622110	N/A	Adams Field	RENEWED 02/01/2013	Y	N	1	4			BY POTW		C

Abbreviations: C = compliance, NC = noncompliance, SNC = significant noncompliance, RD = received, NR = not required, RD\* = received prior to no discharge status.

**LITTLE ROCK WASTEWATER  
2016 INDUSTRIAL USER LIST**

<b>Number of Permitted IU's Classified as Federal Categorical</b>	<b>14</b>
<b>Number of Permitted IU's Classified as Significant Industrial Users</b>	<b>20</b>
<b>Number of Permitted IU's Classified as Non-Significant Industrial Users</b>	<b>11</b>
<b>Number of Special Permits for Landfill Leachate or RSTA</b>	<b>5</b>
<b>Total Number of IU's Permitted by LRW</b>	<b>50</b>

**Categorical Industries**

<b>Facility Name</b>	<b>Classification</b>	<b>Part</b>	<b>Manufacturing Process</b>	<b>Total Flow (gpd) average</b>	<b>Work Days/Month</b>	<b>Routine Pollutant Monitoring/Other</b>
Arkansas Painting and Specialities	Categorical	433	Phosphate Coating	200	22	No 433 Discharge in 2016
Cameron V&M	Categorical	433	Steel Oil Field Valves	13,543	22	Zn, Pb, pH, Ni, Permit to discharge nonregulated wastewater
Central Flying Service - Little Rock	Categorical	433	Aircraft Refurbishing	350	30	pH, Permit to discharge nonregulated wastewater
CertainTeed Corporation	Categorical	443	Asphalt Rolled Roofing Production	29,587	26	TSS, O&G, pH
Dassault Falcon Jet Corporation	Categorical	433	Custom Jet Aircraft	14,675	22	COD, pH, Permit to discharge no-regulated wastewater only
Hillcrest Camshaft Service, Inc.	Categorical	433	Electroplating New Source	3,040	22	Cu, Cr, Pb, Ni, Zn, pH, Permit to discharge noregulated wastewater
Interstate Highway Sign	Categorical	433	Highway Signs	10,336	22	Cr, pH, Cu, Zn, Pb, Cd, Ni, Ag, CN, TTO
ITW Global Tire Repair	Categorical	414	Tire Sealant	2,964	22	Permit to discharge domestic wastewater only
PPG	Categorical	446	Paint and Coating	5,008	26	COD, pH, Permit to discharge domestic wastewater only
Progress Rail Services	Categorical	433	Chrome Plating	515	30	Permit to discharge domestic only /closed 2016
Rhein Chemie Little Rock	Categorical	428	Rubber Tire Curing Bladders	9,285	22	pH, Zn, Ni, Cu, O&G, Permit to discharge nonregulated wastewater
St. Vincent Hospital	Categorical	439	Hospital / PETNET	131,588	30	COD, pH, Hg, Zero discharge for 40 CFR 439.
Welspun Tubular	Categorical	433	Spiral Pipe and Coating	124,501	30	Zn, Cr, Pb, pH, Cd, CN, Ni, Cu, Ag, COD, TSS, O&G
Welspun Tubular HFW	Categorical	433	High Frequency Welding, Steel Pipe	82,959	30	Zn, Cr, Pb, pH, Cd, CN, Ni, Cu, Ag, TTO

**LITTLE ROCK WASTEWATER  
2016 INDUSTRIAL USER LIST**

**Significant Non-Categorical Industries**

Facility Name	Classification	Part	Manufacturing Process	Total Flow (gpd) average	Work Days/Month	Routine Pollutant Monitoring/Other
Ameripride Linen and Apparel	Significant		Laundry	66,808	22	COD, TSS, O&G, pH
Arkansas Children's Hospital	Significant		Hospital	89,724	30	East: COD, TSS, pH West: COD, TSS, O&G, pH South: COD, TSS, O&G, pH
Arkansas Heart Hospital	Significant		Hospital	29,903	30	COD, TSS, O&G, pH, Hg
Arkansas State Hospital	Significant		Hospital	15,845	30	COD, TSS, O&G, pH
Baptist Health Medical Center	Significant		Hospital	199,654	30	COD, TSS, O&G, pH, Hg
Hiland Dairy	Significant		Dairy Products, Juice, Tea	97,896	30	COD, TSS, O&G, pH
Fiber Glass Systems	Significant		Fiberglass reinforced epoxy and vinylester resin piping systems	10,701	22	As, Cd, Cu, Cr, Pb, Ni, Hg, Ag, Se, Zn, B, Mn, CN, pH, CN, TTO
G & K Services	Significant		Laundry	31,106	30	COD, TSS, O&G, pH
George Fischer Sloane, Inc.	Significant		Plastic Molding	12,369	30	COD, TSS, O&G, pH
Darling Ingredients	Significant		Grease Recycling	516	22	COD, TSS, O&G, pH
Jack Wilson WTP	Significant		Water Treatment Plant	114,616	30	COD, TSS, pH
Baptist Health Laundry	Significant		Industrial Laundry	30,149	22	COD, TSS, O&G, pH
City of Little Rock Solid Waste	Significant		Municipal Landfill	27,212	26	COD, TSS, O&G, pH, NH3-N, As, Cd, Cu, Cr, Pb, Ni, Hg, Ag, Se, Zn, B, Mn, CN, volatiles, pesticides
Central AR Veterans Health Care	Significant		Hospital	146,246	30	COD, pH, Hg, Ag
Shooting Star Beverages	Significant		Fruit Juice and Water Bottling	3,447	22	COD, TSS, O&G, pH / closed 2016
Ozark Point WTP	Significant		Water Treatment Plant	52,021	30	COD, TSS, pH
Porocel Corporation	Significant		Mineral Milling	2,518	30	COD, TSS, pH, Zn, As, Cu, Cr, Ni, Hg
Little Rock Quick Rice	Significant		Rice Cooking	152,015	30	BOD, COD, TSS, O&G, TS, pH, Temperature
Skippy Foods LLC	Significant		Peanut Butter	39,358	22	COD, TSS, O&G, pH
University of Arkansas Medical Center	Significant		Hospital	307,988	30	COD, TSS, O&G, pH, Hg, Ag

**LITTLE ROCK WASTEWATER  
2016 INDUSTRIAL USER LIST**

**Non-Significant Industries**

Facility Name	Classification	Part	Manufacturing Process	Total Flow (gpd) average	Work Days/Month	Routine Pollutant Monitoring/Other
Arkansas Dust Control & Linen Service	Non-Significant		Industrial Laundry	3,978	22	COD, TSS, O&G, pH
BHMC-LR South Campus	Non-Significant		Hospital	3,268	30	COD, TSS, O&G, pH, Hg, Ag
BFI Landfill	Non-Significant		Landfill	4,042	30	COD, TSS, O7G, pH, NH3-N, As, Cd, Cu, Cr, Pb, Ni, Hg, Ag, Se, Zn, B, Mn, Ba, volatiles, pesticides
Clark Machinery	Non-Significant		Construction Equipment	926	22	COD, TSS, O&G, pH
Democrat Printing and Lithographing	Non-Significant		Printing Company	3,266	30	COD, TSS, O&G, pH
Dusty Mop and Mat Rentals	Non-Significant		Industrial Laundry	9,075	22	COD, TSS, O&G, pH
Good Old Days Foods	Non-Significant		Frozen Fruit Cobbler	6,593	22	COD, TSS, O&G, pH
I-30 Tank Wash	Non-Significant		Truck Wash	1,587	22	COD, TSS, O&G, pH
Martinous Oriental Rug Company	Non-Significant		Retail Rug Sales & Cleaning	96	22	pH
Phelps Fan	Non-Significant		Fan Manufacturer	5,400 / Batch	22	pH, Cr, Ni, Cu
Ryerson	Non-Significant		Metal Fabrication	1,142	30	pH, Cu, Zn

**Restricted Short Term Authorizations and Landfill Leachate**

Facility Name	Classification	Part	Manufacturing Process	Total Flow (gpd) average	Work Days/Month	Routine Pollutant Monitoring/Other
Arkansas Portable Toilets	RSTA		Portable	6,000 / Truck	N/A	Approved Domestic Only
IESI Cherokee Sanitary Landfill	Special Non-SIU		Landfill - HLW	6,000 / Truck	30	BOD, TSS, O&G, pH, NH3-N, As, Ba, B, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Se, Ag, Zn, CN, Mo, volatiles, pesticides, TCLP
Jefferson County Landfill	Special Non-SIU		Landfill - HLW	6,000 / Truck	30	BOD, TSS, O&G, pH, NH3-N, As, Ba, B, Cd, Cr, Cu, Pb, Mn.
Jones & Sons Mobile Pressure Wash	RSTA		Pressure Washer	1,000 / Tank	N/A	Approved wash water only
Ozark Ridge Landfill	Special Non-SIU		Landfill - HLW	6,000 / Truck	30	BOD, TSS, O&G, pH, NH3-N, As, Ba, B, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Se, Ag, Zn, CN, Mo, volatiles, pesticides, TCLP

# **SECTION**

# **IV**

## SUMMARY OF ANALYTICAL RESULTS

### ADAMS FIELD WASTEWATER TREATMENT PLANT (AF-WWTP) INFLUENT AND EFFLUENT ANALYSES

Priority Pollutant Scans were conducted on the Little Rock Wastewater Treatment Plant influent and effluent flows in accordance with NPDES permit requirements. Compounds analyzed include metals, cyanide, phenols, volatile organics, base/neutral and acid compounds, and pesticides/PCBs. Results of the analyses are organized in the following order:

- AF-WWTP 2016 Sample Results - This information includes a summary page of influent and effluent required test data for parameters from 40 CFR Part 122, Appendix D, Table III reported in a format requested by ADEQ. The summary page is followed by separate influent and effluent data tables.

Sampling and testing frequency requirements for Table III parameters are quarterly (NPDES Permit AR 0021806 Part II). Influent and effluent samples were collected with respect to the detention time across the treatment plant for the sampling events. Table III parameters include total arsenic, cadmium, copper, chromium, lead, mercury, nickel, silver, selenium, zinc, antimony, thallium, beryllium, cyanide and phenols. Other parameters collected four per year include molybdenum and oil and grease.

- Treatment Plant Removal Efficiencies - This page includes the metals percent removal rates for AF-WWTP. These removal rates are calculated based on the influent and effluent concentrations reported in the data table provided.
- AF-WWTP 2016 Priority Pollutant Scan - Organic Fractions - This information includes required test data from 40 CFR Part 122, Appendix D, Table II divided into two parts. Item I: Identifies the positive measurements of organic compounds in the AF-WWTP influent and effluent during 2016. Item II: Influent/Effluent organic fraction detections trend chart for 1991 through 2016. Item III is the long term summary of positive results. 40 CFR Part 122, Appendix D, Table II monitoring frequency for 2016 is once per year in accordance with the NPDES Permit 0021806.
- AF-WWTP Plant Concentration Trends - This information includes graphs showing AF-WWTP influent and effluent concentration trends for the past twenty-two years, 1994-2016. Some peaks may be due to changes in test methods and detection limits.

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT**  
**REPORTING YEAR: JANUARY 1, 2016 TO DECEMBER 31, 2016**  
**CITY OF LITTLE ROCK - ADAMS FIELD WASTEWATER TREATMENT PLANT**  
**NPDES PERMIT NO.: AR0021806**

**AVERAGE POTW FLOW: 20.61 MGD**

**PERCENT (%) IU FLOW: 6.0 %**

METALS, CYANIDE and PHENOLS	MAHC (Total) (µg/l)	INFLUENT DATES SAMPLED (µg/l) Once/quarter				WQ level/limit (µg/l)	EFFLUENT DATES SAMPLED (µg/l) Once/quarter				LABORATORY ANALYSIS		
		Start Date	Start Date	Start Date	Start Date		Start Date	Start Date	Start Date	Start Date	EPA MQL (µg/l)	EPA Method Used	Detection Level Achieved (µg/l)
		1/12/2016	4/26/2016	7/11/2016	11/2/2016		1/13/2016	4/25/2016	7/11/2016	11/2/2016			
Antimony		< 60	< 60	< 60	< 60		< 60	< 60	< 60	< 60	60	200.8	60
Cadmium	9	< 0.5	< 0.5	< 0.5	< 0.5	54	< 0.5	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Copper	270	15.0	22.0	62.0	36.0	214	5.3	6.5	5.1	9.1	0.5	200.8	0.5
Lead	50	2.3	1.6	5.6	2.2	198	< 0.5	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Mercury	0.20	0.0606	0.0203	0.0568	0.1090	0.1	0.0038	0.0027	0.0073	0.0043	0.0002	1631E	0.0002
Nickel	160	3.2	3.7	4.5	2.8	4,990	2.6	3.1	2.4	2.2	0.5	200.8	0.5
Selenium	10	< 5	< 5	< 5	< 5	56	< 5	< 5	< 5	< 5	5	200.8	5
Silver	180	< 0.5	< 0.5	< 0.5	< 0.5	57	< 0.5	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Zinc	360	80	87	150	130	1,700	34	42	53	31	20	200.8	20
Chromium	260	< 10	< 10	< 10	< 10	11,200	< 10	< 10	< 10	< 10	10	200.8	10
Cyanide	90	< 0.8	5.2	< 0.8	1.5	50	< 0.8	5.5	1.8	< 0.8	10	SM204500C&E-1999	0.8
Arsenic	14	2.6	2.7	4.8	9.1	2,380	0.99	0.62	1.20	1.60	0.5	200.8	0.5
Molybdenum		< 8	< 8	< 8	< 8		< 8	< 8	< 8	< 8	8	200.8	8
Phenols		8.1	25.0	30.8	34.7		3.6	9.0	3.7	5.9	2.2	420.1	2.2
Beryllium		< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Thallium		< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Barium				52					19		2	200.7	2
Boron				140					110		100	200.7	100
Manganese				390					160		2	200.7	2
Oil and Grease		8,900	21,400	39,300	35,200		< 5,000	< 5,000	< 5,000	< 5,000	5000	1664Rev.B-2010	5,000
Flow, MGD		32.73	20.93	27.05	13.53		27.46	18.72	21.32	10.79			

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
REPORTING YEAR: JANUARY 1, 2016 TO DECEMBER 31, 2016**

TREATMENT PLANT: CITY OF LITTLE ROCK - ADAMS FIELD WASTEWATER TREATMENT PLANT

NPDES PERMIT NO.: AR0021806

AVERAGE POTW FLOW: 20.61 MGD

PERCENT (%) IU FLOW: 6 %

PLANT INFLUENT	Flow MGD	O&G <small>1664 Rev B 2010</small> µg/L	CN- <small>SM 4300 C&amp;E 1999</small> µg/L	Zn µg/L	Cd µg/L	Cr µg/L	Ag µg/L	Cu µg/L	Mo µg/L	Ni µg/L	Pb µg/L	As µg/L	Se µg/L	Hg µg/L	Phenol µg/L	Sb µg/L	Be µg/L	Tl µg/L	Mn µg/L	Ba µg/L	B µg/L
		5000	0.8	20	0.5	10	0.5	0.5	8	0.5	0.5	0.5	0.5	0.0002	2.7	60	0.5	0.5	2	2	100
01/12/2016	32.73			80	< 0.50	< 10	< 0.5	15.0	< 8	3.2	2.30	2.60	< 5			< 60	< 0.5	< 0.5			
01/28/2016	29.35	8900	< 0.8											0.0606	8.1						
04/26/2016	20.93			87	< 0.50	< 10	< 0.5	22.0	< 8	3.7	1.60	2.70	< 5			< 60	< 0.5	< 0.5			
05/19/2016	19.70	21400	5.2											0.0203	25.0						
07/11/2016	27.05			150	< 0.50	< 10	< 0.5	62.0	< 8	4.5	5.60	4.80	< 5			< 60	< 0.5	< 0.5	390	52	140
09/15/2016	13.78	39300	< 0.8											0.0568	30.8						
11/02/2016	13.53			130	< 0.50	< 10	< 0.5	36.0	< 8	2.8	2.20	9.10	< 5			< 60	< 0.5	< 0.5			
11/17/2016	14.03	35200	1.5											0.1090	34.7						
<b>Average</b>	21.39	26200	2.1	112	< 0.50	< 10	0.5	33.8	< 8	3.6	2.93	4.80	< 5	0.0617	24.7	< 60	< 0.5	< 0.5	390	52	140
<b>Maximum</b>	32.73	39300	5.2	150	< 0.50	< 10	0.5	62.0	< 8	4.5	5.60	9.10	< 5	0.1090	34.7	< 60	< 0.5	< 0.5	390	52	140
<b>Minimum</b>	13.53	< 8900	< 0.8	80	< 0.50	< 10	< 0.5	15.0	< 8	2.8	1.60	2.60	< 5	0.0203	8.1	< 60	< 0.5	< 0.5	390	52	140
<b>Headworks limit</b>			0.1	0	9.0	260.0	180.0	270		160	50	14	10	0.2							

Comments:



**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
REPORTING YEAR: JANUARY 1, 2016 TO DECEMBER 31, 2016**

TREATMENT PLANT: CITY OF LITTLE ROCK - ADAMS FIELD WASTEWATER TREATMENT PLANT

NPDES PERMIT NO.: AR0021806

AVERAGE POTW FLOW: 20.61 MGD

PERCENT (%) IU FLOW: 6 %

FINAL EFFLUENT	Flow MGD	O&G µg/L	CN- µg/L	Zn µg/L	Cd µg/L	Cr µg/L	Ag µg/L	Cu µg/L	Mo µg/L	Ni µg/L	Pb µg/L	As µg/L	Se µg/L	Hg µg/L	Phenol µg/L	Sb µg/L	Be µg/L	Tl µg/L	Mn µg/L	Ba µg/L	B µg/L	
EPA Test Method Used		1664 Rev. B 1999	SM 4500 C&E 2010	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	1631E	420.1	200.8	200.8	200.8	200.8	200.8	200.8	200.8
Detection Level Achieved		5000	0.8	20	0.5	10	0.5	0.5	8	0.5	0.5	0.5	5	0.0002	2.5	60	0.5	0.5	2	2	100	
01/12/2016	27.46			34 <	0.50 <	10 <	0.5	5.3 <	8	2.6 <	0.50	0.99 <	5			< 60 <	0.5 <	0.5				
01/28/2016	24.28	< 5000	< 0.8											0.0038	3.6							
04/25/2016	18.72			42 <	0.50 <	10 <	0.5	6.5 <	8	3.1 <	0.50	0.62 <	5			< 60 <	0.5 <	0.5				
05/19/2016	18.67	< 5000	5.5											0.0027	9.0							
07/11/2016	21.32			53 <	0.50 <	10 <	0.5	5.1 <	8	2.4 <	0.50	1.20 <	5			< 60 <	0.5 <	0.5000	160	19	110	
09/15/2016	13.80	< 9100	1.8											0.0073	3.7							
11/02/2016	10.79			31 <	0.50 <	10 <	0.5	9.1 <	8	2.2 <	0.50	1.60 <	5			< 60 <	0.5 <	0.5				
11/17/2016	12.12	< 5000	< 0.8											0.0043	5.9							
<b>Average</b>	18.40	6025	2.2	40	0.50 <	10 <	0.5	6.5 <	8	2.6 <	0.50	1.10 <	5	0.0045	5.6 <	60 <	0.5 <	0.5	160	19	110	
<b>Maximum</b>	27.46	9100	5.5	53	0.50 <	10 <	0.5	9.1 <	8	3.1 <	0.50	1.60 <	5	0.0073	9.0 <	60 <	0.5 <	0.5	160	19	110	
<b>Minimum</b>	10.79	< 5000	< 0.8	31 <	0.50 <	10 <	0.5	5.1 <	8	2.2 <	0.50	0.62 <	5	0.0027	3.6 <	60 <	0.5 <	0.5	160	19	110	
<b>WQS Effluent Level</b>																						
<b>Day Max.</b>			0.1	2	54.0	11200.0	57.0	214		4990	198	2380	56	0.1								
<b>Month Avg.</b>			0.0	1	27.0	5590.0	28.0	106		2490	98	1190	28	0.07								

Comments:

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
TREATMENT PLANT PERCENT REMOVAL EFFICIENCIES  
REPORTING YEAR: JANUARY 1, 2016 TO DECEMBER 31, 2016**

**Adams Field Wastewater Treatment Plant - NPDES Permit No. AR0021806**

	O&G	CN-	Zn	Cd	Cr	Ag	Cu	Mo	Ni	Pb	As	Se	Hg	Phenol	Sb	Be	Tl	Mn	Ba	B
01/12/2016			57.5%	0.0%	0.0%	0.0%	64.7%	0.0%	18.8%	78.3%	61.9%	0.0%			0.0%	0.0%	0.0%			
01/28/2016	43.8%	0.0%											93.8%	55.6%						
04/25/2016			51.7%	0.0%	0.0%	0.0%	70.5%	0.0%	16.2%	68.8%	77.0%	0.0%			0.0%	0.0%	0.0%			
05/19/2016	76.6%	-5.8%											86.7%	64.0%						
07/11/2016			64.7%	0.0%	0.0%	0.0%	91.8%	0.0%	46.7%	91.1%	75.0%	0.0%			0.0%	0.0%	0.0%	59.0%	63.5%	21.4%
09/15/2016	76.8%	-125.0%											87.2%	88.0%						
11/02/2016			76.2%	0.0%	0.0%	0.0%	74.7%	0.0%	21.4%	77.3%	82.4%	0.0%			0.0%	0.0%	0.0%			
11/17/2016	85.8%	46.7%											96.0%	83.0%						
<b>Average</b>	<b>70.8%</b>	<b>-21.0%</b>	<b>62.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>75.4%</b>	<b>0.0%</b>	<b>25.8%</b>	<b>78.8%</b>	<b>74.1%</b>	<b>0.0%</b>	<b>90.9%</b>	<b>72.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>59.0%</b>	<b>63.5%</b>	<b>21.4%</b>

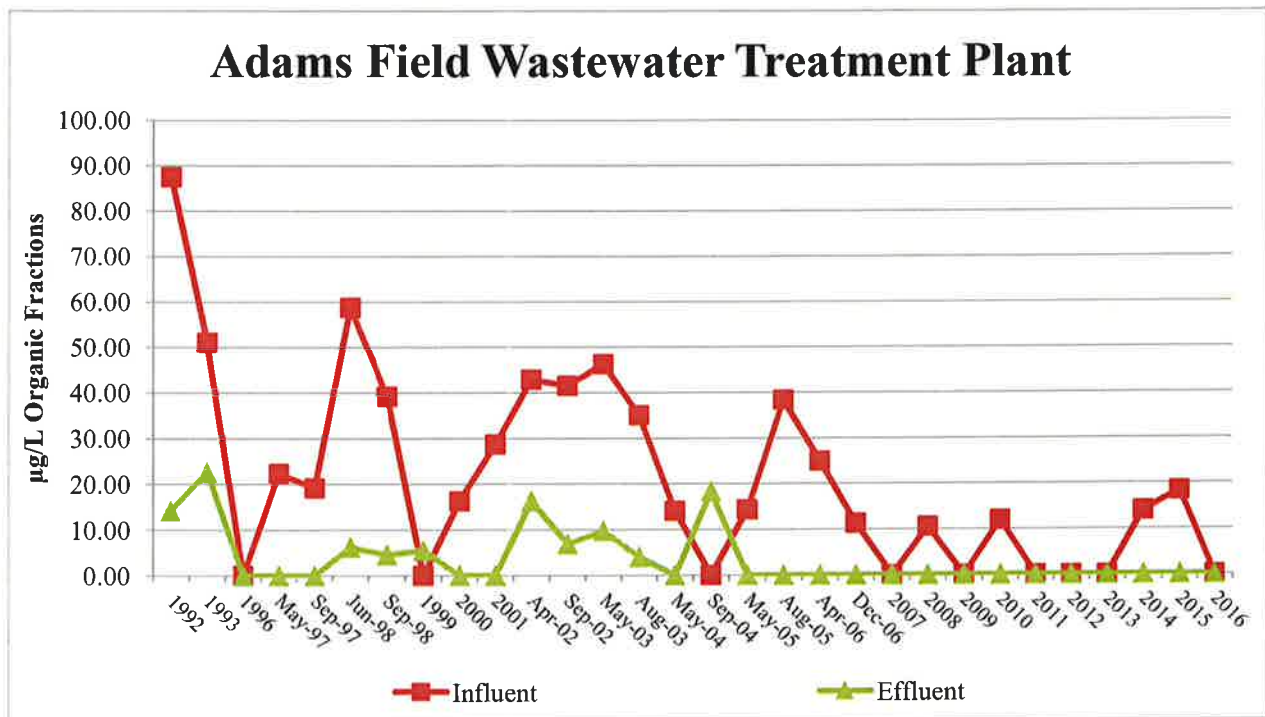
**LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 ADAMS FIELD WASTEWATER TREATMENT PLANT INFLUENT/FINAL EFFLUENT  
 PRIORITY POLLUTANT SCAN - ORGANIC FRACTIONS**

**I. 2016 POSITIVE RESULTS, µg/L**

ADAMS FIELD WASTEWATER TREATMENT PLANT		
Sample Date	Compound	Influent
9/6/2016	Volatiles, Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND
Sample Date	Compound	Effluent
9/6/2016	Volatiles, Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND

Comments: ND - No Detection

**II. TREND OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 2016**



**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD WASTEWATER TREATMENT PLANT INFLUENT/FINAL EFFLUENT  
PRIORITY POLLUTANT SCAN - ORGANIC FRACTIONS**

**March 31, 2017  
Page 2 of 6**

**III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 2016**

**Adams Field Wastewater Treatment Plant**

PPS, µg/L Parameter	2016	
	INF	EFF
Bis(2-ethylhexyl)Phthalate	ND	ND
Chloroform	ND	ND
Tetrachlorethylene	ND	ND
Toulene	ND	ND
Gamma-BHC	ND	ND
Dieldrin	ND	ND
Heptachlor	ND	ND
Ethylbenzene	ND	ND
Diethylphthalate	ND	ND
Dibutylphthalate	ND	ND
Di-n-butylphthalate	ND	ND
Butylbenzylphthalate	ND	ND
Phenol	ND	ND
Trichlorethene	ND	ND
Methylene Chloride	ND	ND
Dibenzo(a,h)anthracene	ND	ND
<b>Total</b>	<b>0.0</b>	<b>0.0</b>

**Comments**

LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 ADAMS FIELD WASTEWATER TREATMENT PLANT INFLUENT/FINAL EFFLUENT  
 PRIORITY POLLUTANT SCAN - ORGANIC FRACTIONS

March 31, 2017  
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III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 2008 THROUGH 2015

Adams Field Wastewater Treatment Plant

PPS, µg/L Parameter	2008		2009		2010		2011		2012		2013		2014		2015	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF
Bis(2-ethylhexyl)Phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.0	ND	13.0	ND
Chloroform	10.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachlorethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toulene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibutylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	12.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND
Trichlorethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Total</b>	<b>10.6</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>12.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>14.0</b>	<b>0.0</b>	<b>18.4</b>	<b>0.0</b>

Comments

III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 2003 THROUGH 2007

Adams Field Wastewater Treatment Plant

PPS, µg/L Parameter	Aug-03		May-04		Sep-04		May-05		Aug-Oct-05 <sup>1</sup>		Apr-06		Oct-Dec-06 <sup>2</sup>		2007 <sup>3</sup>	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF
Bis(2-ethylhexyl)Phthalate	14.0	ND	ND	ND	ND	ND	14.3	ND	15.3	ND	13.5	ND	11.3	ND	ND	ND
Chloroform	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachlorethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toulene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibutylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	ND	ND	14.0	18.3	ND	ND	ND	ND	ND	ND	11.4	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	23	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Total</b>	<b>35.0</b>	<b>0.0</b>	<b>14.0</b>	<b>18.3</b>	<b>0.0</b>	<b>0.0</b>	<b>14.3</b>	<b>0.0</b>	<b>38.3</b>	<b>0.0</b>	<b>24.9</b>	<b>0.0</b>	<b>11.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Comments

1. Grab samples for volatiles collected in August 2005; 24 hour composite samples (12/24 HFC) collected in October, 2005.
2. Influent 001P-015 24-HFC was invalid due to the wrong flows used to calculate the discrete volumes needed to prepare the composite sample.
3. NPDES permit effective January 1, 2007, monitoring frequency for toxic pollutants listed in 40 CFR 122 Appendix D Table II changed to at least once/year.

III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 1998 THROUGH 2003

Adams Field Wastewater Treatment Plant

PPS, µg/L Parameter	Jun-98		Sep-98		1999		2000		2001		Apr-02		Sep-02		May-03	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF <sup>1</sup>	EFF <sup>1</sup>
Bis(2-ethylhexyl)Phthalate	14.0	ND	12.0	3.1	ND	ND	ND	ND	17.5	ND	12.0	ND	12.0	3.6	15.0	ND
Chloroform	11.00	4.6	9.4	2.4	ND	ND	ND	ND	ND	ND	8.2	6.8	5.9	3.4	8.2	4
Tetrachlorethylene	8.80	ND	ND	ND	ND	ND	16.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toulene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND	0.018	0.013	ND	0.016	ND	0.021
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0045	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0063	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	8.4	ND	6.9	ND	ND	ND	ND	ND	ND	ND	7.1	ND	7.2	ND	6.2	ND
Dibutylphthalate	7.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	ND	ND	5.4	ND	ND	ND	ND	ND	11.1	16.3	5.0	ND	5.0	2.7	9.2	ND
Butylbenzylphthalate	4.4	ND	3.4	ND	ND	ND	ND	ND	ND	ND	5.3	ND	4.2	ND	4.6	ND
Phenol	4.5	ND	2.0	ND	ND	ND	ND	ND	ND	ND	5.2	ND	7.2	ND	3.0	ND
Trichlorethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Total</b>	<b>58.70</b>	<b>4.60</b>	<b>39.12</b>	<b>5.50</b>	<b>0.00</b>	<b>0.00</b>	<b>16.20</b>	<b>0.0</b>	<b>28.60</b>	<b>16.30</b>	<b>42.82</b>	<b>6.82</b>	<b>41.50</b>	<b>9.72</b>	<b>46.2</b>	<b>4.02</b>

Comments

1. May-2003 parameters were retested due to elevated detection limits for some parameters due to dilution factors used in laboratory.

III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 1997

Adams Field Wastewater Treatment Plant

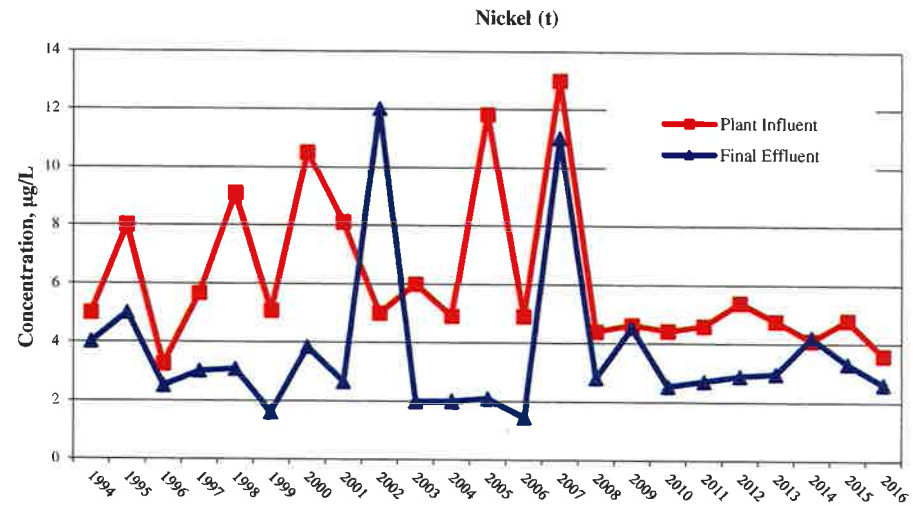
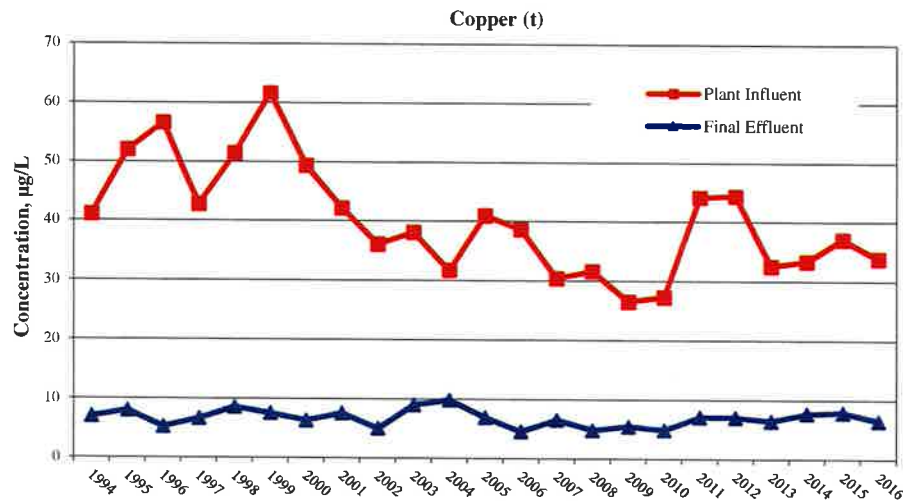
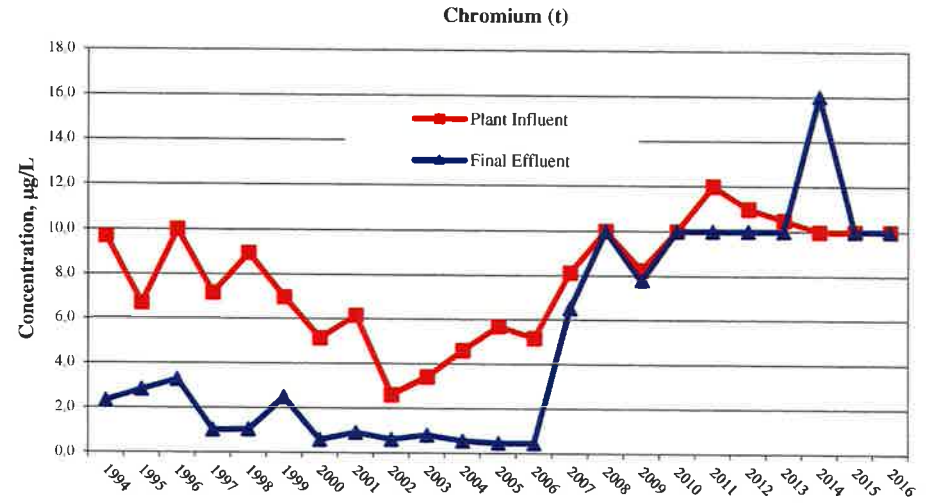
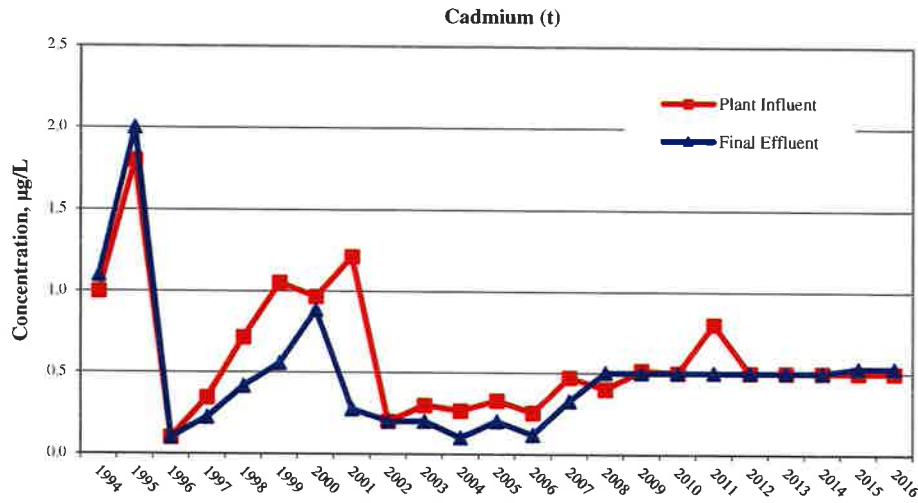
PPS, µg/L Parameter	1991		1992		1993		1994		1995		1996		May-97		Sep-97	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF
Bis(2-ethylhexyl)Phthalate	ND	4.20	82.0	5.30	24.0	ND	35.00	13.00	ND	3.7	ND	ND	ND	ND	11.8	6.22
Chloroform	14.00	10.00	5.40	5.30	ND	ND	3.70	3.60	12	6.4	ND	ND	10.40	ND	7.3	ND
Tetrachlorethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.90	ND	ND	ND
Toulene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	0.13	0.08	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	16.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	12.00	ND	ND	10.00	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibutylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorethene	ND	ND	ND	ND	27.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	29.00	ND	ND	ND	ND	ND	ND	ND
<b>Total</b>	<b>30.13</b>	<b>14.28</b>	<b>87.4</b>	<b>22.62</b>	<b>51.0</b>	<b>0.0</b>	<b>48.70</b>	<b>16.60</b>	<b>41.00</b>	<b>10.10</b>	<b>0.00</b>	<b>0.00</b>	<b>22.30</b>	<b>0.00</b>	<b>19.10</b>	<b>6.22</b>

Comments



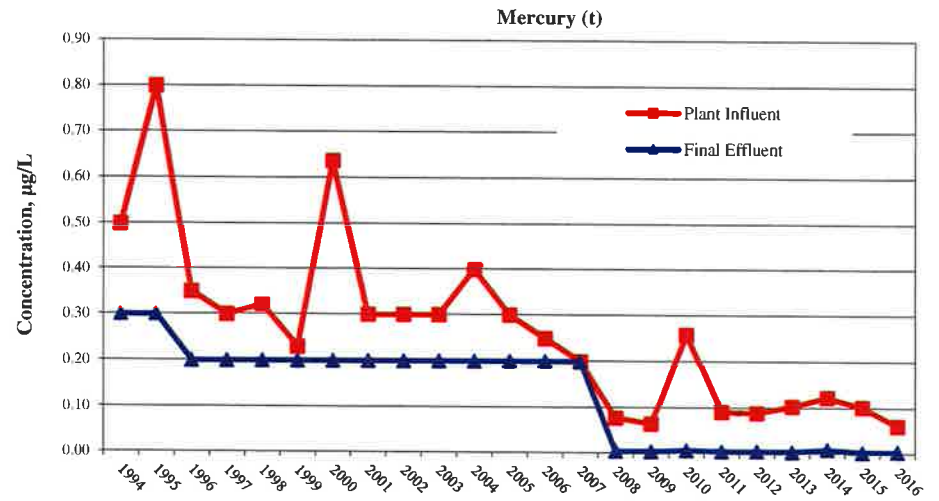
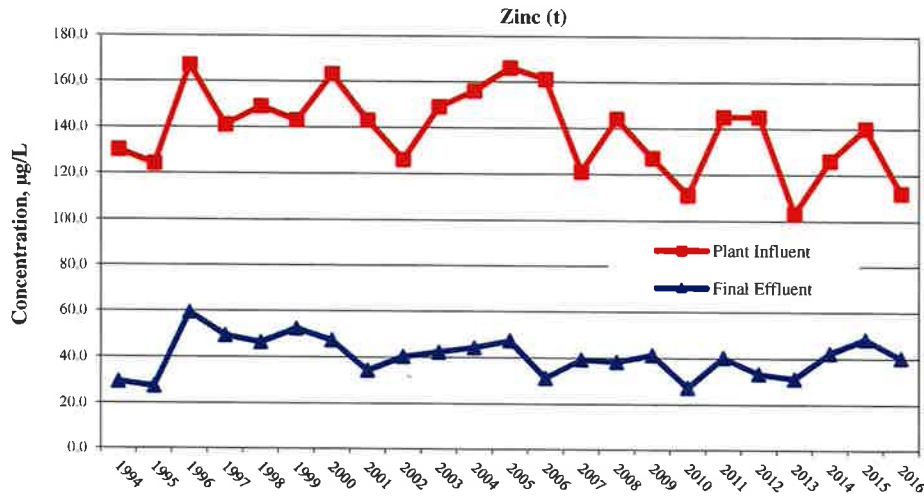
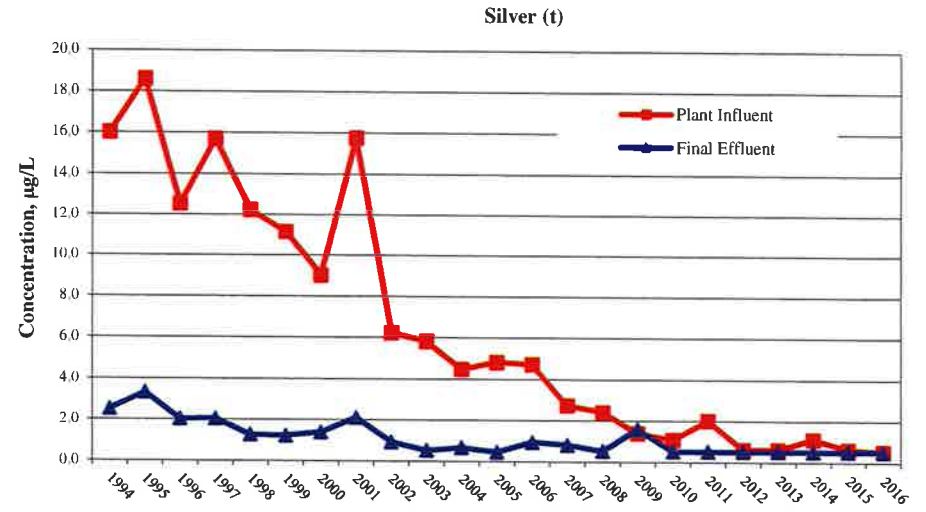
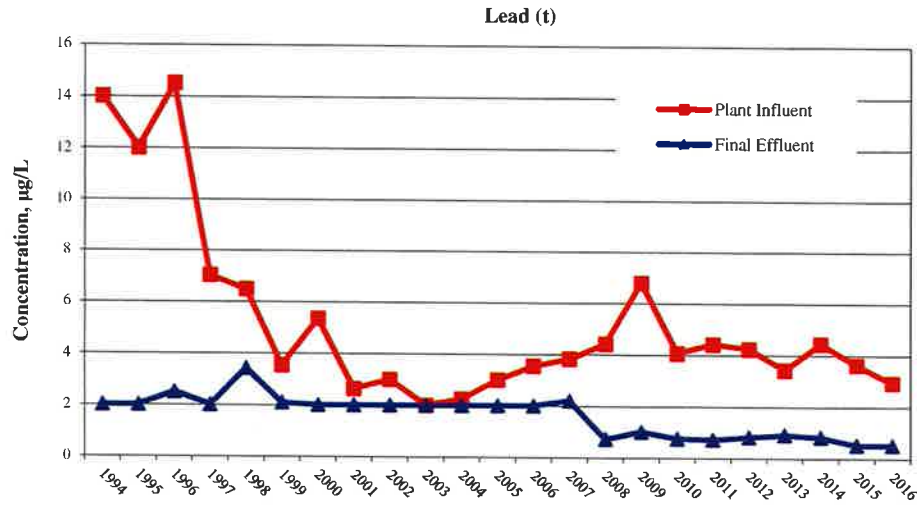
**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2016**

March 31, 2017  
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	Cadmium(t)	Copper (t)	Chromium (t)	Nickel(t)
Influent Headworks Limit	9 ug/L	270 ug/L	260 ug/L	160 ug/L
Effluent Water Quality Criteria (Acute)	27 ug/L	106 ug/L	5,590 ug/L	2,490 ug/L

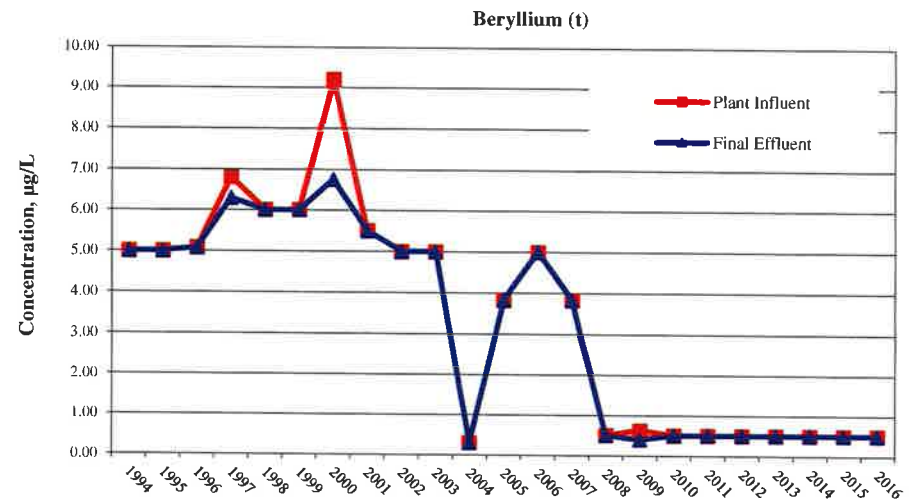
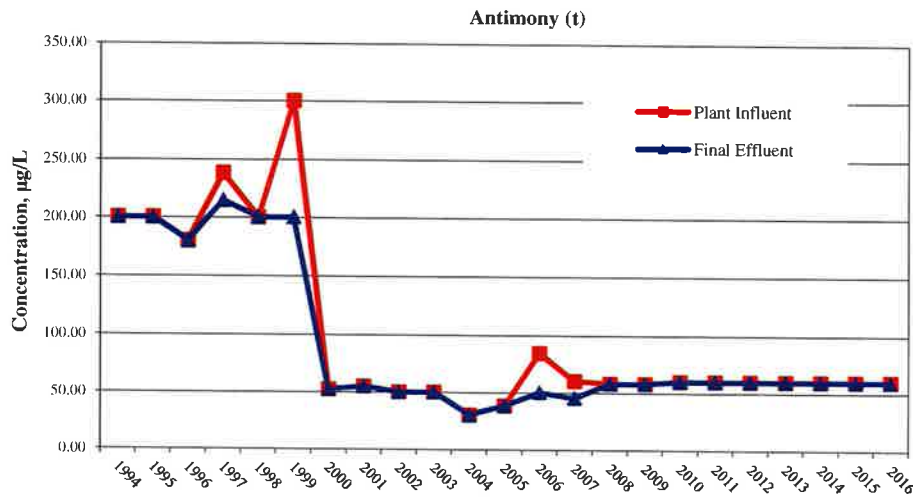
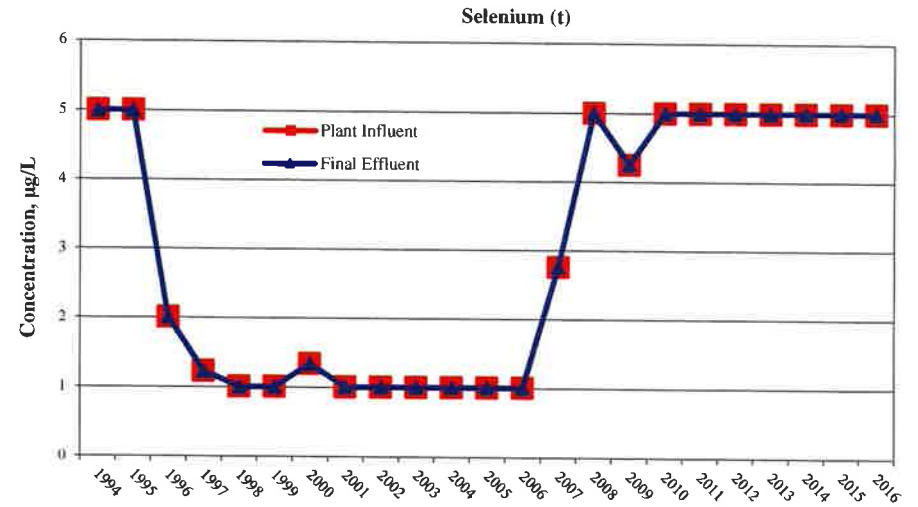
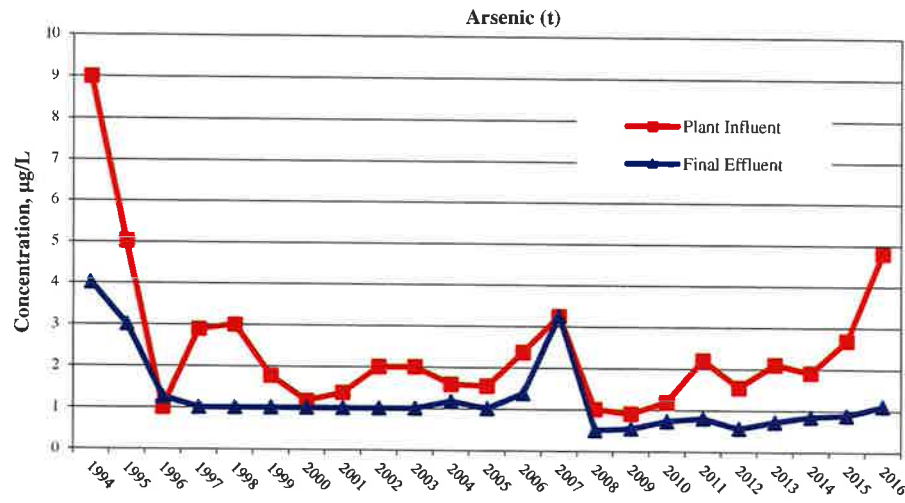
**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2016**



	Lead (t)	Zinc(t)	Silver(t)	Mercury(t)
Influent Headworks Limit	50 µg/L	0.36 mg/L	180 µg/L	0.2 µg/L
Effluent Water Quality Criteria (Acute)	98 µg/L	0.85 mg/L	28 µg/L	0.07 µg/L

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2016**

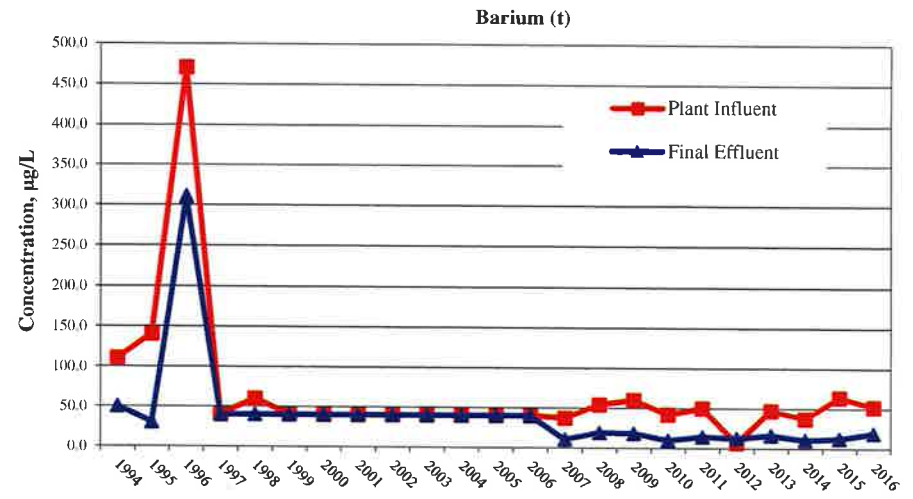
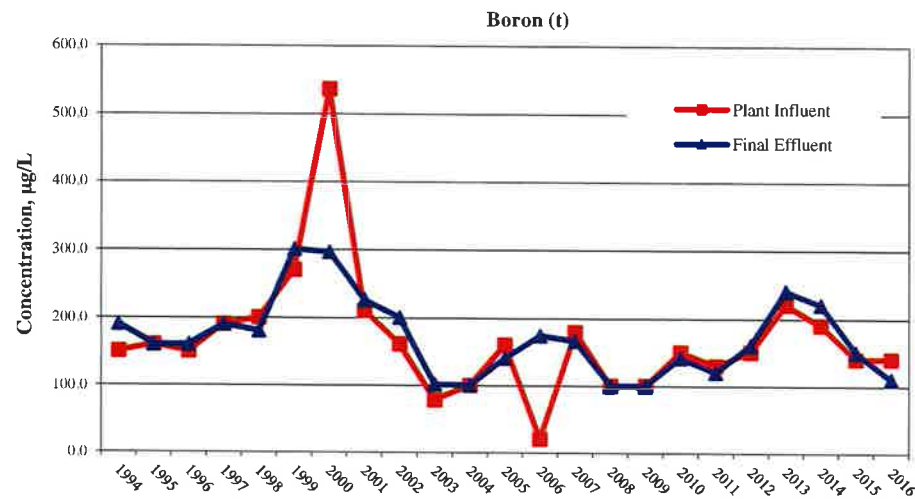
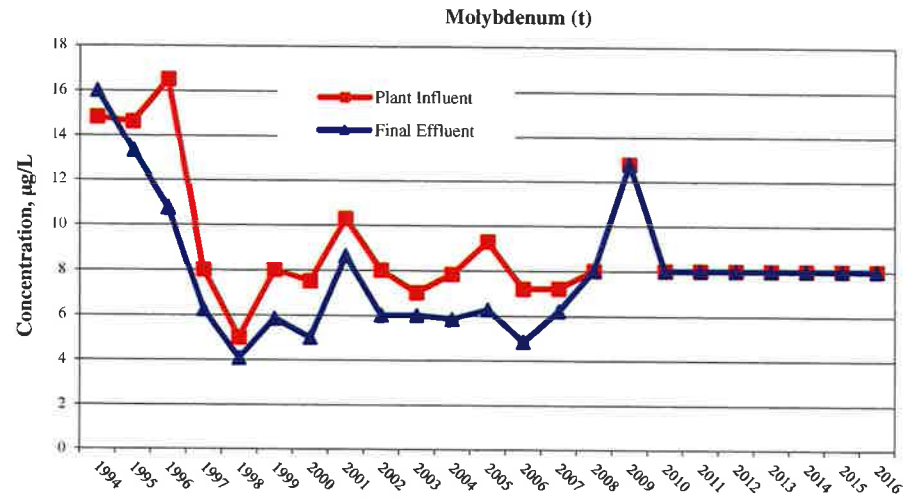
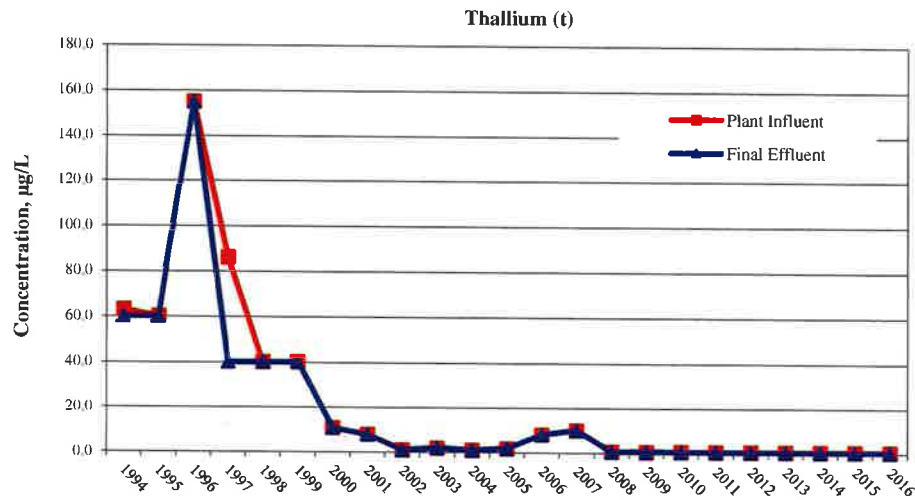
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	Arsenic(t)	Antimony (t)	Selenium (t)	Beryllium (t)
Influent Headworks Limit	14 ug/L	None	10 ug/L	None
Effluent Water Quality Criteria (Acute)	1,190 ug/L	None	28 ug/L	None

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2016**

March 31, 2017  
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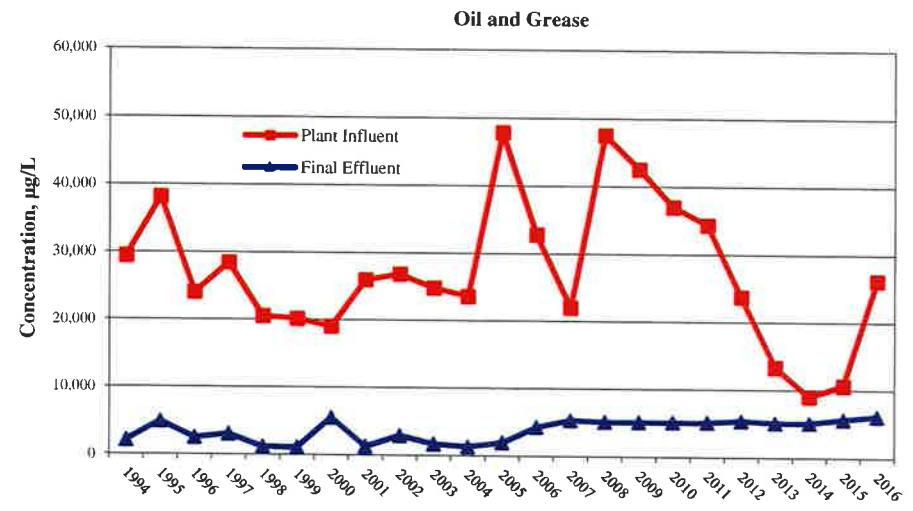
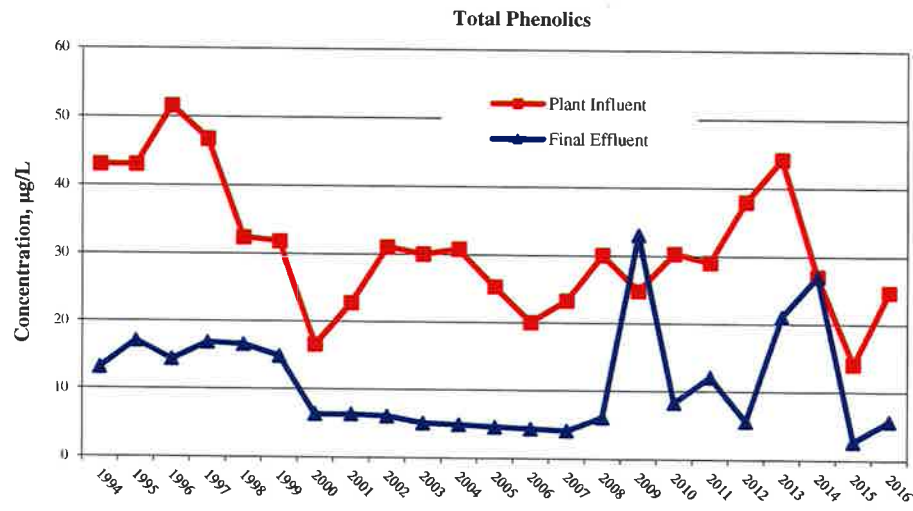
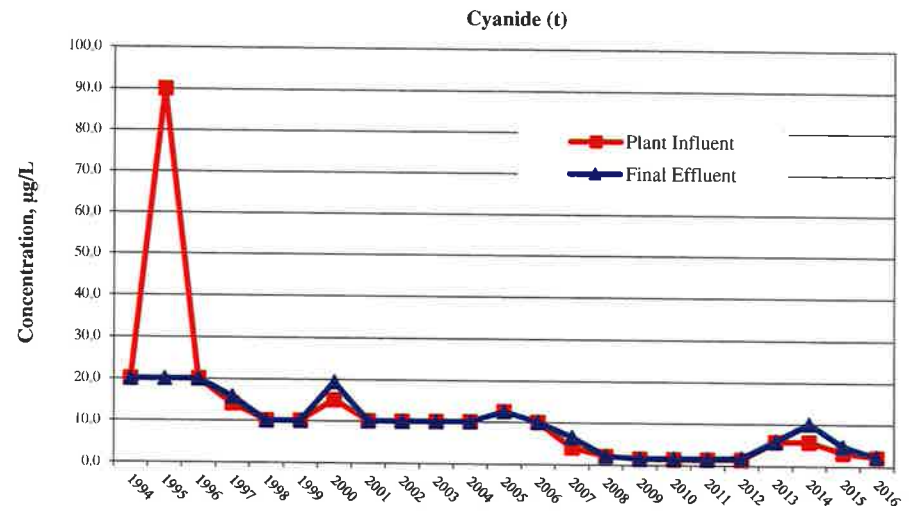
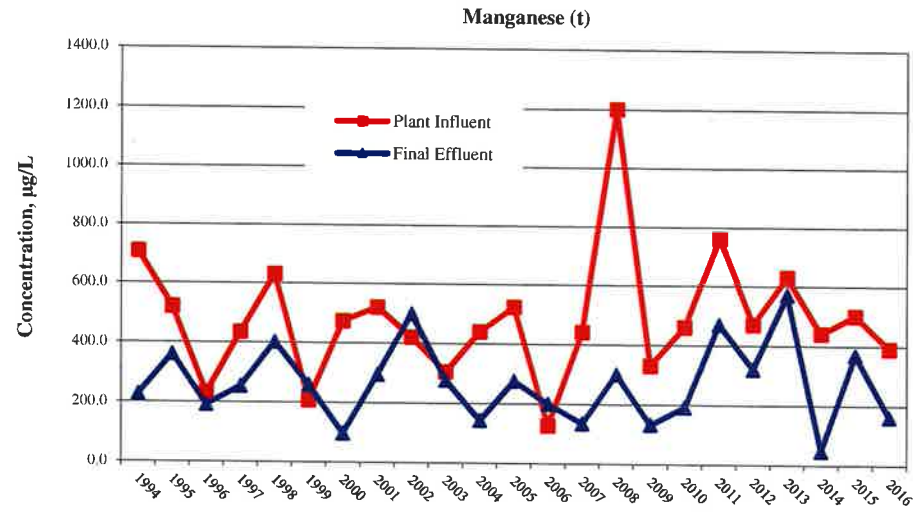


	Thallium (t)	Boron (t)	Molybdenum(t)	Barium(t)
Influent Headworks Limit	None	None	None	None
Effluent Water Quality Criteria (Acute)	None	None	None	None



**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2016**

March 31, 2017  
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	Manganese (t)	Total Phenols	Cyanide (t)	Oil&Grease
Influent Headworks Limit	None	None	0.09 mg/L	None
Effluent Water Quality Criteria (Acute)	None	None	0.29 mg/L	None

# **SECTION**

**V**

## SUMMARY OF ANALYTICAL RESULTS

### FOURCHE CREEK WASTEWATER TREATMENT PLANT (FC-WWTP) INFLUENT AND EFFLUENT ANALYSES

Priority Pollutant Scans were conducted on the Little Rock Wastewater Treatment Plant influent and effluent flows in accordance with NPDES permit requirements. Compounds analyzed include metals, cyanide, phenols, volatile organics, base/neutral and acid compounds, and pesticides/PCBs. Results of the analyses are organized in the following order:

- FC-WWTP 2016 Sample Results - This information includes a summary page of influent and effluent required test data for parameters from 40 CFR Part 122, Appendix D, Table III reported in a format requested by ADEQ. The summary page is followed by separate influent and effluent data tables.

Sampling and testing frequency requirements for Table III parameters are quarterly (NPDES Permit AR 0040177 Part II). Influent and effluent samples were collected with respect to the detention time across the treatment plant for the sampling events. Table III parameters include total arsenic, cadmium, copper, chromium, lead, mercury, nickel, silver, selenium, zinc, antimony, thallium, beryllium, cyanide and phenols. Other parameters collected four per year include molybdenum and oil and grease.

- Treatment Plant Removal Efficiencies - This page includes the metals percent removal rates for the FC-WWTP. These removal rates are calculated based on the influent and effluent concentrations reported in the data tables provided.
- FC-WWTP 2016 Priority Pollutant Scan - Organic Fractions - This information includes required test data from 40 CFR Part 122, Appendix D, Table II divided into two parts. Item I: Identifies the positive measurements of organic compounds in the FC-WWTP influent and effluent during 2016. Item II: Influent/Effluent organic fraction detections trend chart for 1991 through 2016. Item III is the long term summary of positive results. 40 CFR Part 122, Appendix D, Table II monitoring frequency for 2016 is once per year in accordance with the NPDES Permit 0040177.
- FC-WWTP Concentration Trends - This information includes graphs showing FC-WWTP influent and effluent concentration trends for the past twenty-two years, 1994-2016. Some peaks may be due to changes in test methods and detection limits.

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT**  
**REPORTING YEAR: JANUARY 1, 2016 TO DECEMBER 31, 2016**  
**CITY OF LITTLE ROCK - FOURCHE CREEK WASTEWATER TREATMENT PLANT**  
**NPDES PERMIT NO.: AR0040177**

**AVERAGE POTW FLOW: 9.58 MGD**

**PERCENT (%) IU FLOW: 6.1 %**

METALS, CYANIDE and PHENOLS	MAHC (Total) (µg/l)	INFLUENT DATES SAMPLED (µg/l) Once/quarter				WQ level/limit (µg/l)	EFFLUENT DATES SAMPLED (µg/l) Once/quarter				LABORATORY ANALYSIS		
		Start Date	Start Date	Start Date	Start Date		Start Date	Start Date	Start Date	Start Date	EPA MQL (µg/l)	EPA Method Used	Detection Level Achieved (µg/l)
		1/12/2016	4/25/2016	7/18/2016	10/4/2016		1/13/2016	4/26/2016	7/18/2016	10/5/2016			
Antimony		< 60	< 60	< 60	< 60		< 60	< 60	< 60	< 60	60	200.8	60
Cadmium	9	< 0.5	< 0.5	< 1.2	< 0.5	107	< 0.5	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Copper	270	11.0	30.0	27.0	83.0	619	3.2	3.2	4.1	4.2	0.5	200.8	0.5
Lead	50	0.96	2.10	5.10	3.00	395	< 0.50	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Mercury	0.20	0.0499	0.0174	0.0303	0.0685	0.27	0.0036	0.0020	0.0041	0.0047	0.0002	1631E	0.0002
Nickel	160	4.6	13.0	6.2	7.6	9,980	4.1	5.2	5.0	4.0	0.5	200.8	0.5
Selenium	10	< 5	< 5	< 5	< 5	112	< 5	< 5	< 5	< 5	5	200.8	5
Silver	180	< 0.5	< 0.5	< 0.50	< 0.5	165	< 0.5	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Zinc	360	68	130	99	250	4,940	23	< 20	42	< 20	20	200.8	20
Chromium	260	< 10	< 10	< 12	< 10	23,500	< 10	< 10	< 10	< 10	10	200.8	10
Cyanide	90	< 0.8	< 0.8	< 3.4	< 0.8	116	< 0.8	5.7	1.5	< 0.8	10	SM204500C&E-1999	0.8
Arsenic	14	2.90	2.20	6.40	5.40	6,900	1.10	0.99	1.10	1.70	0.5	200.8	0.5
Molybdenum		< 8.0	< 8.0	< 8.0	< 8.0		< 8.0	< 8.0	< 8.0	< 8.0	8	200.8	8
Phenols		76.2	83.3	105.6	169.2		6.2	5.8	4.4	20.1	5	420.1	2.2
Beryllium		< 0.5	< 0.5	< 0.5	< 0.5				< 0.5		0.5	200.8	0.5
Thallium		< 0.5	< 0.5	< 0.5	< 0.5				< 0.5		0.5	200.8	0.5
Barium				45					4		2	200.7	2
Boron				160					140		100	200.7	100
Manganese				370					260		2	200.7	2
Oil and Grease		31,800	74,700	32,600	75,800		< 5,000	< 5,000	< 8,300	< 5,000	5000	1664Rev.B-2010	5000
Flow, MGD		9.81	6.95	6.24	6.72		9.87	7.57	6.71	7.89			



**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
REPORTING YEAR: JANUARY 1, 2015 TO DECEMBER 31, 2015**

TREATMENT PLANT: CITY OF LITTLE ROCK - FOURCHE CREEK WASTEWATER TREATMENT PLANT

NPDES PERMIT NO.: AR0040177

AVERAGE POTW FLOW: 9.58 MGD

PERCENT (%) IU FLOW: 6.1 %

PLANT INFLUENT	Flow MGD	O&G µg/L	CN- µg/L	Zn µg/L	Cd µg/L	Cr µg/L	Ag µg/L	Cu µg/L	Mo µg/L	Ni µg/L	Pb µg/L	As µg/L	Se µg/L	Hg µg/L	Phenol µg/L	Sb µg/L	Be µg/L	Tl µg/L	Mn µg/L	Ba µg/L	B µg/L	
EPA Test Method Used		1664 Rev B 2010	SM 2500 4500 C&E 1999	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	1631E	420.1	200.8	200.8	200.8	200.8	200.8	200.8	200.8
Detection Level Achieved		5000	0.8	20	0.5	10	0.5	0.5	8	0.5	0.5	0.5	5	0.0002	2.2	60	0.5	0.5	2	2	100	
01/12/2016	9.81			68	< 0.5	< 10	< 0.50	11.0	< 8.0	4.6	0.96	2.90	< 5			< 60	< 0.5	< 0.5				
01/28/2016	9.58	31800	< 0.8											0.0499	76.2							
04/25/2016	6.95			130	< 0.5	< 10	< 0.50	30.0	< 8.0	13.0	2.10	2.20	< 5			< 60	< 0.5	< 0.5				
05/19/2016	6.25	74700	< 0.8											0.0174	83.3							
07/18/2016	6.24			99	1.2	12	< 0.50	27.0	< 8.0	6.2	5.10	6.40	< 5			< 60	< 0.5	< 0.5	370	45	160	
09/15/2016	6.96	32600	3.4											0.0303	105.6							
10/04/2016	6.72			250	< 0.5	< 10	< 0.50	83.0	< 8.0	7.6	3.00	5.40	< 5			< 60	< 0.5	< 0.5				
11/17/2016	6.36	75800	< 0.8											0.0685	169.2							
<b>Average</b>	7.36	53725	1.5	137	< 0.7	11	0.50	37.8	< 8.0	7.9	2.79	4.23	< 5	0.0415	108.6	< 60	< 0.5	< 0.5	370	45	160	
<b>Maximum</b>	9.81	75800	3.4	250	< 1.2	12	0.50	83.0	< 8.0	13.0	5.10	6.40	< 5	0.0685	169.2	< 60	< 0.5	< 0.5	370	45	160	
<b>Minimum</b>	6.24	31800	< 0.8	68	< 0.5	< 10	< 0.50	11.0	< 8.0	4.6	0.96	2.20	< 5	0.0174	76.2	< 60	< 0.5	< 0.5	370	45	160	
<b>Headworks limit</b>			0.09	0.360	9.0	260.0	180.0	270		160	50	14	10	0.2								

Comments:

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
REPORTING YEAR: JANUARY 1, 2015 TO DECEMBER 31, 2015**

TREATMENT PLANT: CITY OF LITTLE ROCK - FOURCHE CREEK WASTEWATER TREATMENT PLANT

NPDES PERMIT NO.: AR0040177

AVERAGE POTW FLOW: 9.58 MGD

PERCENT (%) IU FLOW: 6.1 %

FINAL EFFLUENT	Flow MGD	O&G <small>1664 Rev. B 2010</small> µg/L	CN- <small>SM 2005 4900 C&amp;E 1999</small> µg/L	Zn µg/L	Cd µg/L	Cr µg/L	Ag µg/L	Cu µg/L	Mo µg/L	Ni µg/L	Pb µg/L	As µg/L	Se µg/L	Hg µg/L	Phenol µg/L	Sb µg/L	Be µg/L	Tl µg/L	Mn µg/L	Ba µg/L	B µg/L
EPA Test Method Used		2010	C&E 1999	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	1631E	420.1	200.8	200.8	200.8	200.7	200.7	200.7
Detection Level Achieved		5000	0.8	20	0.5	10	0.5	0.5	8	0.5	0.5	0.5	5	0.0002	2.2	0.06	0.5	0.5	2	2	100
01/13/2016	9.87			23	< 0.5	< 10	< 0.50	3.2	< 8.0	4.1	< 0.50	1.10	< 5			< 60	< 0.5	< 0.5			
01/28/2016	10.57	< 500	< 0.8											0.0036	6.2						
04/26/2016	7.57			< 20	< 0.5	< 10	< 0.50	3.2	< 8.0	5.2	< 0.50	0.99	< 5			< 60	< 0.5	< 0.5			
05/16/2016	7.44	< 5000	5.7											0.0020	5.8						
07/18/2016	6.71			42	< 0.5	< 10	< 0.50	4.1	< 8.0	5.0	< 0.50	1.10	< 5			< 60	< 0.5	< 0.5	260	4	140
09/15/2016	5.73	< 8300	1.5											0.0041	4.4						
10/05/2016	7.89			< 20	< 0.5	< 10	< 0.50	4.2	< 8.0	4.0	< 0.50	1.70	< 5			< 60	< 0.5	< 0.5			
11/17/2016	6.94	< 5000	< 0.8											0.0047	20.1						
<b>Average</b>	7.84	< 4700	2.2	26	< 0.5	< 10	< 0.50	3.7	< 8.0	4.6	0.50	1.22	< 5	0.0036	9.1	< 60	< 0.5	< 0.5	260	4	140
<b>Maximum</b>	10.57	< 8300	5.7	42	< 0.5	< 10	< 0.50	4.2	< 8.0	5.2	0.50	1.70	< 5	0.0047	20.1	< 60	< 0.5	< 0.5	260	4	140
<b>Minimum</b>	5.73	< 500	< 0.8	< 20	< 0.5	< 10	< 0.50	3.2	< 8.0	4.0	< 0.50	0.99	< 5	0.0020	4.4	< 60	< 0.5	< 0.5	260	4	140
<b>WQS Effluent Level</b>																					
<b>Day Max.</b>			0.116	4.94	107	23500	165	619		9980	395	6900	112	0.27							
<b>Month Avg.</b>			0.058	2.46	53	11700	82	309		4980	197	3440	56	0.14							

Comments:

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
TREATMENT PLANT PERCENT REMOVAL EFFICIENCIES  
REPORTING YEAR: JANUARY 1, 2016 TO DECEMBER 31, 2016**

**Fourche Creek Wastewater Treatment Plant - NPDES Permit No. AR0040177**

	O&G	CN-	Zn	Cd	Cr	Ag	Cu	Mo	Ni	Pb	As	Se	Hg	Phenol	Sb	Be	Tl	Mn	Ba	B
01/12/2016			66.2%	0.0%	0.0%	0.0%	70.9%	0.0%	10.9%	47.9%	62.1%	0.0%			0.0%	0.0%	0.0%			
01/28/2016	98.4%	0.0%											92.7%	91.9%						
04/25/2016			84.6%	0.0%	0.0%	0.0%	89.3%	0.0%	60.0%	76.2%	55.0%	0.0%			0.0%	0.0%	0.0%			
05/19/2016	93.3%	-612.5%											88.4%	93.0%						
07/18/2016			57.6%	58.3%	16.7%	0.0%	84.8%	0.0%	19.4%	90.2%	82.8%	0.0%			0.0%	0.0%	0.0%	29.7%	90.4%	12.5%
09/15/2016	74.5%	55.9%											86.4%	95.8%						
10/04/2016			92.0%	0.0%	0.0%	0.0%	94.9%	0.0%	47.4%	83.3%	68.5%	0.0%			0.0%	0.0%	0.0%			
11/17/2016	93.4%	0.0%											93.2%	88.1%						
<b>Average</b>	<b>89.9%</b>	<b>-139.2%</b>	<b>78.1%</b>	<b>14.6%</b>	<b>4.2%</b>	<b>0.0%</b>	<b>85.0%</b>	<b>0.0%</b>	<b>34.4%</b>	<b>74.4%</b>	<b>67.1%</b>	<b>0.0%</b>	<b>90.2%</b>	<b>92.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>29.7%</b>	<b>90.4%</b>	<b>12.5%</b>

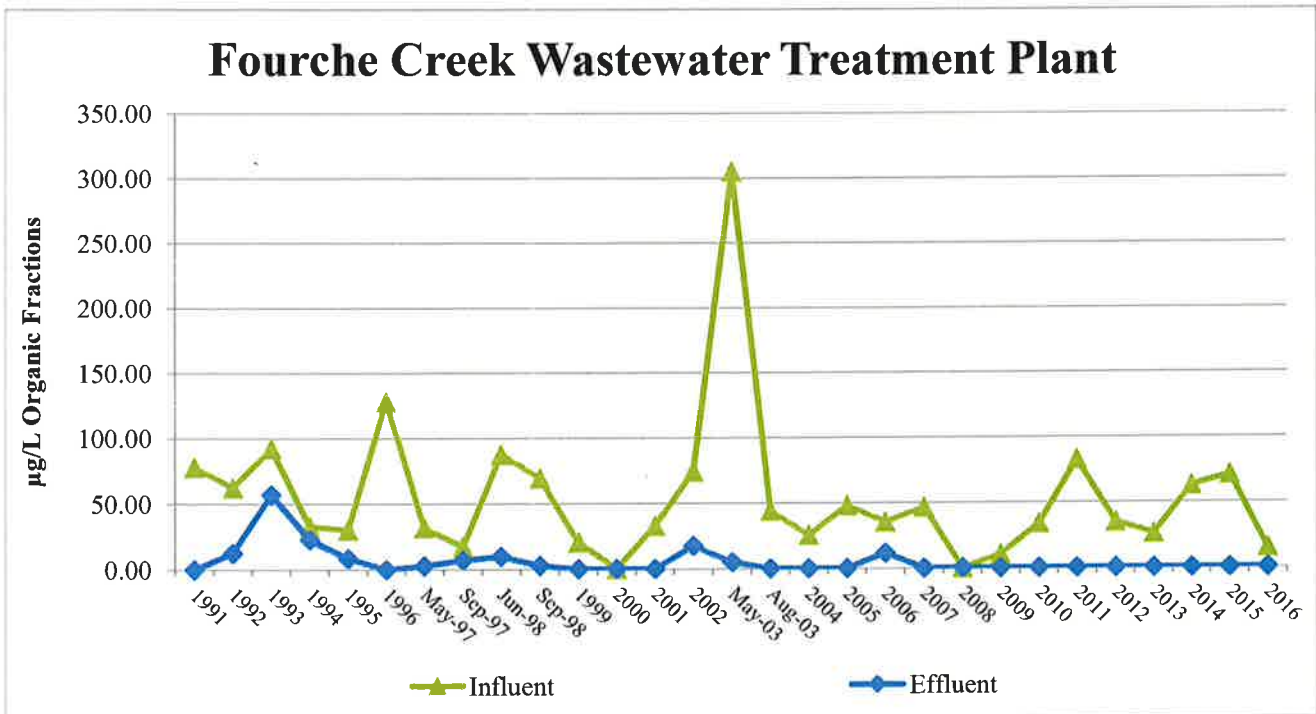
**LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 FOURCHE CREEK WASTEWATER TREATMENT PLANT INFLUENT/FINAL EFFLUENT  
 PRIORITY POLLUTANT SCAN - ORGANIC FRACTIONS**

**I. 2016 POSITIVE RESULTS, µg/L**

FOURCHE CREEK WASTEWATER TREATMENT PLANT		
Sample Date	Compound	Influent
9/14/2016	phenol	15
	Volatiles	ND
	Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND
Sample Date	Compound	Effluent
9/13/2016	Volatiles	ND
	Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND

Comments: ND - No Detection

**II. TREND OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 2016**



LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 FOURCHE CREEK WASTEWATER TREATMENT PLANT INFLUENT/FINAL EFFLUENT  
 PRIORITY POLLUTANT SCAN - ORGANIC FRACTIONS

March 31, 2017  
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III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 2012 THROUGH 2016

Fourche Creek Wastewater Treatment Plant

PPS, µg/L Parameter	2012		2013		2014		2015		2016	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF
Bis(2-ethylhexyl)Phthalate	ND	ND	10.0	ND	17.0	ND	27.0	ND		ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	16	ND	ND	ND	21	ND	22	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4'4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	19	ND	16	ND	25	ND	22	ND	15	ND
Dibutylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4, Dimethyl phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-Octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Total</b>	<b>35.00</b>	<b>0.00</b>	<b>26.00</b>	<b>0.00</b>	<b>63.00</b>	<b>0.00</b>	<b>71.00</b>	<b>0.00</b>	<b>15.00</b>	<b>0.00</b>

Comments

LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 FOURCHE CREEK WASTEWATER TREATMENT PLANT INFLUENT/FINAL EFFLUENT  
 PRIORITY POLLUTANT SCAN - ORGANIC FRACTIONS

March 31, 2017  
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III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 2004 THROUGH 2011

Fourche Creek Wastewater Treatment Plant

PPS, µg/L Parameter	2004		2005		2006		2007		2008		2009		2010		2011	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF <sup>1</sup>	EFF <sup>1</sup>	INF	EFF	INF	EFF	INF	EFF
Bis(2-ethylhexyl)Phthalate	12.5	ND	22.4	ND	18.1	ND	19.2	ND	ND	ND	10.3	ND	ND	ND	11.0	ND
Chloroform	13.0	ND	12.8	ND	ND	ND	12.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1 Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4'4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ND	ND	ND	ND	17.4	11.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	12.8	ND	ND	ND	14.5	ND	ND	ND	ND	ND	34	ND	19	ND
Dibutylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4, Dimethyl phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-Octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,Dichlorobenzene															2.8	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Total</b>	<b>25.50</b>	<b>0.00</b>	<b>48.00</b>	<b>0.00</b>	<b>35.50</b>	<b>11.60</b>	<b>46.50</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>10.30</b>	<b>0.00</b>	<b>34.00</b>	<b>0.00</b>	<b>82.80</b>	<b>0.00</b>

Comments

- Parameters were retested due to elevated detection limits for some parameters due to dilution factors used in laboratory.

LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 FOURCHE CREEK WASTEWATER TREATMENT PLANT INFLUENT/FINAL EFFLUENT  
 PRIORITY POLLUTANT SCAN - ORGANIC FRACTIONS

March 31, 2017  
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III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 1998 THROUGH 2003

Fourche Creek Wastewater Treatment Plant

PPS, µg/L Parameter	Jun-98		Sep-98		1999		2000		2001		2002		May-03		Aug-03	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF <sup>1</sup>	EFF <sup>1</sup>	INF <sup>2</sup>	EFF <sup>2</sup>
Bis(2-ethylhexyl)Phthalate	23.0	3.60	26.0	ND	20.4	ND	ND	ND	15.0	ND	18.0	2.7	75.0	ND	21.0	ND
Chloroform	12.00	3.80	8.2	2.6	ND	ND	ND	ND	ND	ND	15.0	7.5	9.5	4.8	13.0	ND
1,1,1 Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethane	4.20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	14.00	ND	7.1	ND	ND	ND	ND	ND	17.9	ND	6.7	ND	9.6	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	210	ND	ND	ND
4'4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.82	ND	ND	ND
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	4.6	ND	ND	10	ND
Diethylphthalate	9.20	ND	8.6	ND	ND	ND	ND	ND	ND	ND	9.7	ND	ND	ND	ND	ND
Butylbenzylphthalate	3.90	ND	4.0	ND	ND	ND	ND	ND	ND	ND	6.0	2.6	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND
Phenol	12.00	ND	6.9	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	ND	ND
Dibutylphthalate	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4, Dimethyl phenol	4.40	ND	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.019	ND	ND	ND	ND
Dieldrin	ND	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.032	ND	ND
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.036	0.017	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.032	ND	ND
Di-n-Octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,Dichlorobenzene																
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.025	ND	ND	ND	ND
<b>Total</b>	<b>87.70</b>	<b>9.90</b>	<b>69.50</b>	<b>2.60</b>	<b>20.40</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>32.90</b>	<b>0.00</b>	<b>74.15</b>	<b>17.46</b>	<b>304.92</b>	<b>4.86</b>	<b>44.00</b>	<b>0.00</b>

Comments

1. May-2003 parameters were retested due to elevated detection limits for some parameters due to dilution factors used in laboratory.
2. Parameters were retested due to elevated detection limits for some parameters due to dilution factors used in laboratory.

LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 FOURCHE CREEK WASTEWATER TREATMENT PLANT INFLUENT/FINAL EFFLUENT  
 PRIORITY POLLUTANT SCAN - ORGANIC FRACTIONS

March 31, 2017  
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III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 1997

Fourche Creek Wastewater Treatment Plant

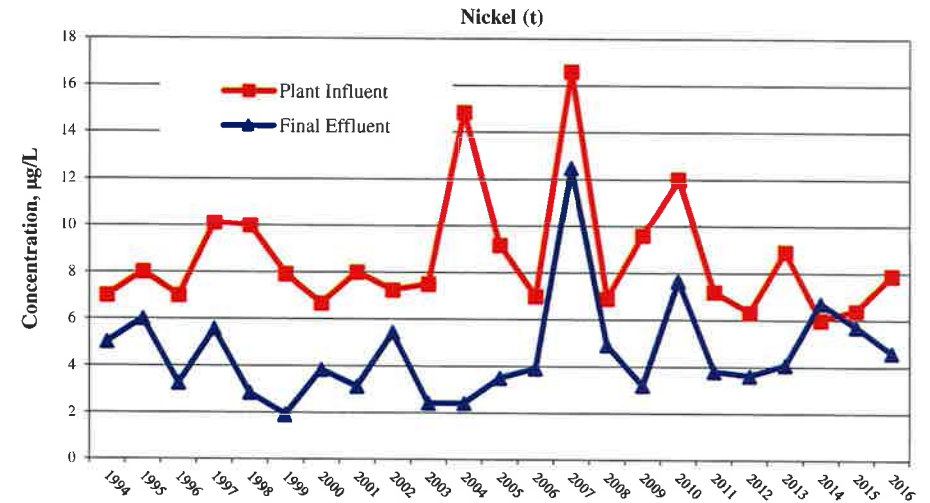
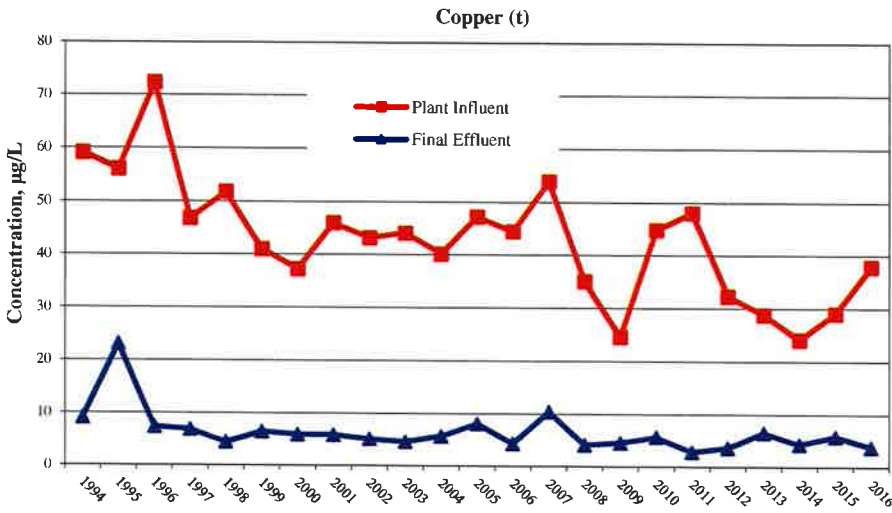
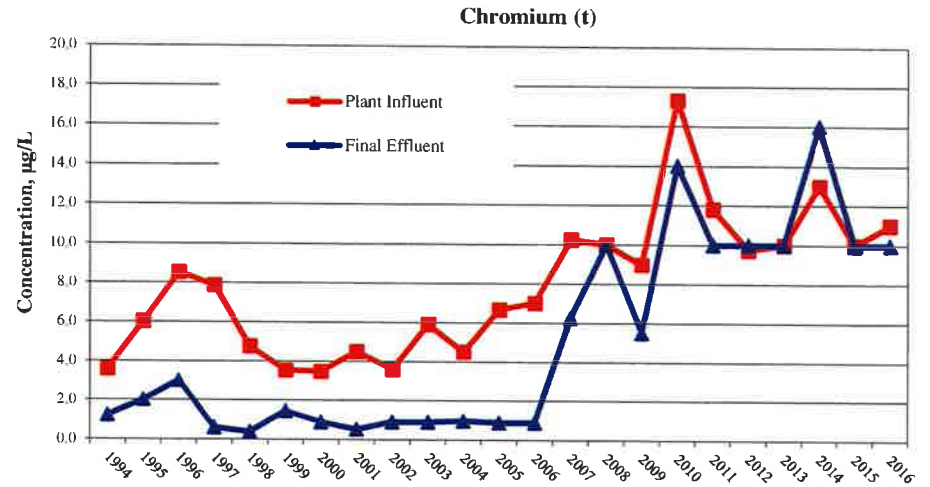
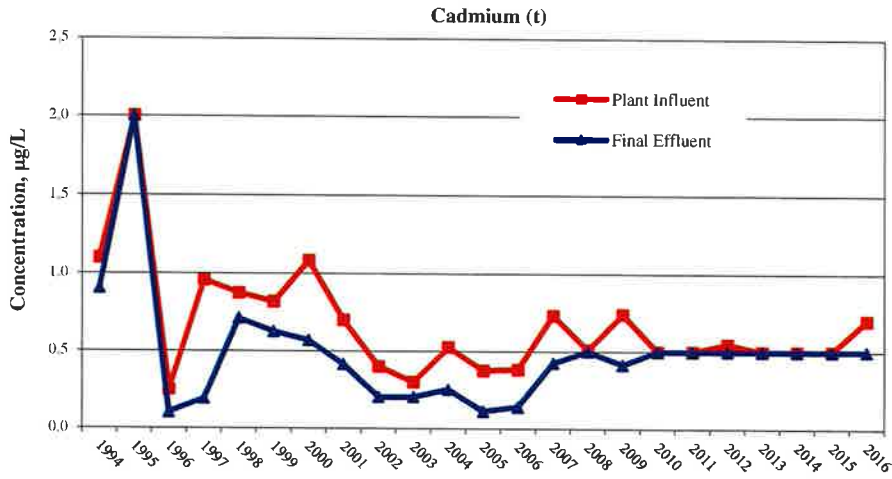
PPS, µg/L Parameter	1991		1992		1993		1994		1995		1996		May-97		Sep-97	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF
Bis(2-ethylhexyl)Phthalate	24.00	ND	23.0	7.0	44.0	18.0	11.60	ND	30.0	5.8	ND	ND	17.2	ND	ND	6.98
Chloroform	ND	ND	17.0	5.4	8.9	27.0	10.70	ND	ND	ND	ND	ND	14.50	ND	8.0	ND
1,1,1 Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17.6	ND	ND	ND	ND	ND
Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	89.8	ND	ND	ND	ND	ND
Toluene	ND	ND	7.70	ND	10.0	ND	ND	ND	ND	ND	20.8	ND	ND	ND	8.8	ND
Methylene Chloride	ND	ND	3.80	ND	ND	ND	10.40	22.90	ND	ND	ND	ND	ND	ND	ND	ND
4'4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ND	ND	ND	ND	9.4	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	11.0	ND	14.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibutylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4, Dimethyl phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	54.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-Octyl phthalate	ND	ND	ND	ND	5.9	8.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.50	ND	ND	ND	2.50	ND	ND
1,3,Dichlorobenzene																
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48	ND	ND	ND	0.48	ND
<b>Total</b>	<b>78.00</b>	<b>0.00</b>	<b>62.50</b>	<b>12.40</b>	<b>92.2</b>	<b>57.3</b>	<b>32.70</b>	<b>22.90</b>	<b>30.00</b>	<b>8.30</b>	<b>128.68</b>	<b>0.00</b>	<b>31.70</b>	<b>2.50</b>	<b>17.28</b>	<b>6.98</b>

Comments



**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
FOURCHE CREEK TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2016**

March 31, 2017  
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**Influent Headworks Limit  
Effluent Water Quality Criteria**

**Cadmium(t)  
9 ug/L  
53 ug/L**

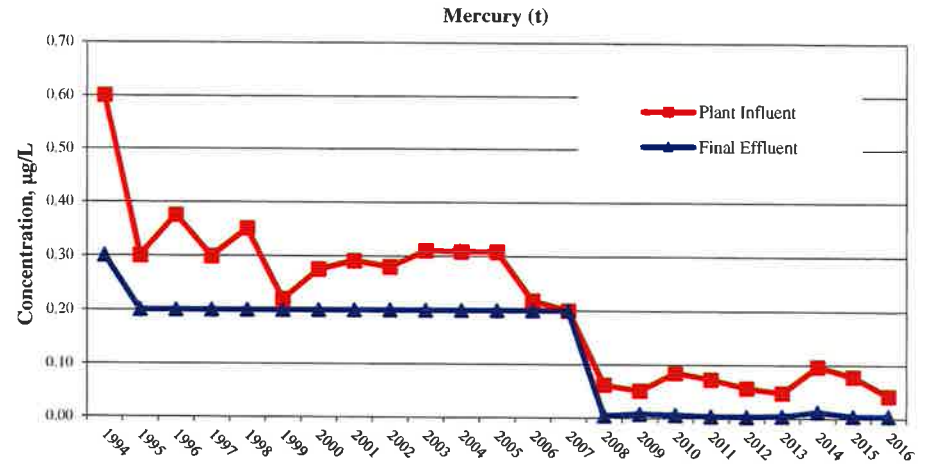
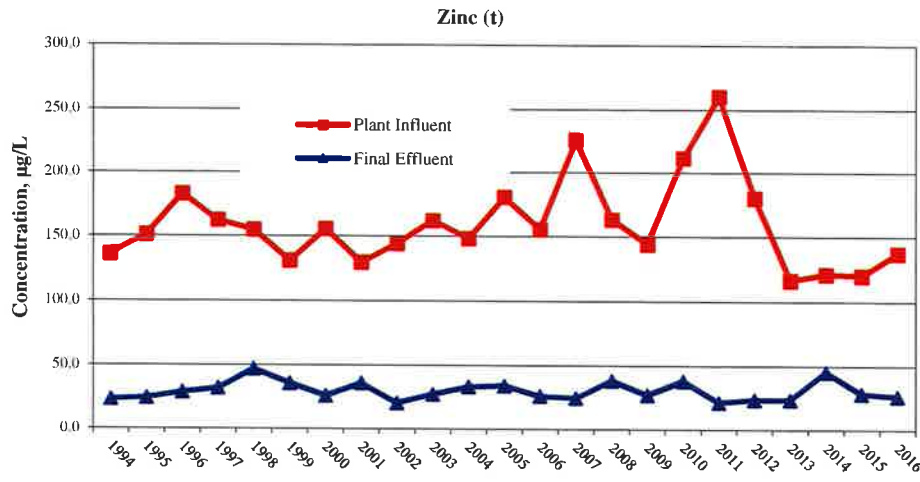
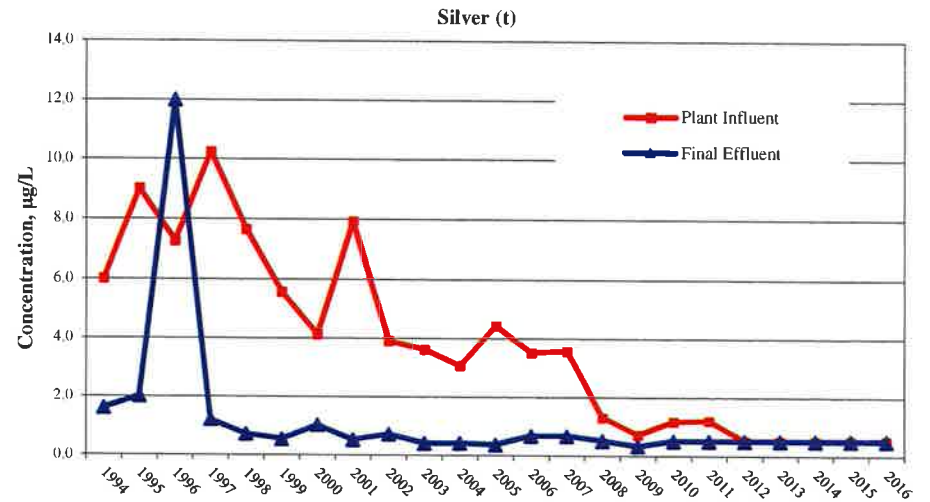
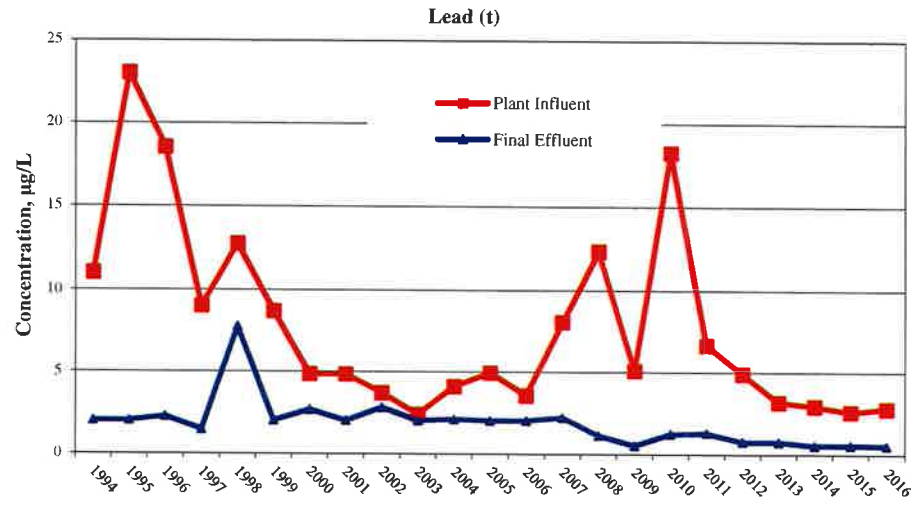
**Copper (t)  
270 ug/L  
395 ug/L**

**Chromium (t)  
260 ug/L  
11,700 ug/L**

**Nickel(t)  
160 ug/L  
4,980 ug/L**

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
FOURCHE CREEK TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2016**

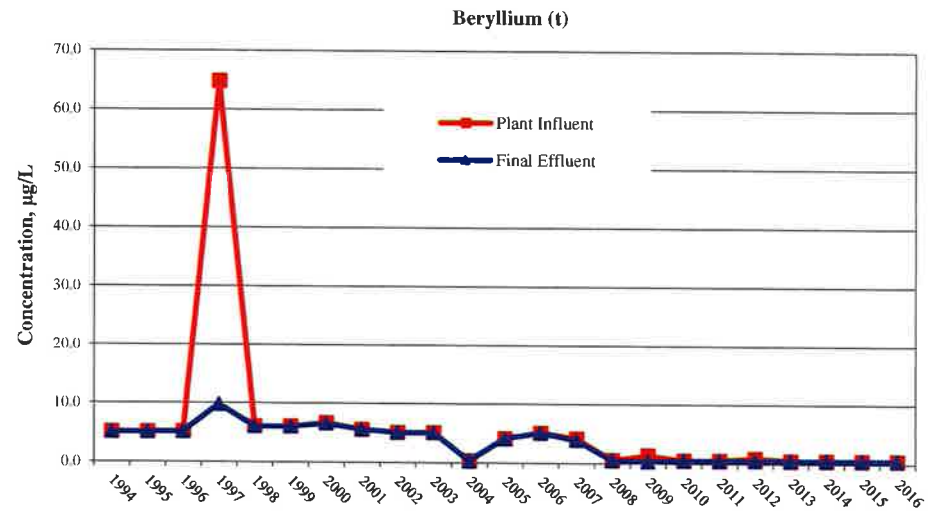
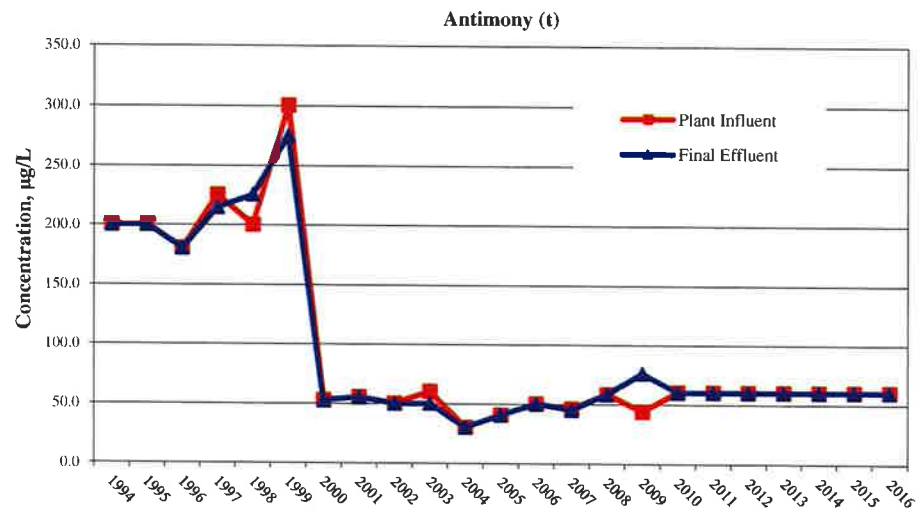
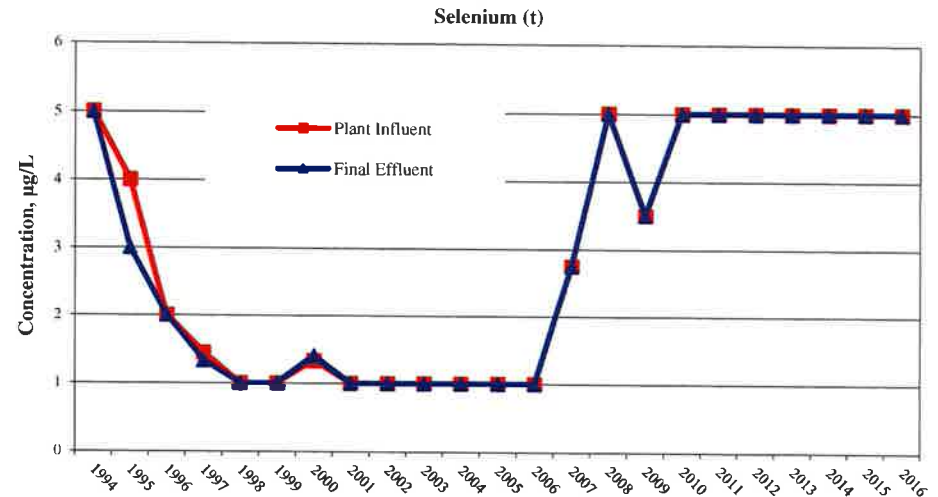
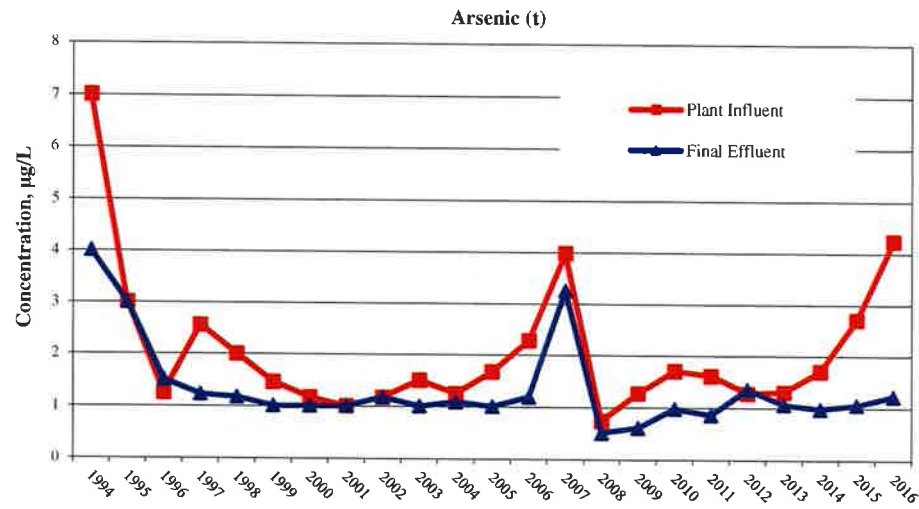
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	Lead (t)	Zinc(t)	Silver(t)	Mercury(t)
Influent Headworks Limit	50 ug/L	0.36 mg/L	180 ug/L	0.2 ug/L
Effluent Water Quality Criteria	197 ug/L	2.46 mg/L	56 ug/L	0.14 ug/L

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
FOURCHE CREEK TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2016**

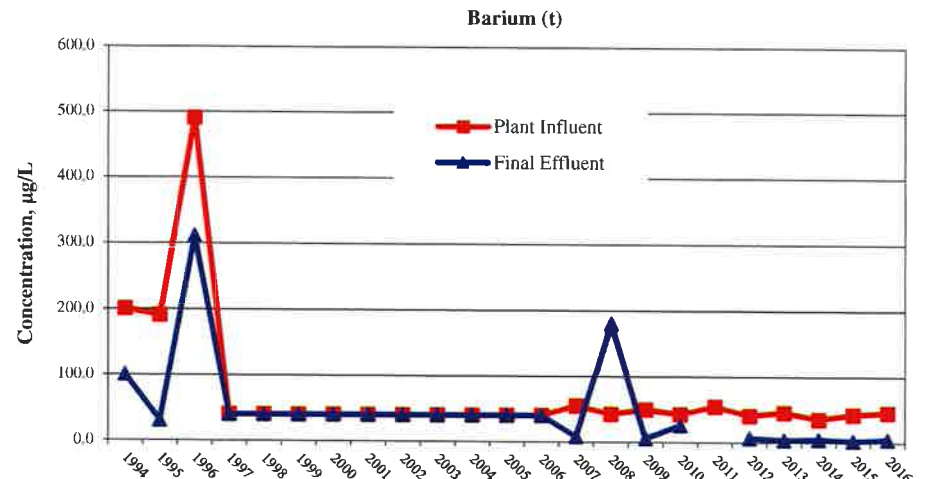
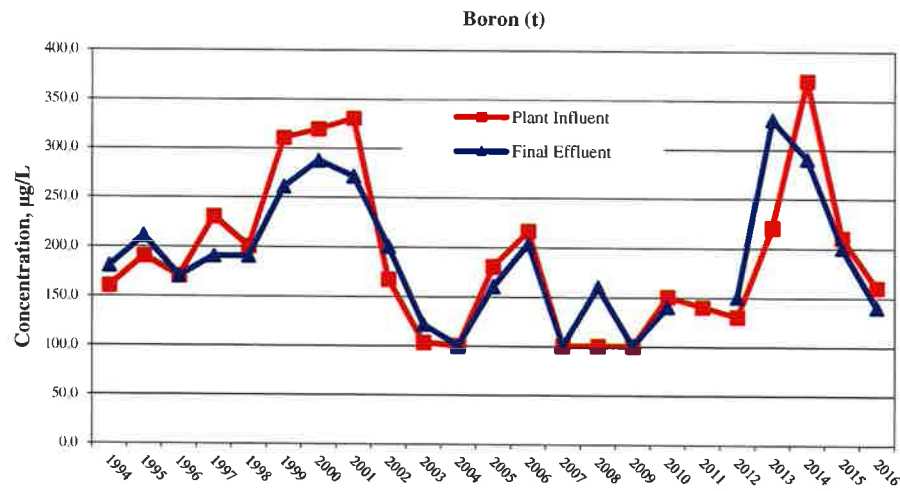
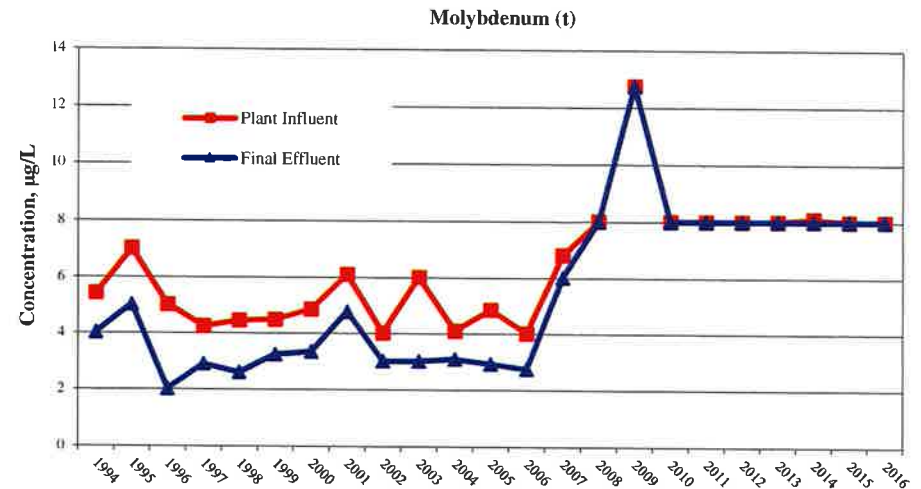
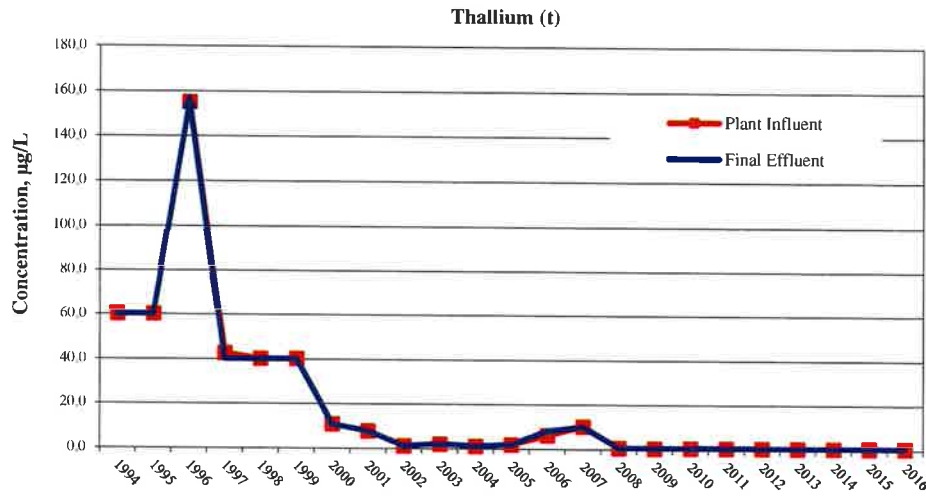
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	Arsenic(t)	Antimony (t)	Selenium (t)	Beryllium (t)
<b>Influent Headworks Limit</b>	14 ug/L	None	10 ug/L	None
<b>Effluent Water Quality Criteria</b>	3,440 ug/L	None	56 ug/L	None

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
FOURCHE CREEK TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2016**

March 31, 2017  
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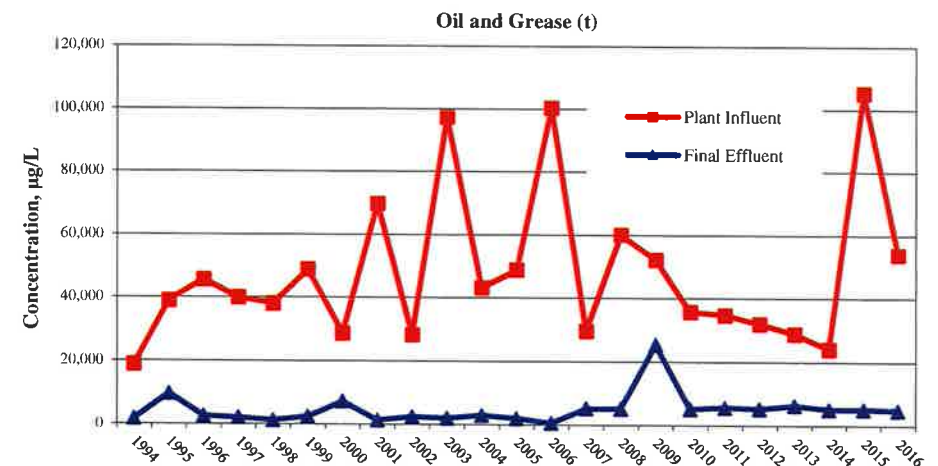
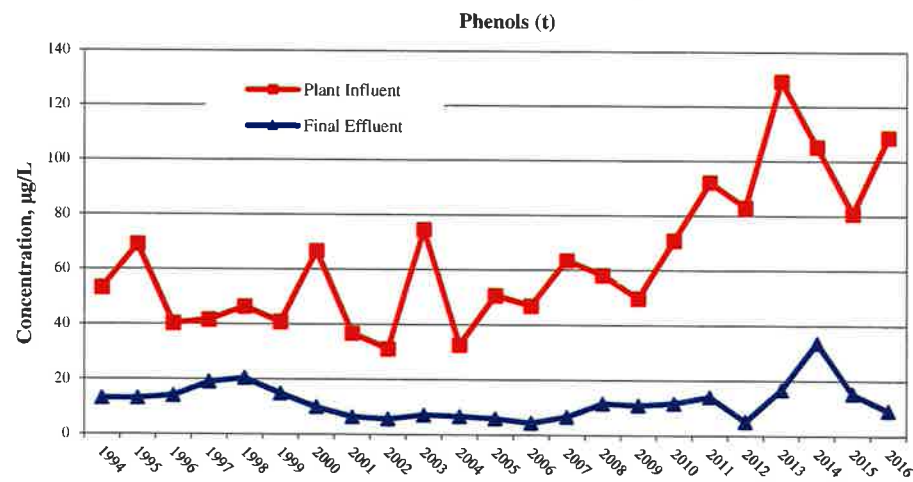
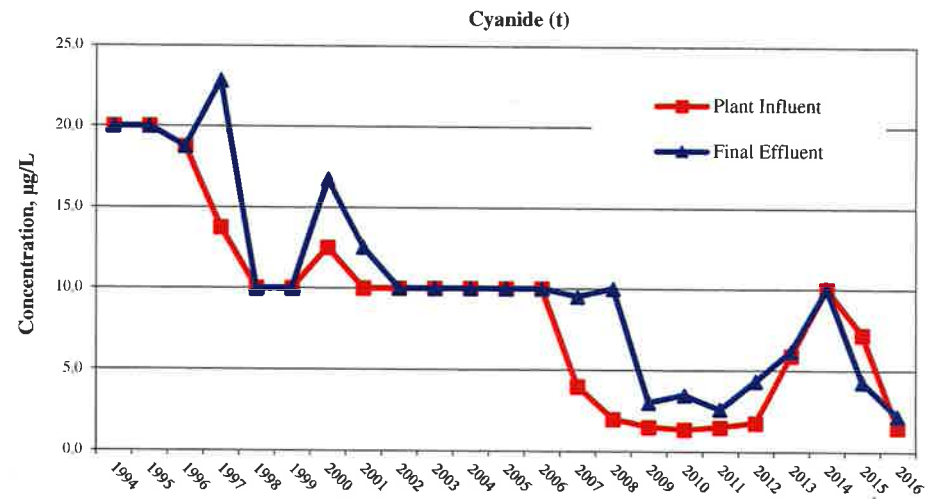
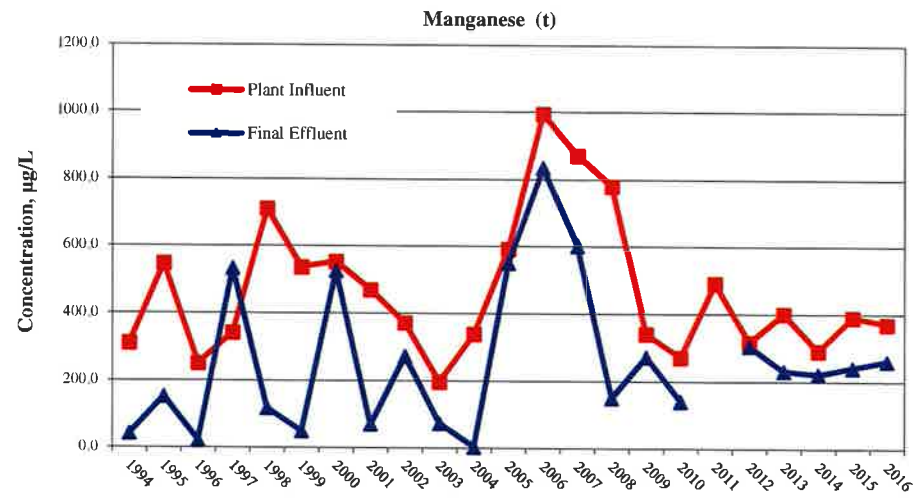


	Thallium (t)	Boron (t)	Molybdenum(t)	Barium(t)
Influent Headworks Limit	None	None	None	None
Effluent Water Quality Criteria	None	None	None	None



**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
FOURCHE CREEK TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2016**

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	Manganese (t)	Total Phenols	Cyanide (t)	Oil&Grease
Influent Headworks Limit	None	None	0.09 mg/L	None
Effluent Water Quality Criteria	None	None	0.058 mg/L	None

# **SECTION**

# **VI**

## SUMMARY OF ANALYTICAL RESULTS

### LITTLE MAUMELLE WASTEWATER TREATMENT PLANT (LM-WWTP) INFLUENT AND EFFLUENT ANALYSES

Priority Pollutant Scans were conducted on the Little Rock Wastewater Treatment Plant influent and effluent flows in accordance with our NPDES permit requirements. Compounds analyzed include metals, cyanide, phenols, volatile organics, base/neutral and acid compounds, and pesticides/PCBs. Results of the analyses are organized in the following order:

- LM-WWTP 2016 Sample Results - This information includes a summary page of influent and effluent required test data for parameters from 40 CFR Part 122, Appendix D, Table III reported in a format requested by ADEQ. The summary page is followed by separate influent and effluent data tables.

Sampling and testing frequency requirements for Table III parameters are once per year (NPDES Permit AR 0050849 Part II). Influent and effluent samples were collected with respect to the detention time across the treatment plant for the sampling events. Table III parameters include total arsenic, cadmium, copper, chromium, lead, mercury, nickel, silver, selenium, zinc, antimony, thallium, beryllium, cyanide and phenols. Other parameters collected once per year include molybdenum and oil and grease.

- Treatment Plant Removal Efficiencies - This page includes the metals percent removal rates for the LM-WWTP. These removal rates are calculated based on the influent and effluent concentrations reported in the data tables provided.
- LM-WWTP 2016 Priority Pollutant Scan - Organic Fractions - This information includes required test data from 40 CFR Part 122, Appendix D, Table II divided into two parts. Item I: Identifies the positive measurements of organic compounds in the LM-WWTP influent and effluent during 2016. Item II: Influent/Effluent organic fraction detections trend chart for 2011 through 2016. Item III is the long term summary of positive results. 40 CFR Part 122, Appendix D, Table II monitoring frequency for 2016 is once per year in accordance with the NPDES Permit 0050849.
- LM-WWTP Concentration Trends - This information includes graphs showing LM-WWTP influent and effluent concentration trends for the past four years 2011-2016. Some peaks may be due to changes in test methods and detection limits.

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT**  
**REPORTING YEAR: JANUARY 1, 2016 TO DECEMBER 31, 2016**  
**CITY OF LITTLE ROCK - LITTLE MAUMELLE WASTEWATER TREATMENT PLANT**  
**NPDES PERMIT NO.: AR0050849**

**AVERAGE POTW FLOW: 2.23 MGD**

**PERCENT (%) IU FLOW: 0 %**

METALS, CYANIDE and PHENOLS	MAHC (Total) (µg/l)	INFLUENT DATES SAMPLED (µg/l) Once/year				WQ level/limit (µg/l)	EFFLUENT DATES SAMPLED (µg/l) Once/year				LABORATORY ANALYSIS		
		Start Date	Start Date	Start Date	Start Date		Start Date	Start Date	Start Date	Start Date	EPA MQL (µg/l)	EPA Method Used	Detection Level Achieved (µg/l)
				7/25/2016	9/15/2016				7/26/2016	9/15/2016			
Antimony				< 60				< 60		60	200.8	60	
Cadmium	9			< 0.5	N/A			< 0.5		0.5	200.8	0.5	
Copper	270			29.0	N/A			4.7		0.5	200.8	0.5	
Lead	50			1.5	N/A			< 0.5		0.5	200.8	0.5	
Mercury	0.20				0.09140				0.0032	0.0002	1631E	0.0002	
Nickel	160			2.9	N/A			2.2		0.5	200.8	0.5	
Selenium	10			< 5	N/A			< 5		5	200.8	5	
Silver	180			< 0.5	N/A			< 0.5		0.5	200.8	0.5	
Zinc	360			98	N/A			50		20	200.8	20	
Chromium	260			< 10	N/A			< 10		10	200.8	10	
Cyanide	90			< 0.8	N/A			< 0.8		10	SM204500C&E-1999	0.8	
Arsenic	14			8.7	N/A			1.2		0.5	200.8	0.5	
Molybdenum				< 8				< 8		8	200.8	8	
Phenols					34.0				14.8	2.2	420.1	2.2	
Beryllium				< 0.5				< 0.5		0.5	200.8	0.5	
Thallium				< 0.5				< 0.5		0.5	200.8	0.5	
Barium				22				6.4		2	200.7	2	
Boron				170				170		100	200.7	100	
Manganese				490				60		2	200.7	2	
Oil and Grease					17,700				< 6,900	5000	1664Rev.B-2010	5000	
Flow, MGD				1.77	1.70			1.83	1.80				



**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
REPORTING YEAR: JANUARY 1, 2016 TO DECEMBER 31, 2016**

TREATMENT PLANT: CITY OF LITTLE ROCK -LITTLE MAUMELLE WASTEWATER TREATMENT PLANT

NPDES PERMIT NO.: AR0050849

AVERAGE POTW FLOW: 2.23 MGD

PERCENT (%) IU FLOW: 0 %

PLANT INFLUENT	Flow MGD	O&G $\mu\text{g/L}$	CN- $\mu\text{g/L}$	Zn $\mu\text{g/L}$	Cd $\mu\text{g/L}$	Cr $\mu\text{g/L}$	Ag $\mu\text{g/L}$	Cu $\mu\text{g/L}$	Mo $\mu\text{g/L}$	Ni $\mu\text{g/L}$	Pb $\mu\text{g/L}$	As $\mu\text{g/L}$	Se $\mu\text{g/L}$	Hg $\mu\text{g/L}$	Phenol $\mu\text{g/L}$	Sb $\mu\text{g/L}$	Be $\mu\text{g/L}$	Tl $\mu\text{g/L}$	Mn $\mu\text{g/L}$	Ba $\mu\text{g/L}$	B $\text{mg/L}$
EPA Test Method Used		1664Rev.B 2010	SM200b 4300 C&E 1999	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	1631E	420.1	200.8	200.8	200.8	200.7	200.7	200.7
Detection Level Achieved		5000	0.8	20	0.5	10	0.5	0.5	8	0.5	0.5	0.5	5	0.0002	2.2	60	0.5	0.5	2	2	100
07/25/2016	1.77			98	< 0.5	< 10	< 0.5	29.0	< 8	2.9	1.50	8.70	< 5			< 60	< 0.5	< 0.5	490	22	170
09/15/2016	1.70	17700	< 0.8											0.0914	34.0						
Average	1.74	17700	< 0.8	98	0.5	< 10	< 0.5	29.0	< 8	2.9	1.50	8.70	< 5	0.0914	34.0	< 60	< 0.5	< 0.5	490	22	170
Maximum	1.77	17700	< 0.8	98	0.5	< 10	< 0.5	29.0	< 8	2.9	1.50	8.70	< 5	0.0914	34.0	< 60	< 0.5	< 0.5	490	22	170
Minimum	1.70	17700	< 0.8	98	0.5	< 10	< 0.5	29.0	< 8	2.9	1.50	8.70	< 5	0.0914	34.0	< 60	< 0.5	< 0.5	490	22	170
Headworks limit			0.09	0.36	9.0	260.0	180.0	270		160	50	14	10	0.2							

Comments: None

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
REPORTING YEAR: JANUARY 1, 2016 TO DECEMBER 31, 2016**

TREATMENT PLANT: CITY OF LITTLE ROCK -LITTLE MAUMELLE WASTEWATER TREATMENT PLANT

NPDES PERMIT NO.: AR0050849

AVERAGE POTW FLOW: 2.23 MGD

PERCENT (%) IU FLOW: 0 %

FINAL EFFLUENT	Flow MGD	O&G µg/L	CN- µg/L	Zn µg/L	Cd µg/L	Cr µg/L	Ag µg/L	Cu µg/L	Mo µg/L	Ni µg/L	Pb µg/L	As µg/L	Se µg/L	Hg µg/L	Phenol µg/L	Sb µg/L	Be µg/L	Tl µg/L	Mn µg/L	Ba µg/L	B µg/L
EPA Test Method Used		1664Rev B 2010	SM20th 4500 C&E 1999	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	200.8	1631E	420.1	200.8	200.8	200.8	200.7	200.7	200.7
Detection Level Achieved		5000	0.8	20	0.5	10	0.5	0.5	8	0.5	0.5	0.5	5	0.0002	2.2	60	0.5	0.5	2	2	100
07/26/2016	1.83			50 <	0.5 <	10 <	0.5	4.7 <	8	2.2 <	0.50	1.20 <	5			< 60 <	0.5 <	0.5	60	6.4	170
09/15/2016	1.80	< 6900 <	0.8											0.0032	14.8						
<b>Average</b>	1.82	6900	0.8	50 <	0.5 <	10 <	0.5	4.7 <	8	2.2	0.50	1.20 <	5	0.0032	14.8 <	60 <	0.5 <	0.5	60	6.4	170
<b>Maximum</b>	1.83	6900	0.8	50 <	0.5 <	10 <	0.5	4.7 <	8	2.2	0.50	1.20 <	5	0.0032	14.8 <	60 <	0.5 <	0.5	60	6.4	170
<b>Minimum</b>	1.80	6900	0.8	50 <	0.5 <	10 <	0.5	4.7 <	8	2.2 <	0.50	1.20 <	5	0.0032	14.8 <	60 <	0.5 <	0.5	60	6.4	170
<b>WQS Effluent Level</b>			n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a	n/a							
<b>Day Max.</b>																					
<b>Month Avg.</b>																					

Comments: None

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
TREATMENT PLANT PERCENT REMOVAL EFFICIENCIES  
REPORTING YEAR: JANUARY 1, 2016 TO DECEMBER 31, 2016**

**Little Maumelle Wastewater Treatment Plant - NPDES Permit No. AR0050849**

	O&G	CN-	Zn	Cd	Cr	Ag	Cu	Mo	Ni	Pb	As	Se	Hg	Phenol	Sb	Be	Tl	Mn	Ba	B	
07/25/2016			49.0%	0.0%	0.0%	0.0%	83.8%	0.0%	24.1%	66.7%	86.2%	0.0%			0.0%	0.0%	0.0%	87.8%	70.9%	0.0%	
09/15/2016	61.0%	0.0%											96.5%	56.5%							
Average	61.0%	0.0%	49.0%	0.0%	0.0%	0.0%	83.8%	0.0%	24.1%	66.7%	86.2%	0.0%	96.5%	56.5%	0.0%	0.0%	0.0%	87.8%	70.9%	0.0%	

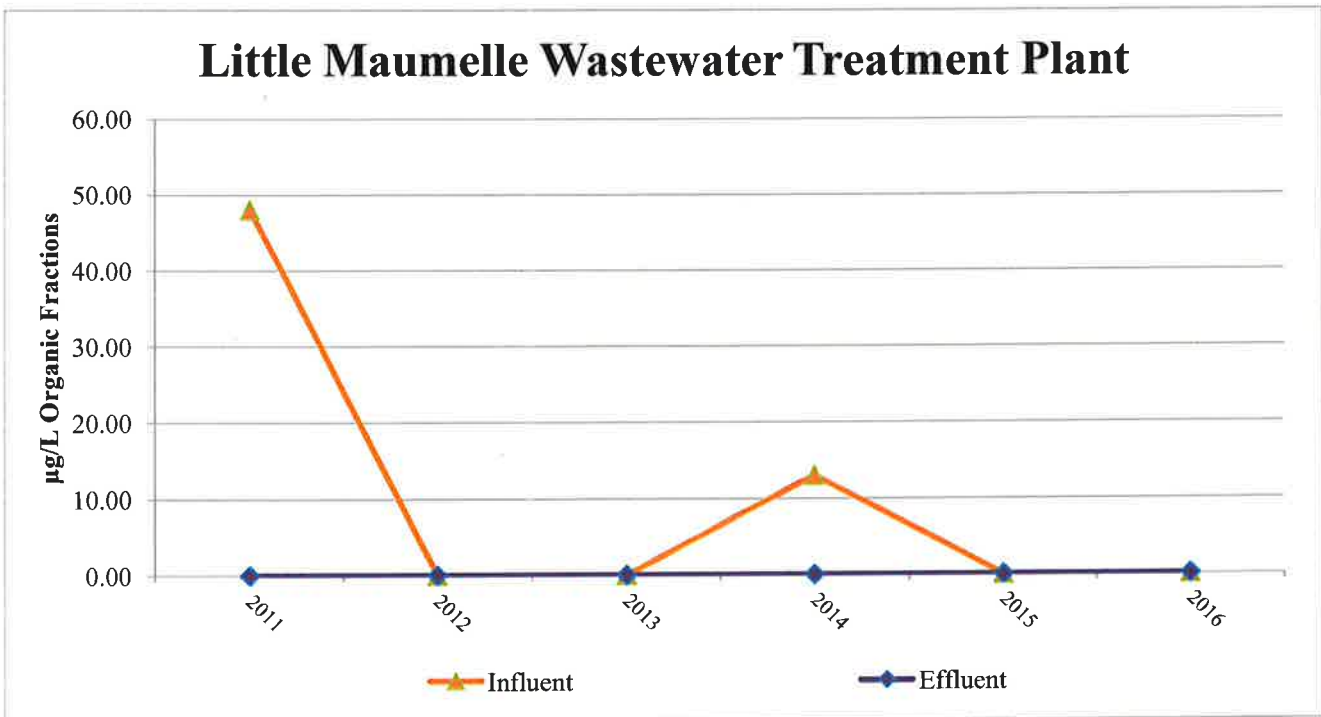
**I. 2016 POSITIVE RESULTS, µg/L**

<b>LITTLE MAUMELLE WASTEWATER TREATMENT PLANT</b>		
<b>Sample Date</b>	<b>Compound</b>	<b>Influent</b>
9/27/2016	Volatiles	ND
10/24/2016	Acrolein	ND
9/27/2016	Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND

<b>Sample Date</b>	<b>Compound</b>	<b>Effluent</b>
9/27/2016	Volatiles	ND
10/24/2016	Acrolein	ND
9/27/2016	Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND

Comments: ND - No Detection

**II. TREND OF POSITIVE RESULTS - REPORTING PERIOD 2011 THROUGH 2016**



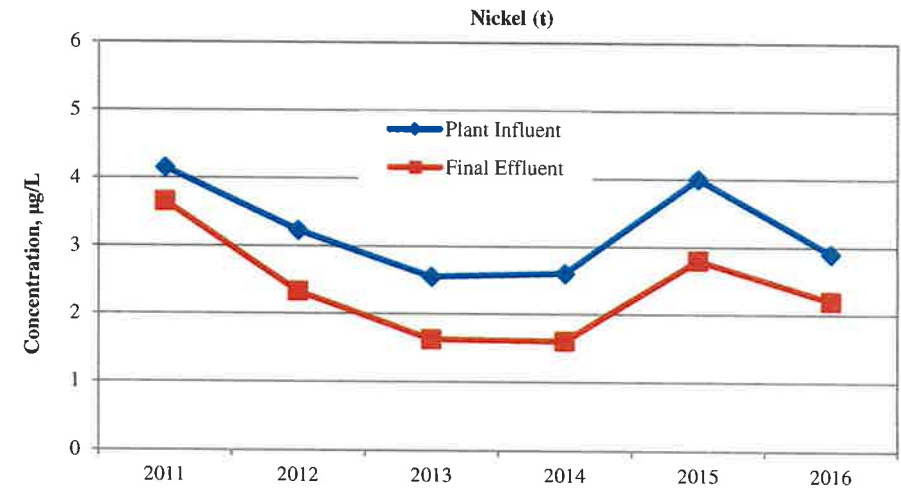
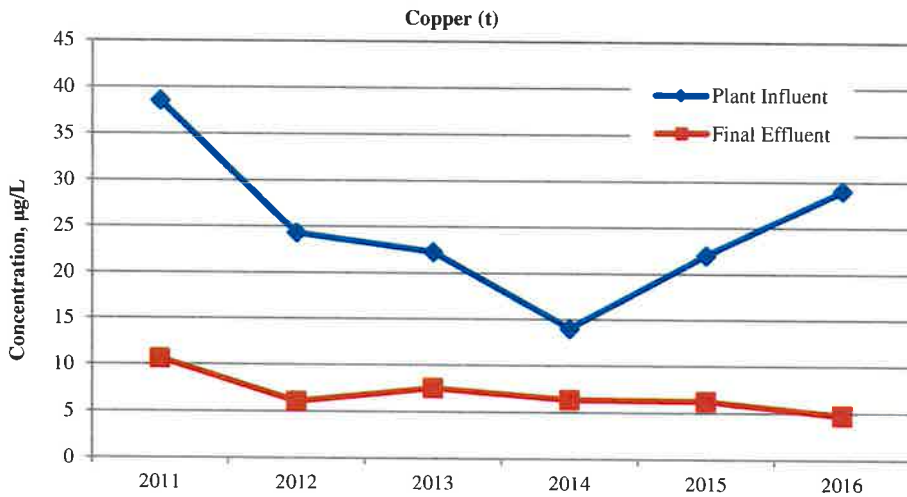
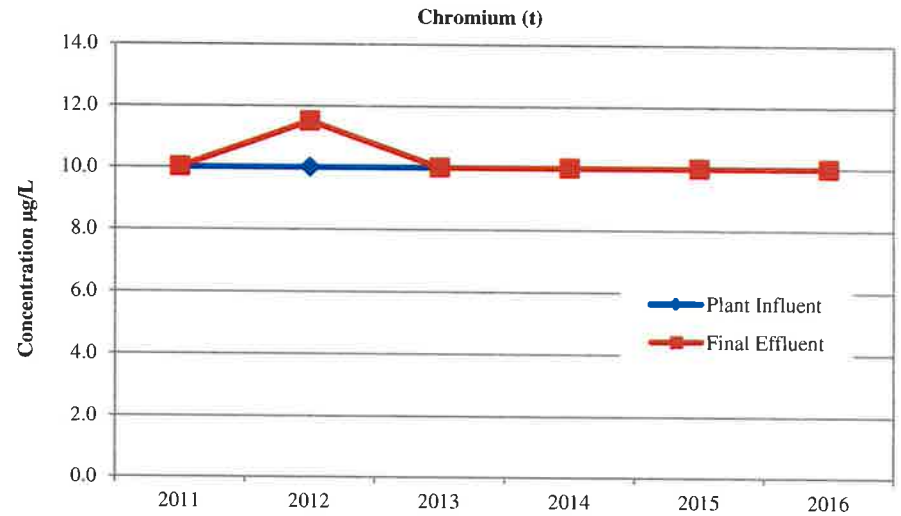
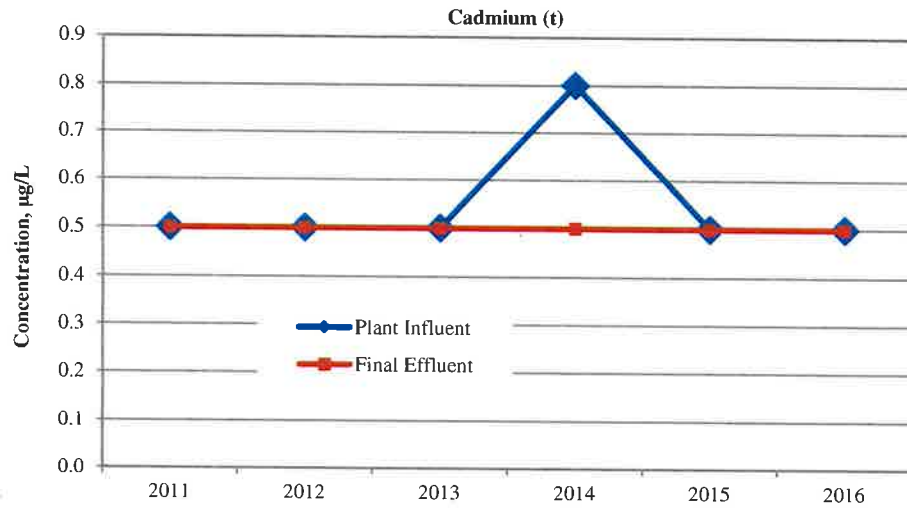
LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 LITTLE MAUMELLE WASTEWATER TREATMENT PLANT INFLUENT/FINAL EFFLUENT  
 PRIORITY POLLUTANT SCAN - ORGANIC FRACTIONS

III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 2011 THROUGH 2016

Little Maumelle Wastewater Treatment Plant

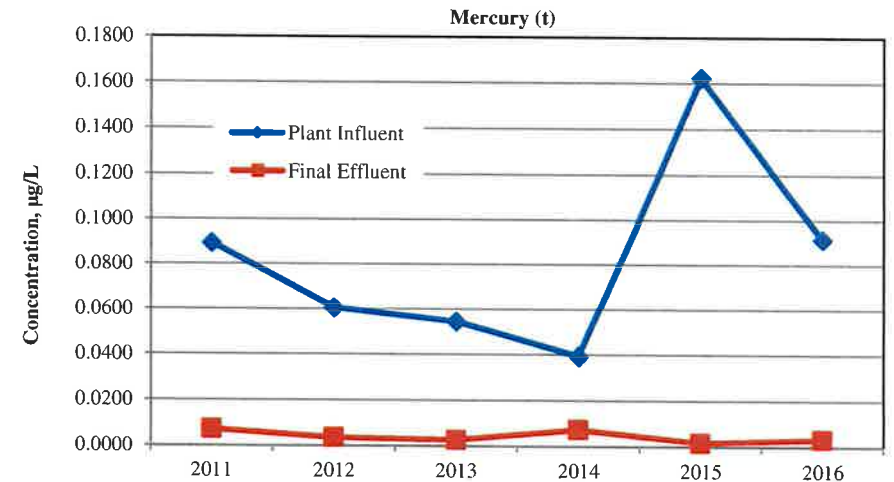
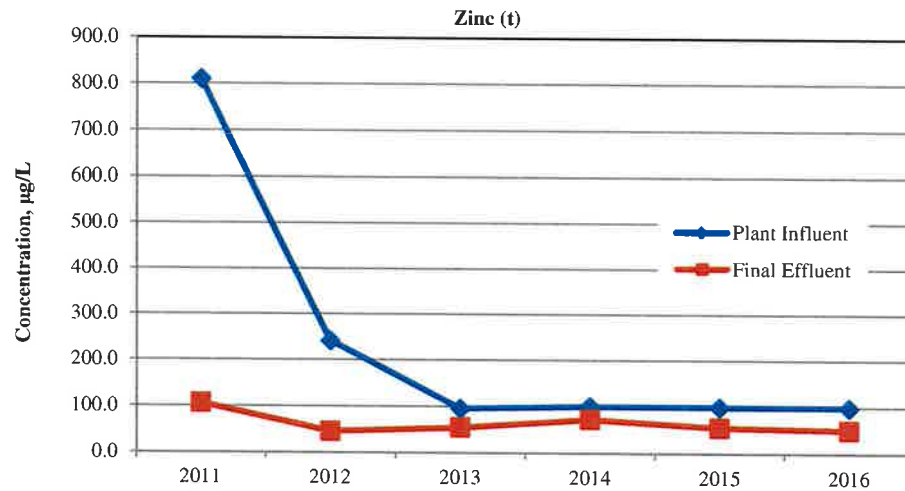
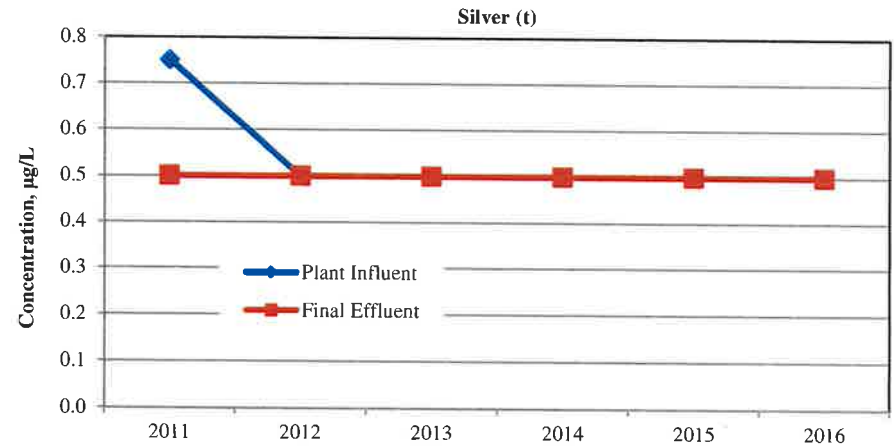
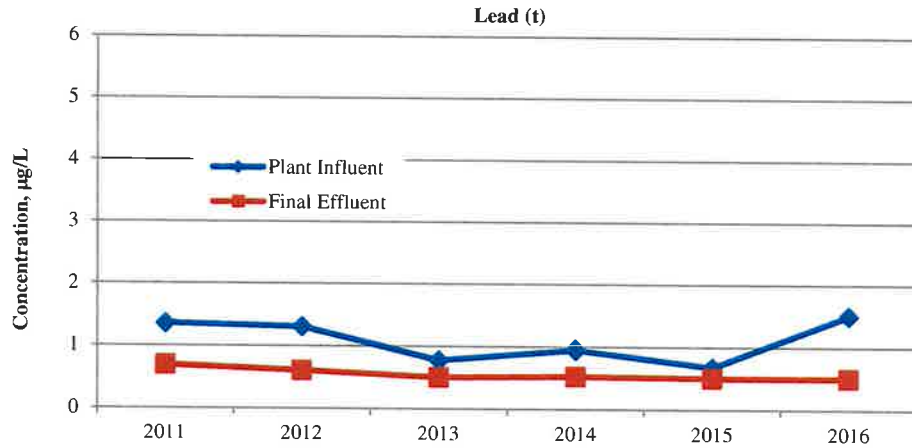
PPS, µg/L Parameter	2011		2012		2013		2014		2015		2016	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF
Toluene	37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)Phthalate	ND	ND	ND	ND	ND	ND	13	ND	ND	ND	ND	ND
Diethylphthalate	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Total</b>	<b>48.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>13.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
2011 THROUGH 2016**



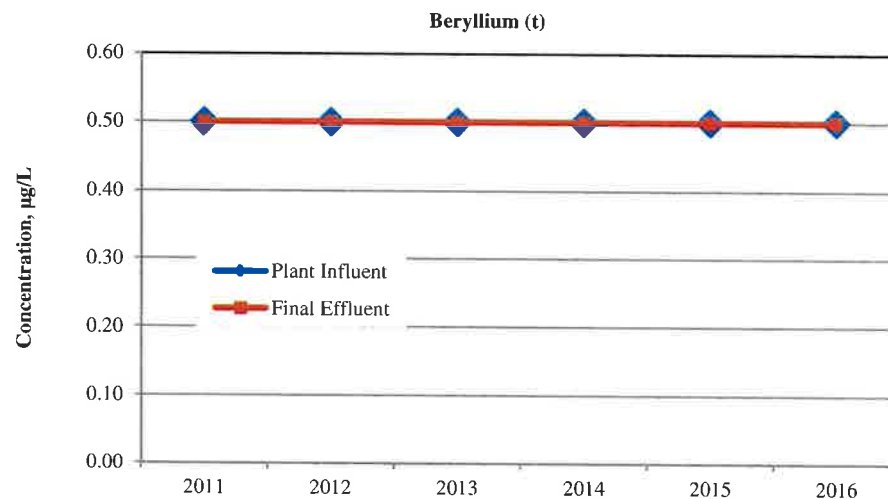
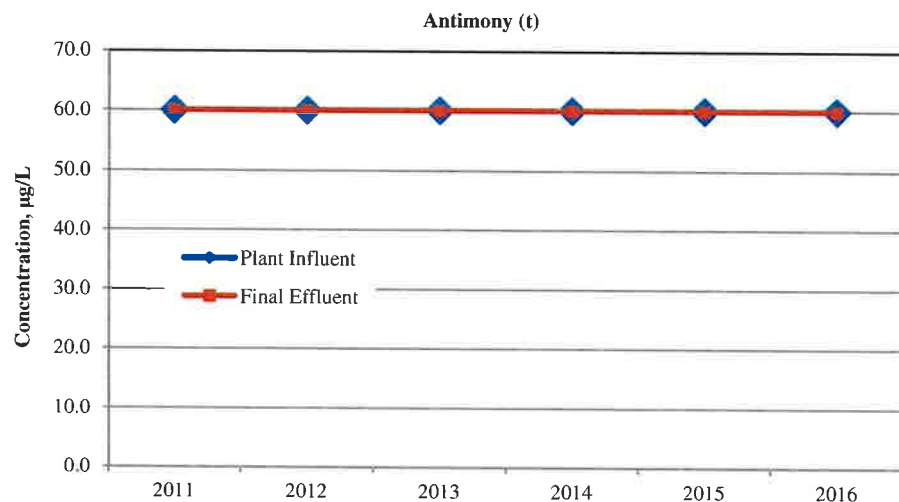
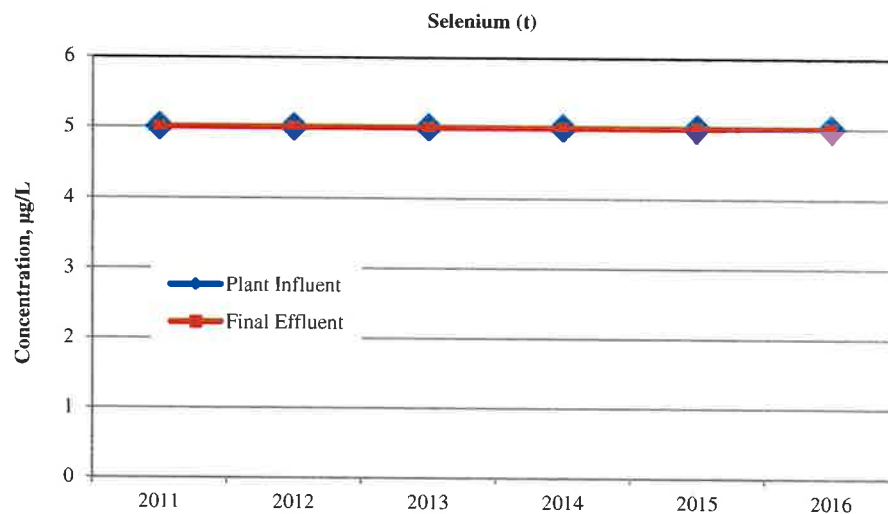
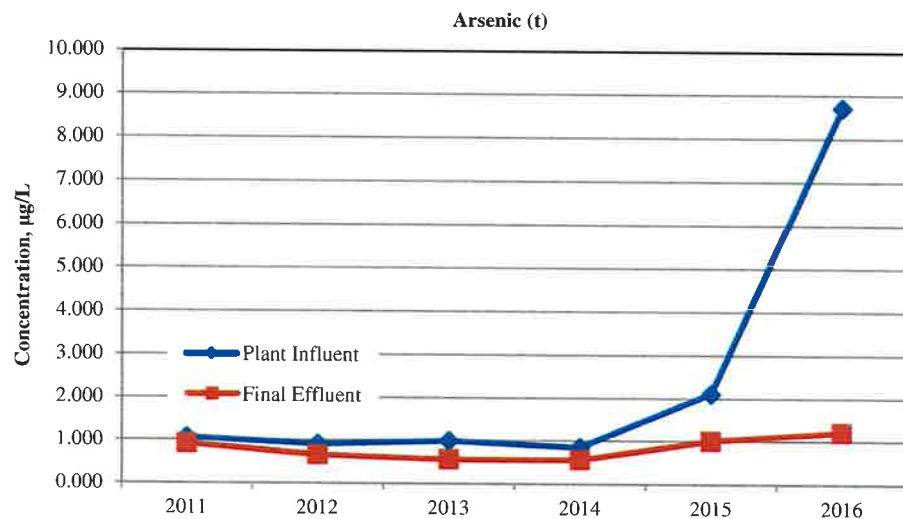
	Cadmium(t)	Copper (t)	Chromium (t)	Nickel(t)
Influent Headworks Limit	9 ug/L	270 ug/L	260 ug/L	160 ug/L
Effluent Water Quality Criteria (Acute)	N/A	N/A	N/A	N/A

**LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
 2011 THROUGH 2016**



	Lead (t)	Zinc(t)	Silver(t)	Mercury(t)
Influent Headworks Limit	50 ug/L	0.36 mg/L	180 ug/L	0.2 ug/L
Effluent Water Quality Criteria (Acute)	N/A	N/A	N/A	N/A

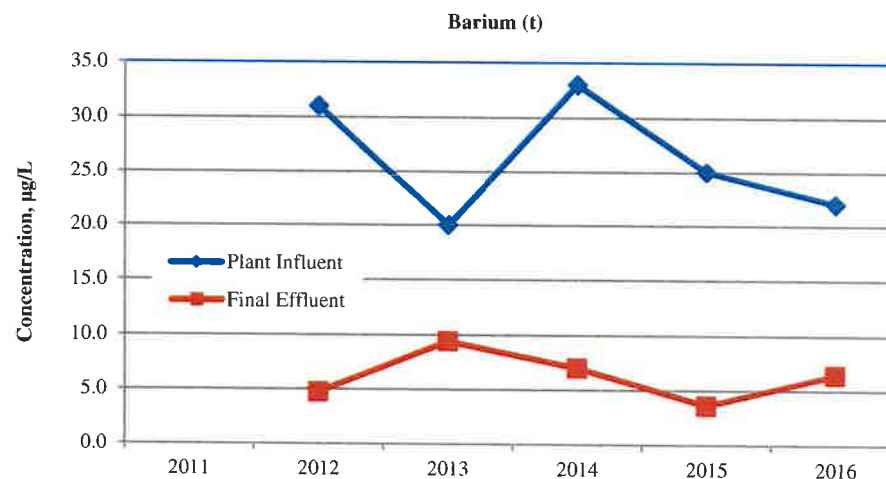
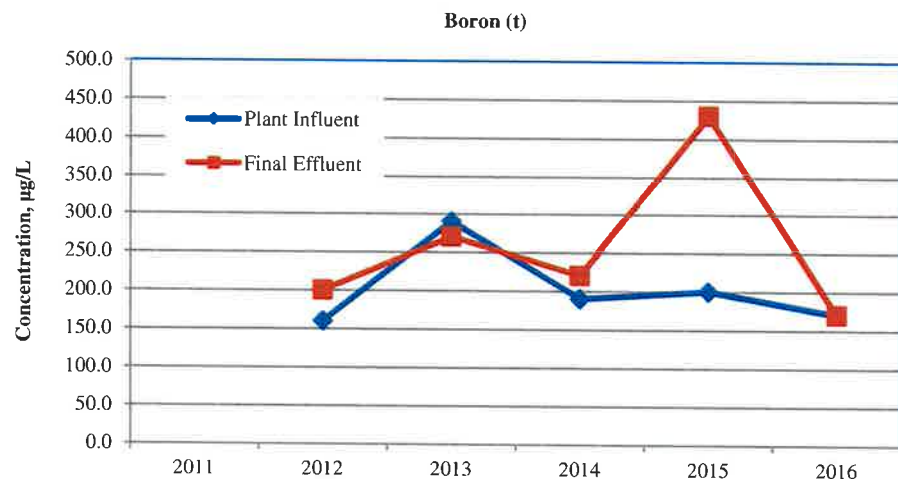
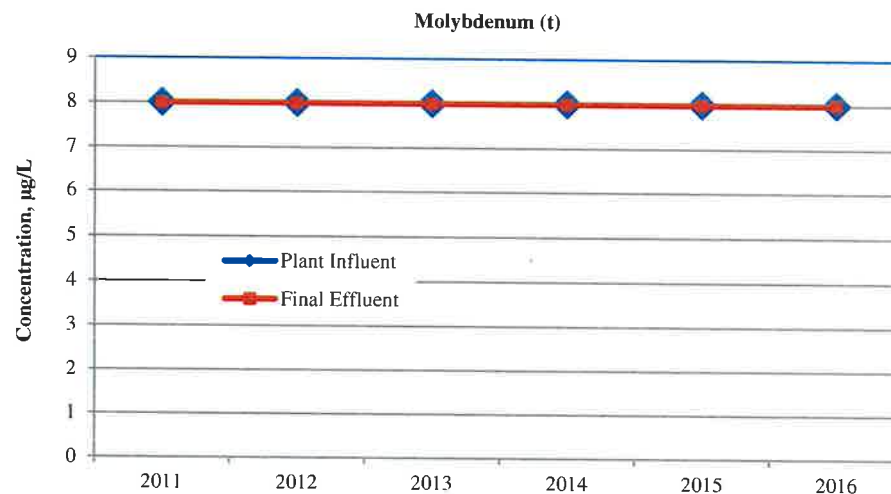
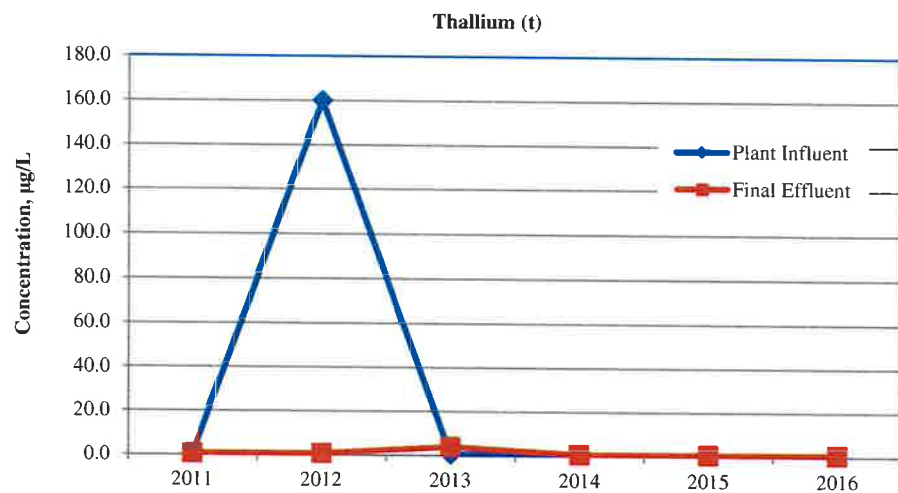
**LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
 2011 THROUGH 2016**



	Arsenic(t)	Antimony (t)	Selenium (t)	Beryllium (t)
<b>Influent Headworks Limit</b>	14 ug/L	None	10 ug/L	None
<b>Effluent Water Quality Criteria (Acute)</b>	N/A	N/A	N/A	N/A

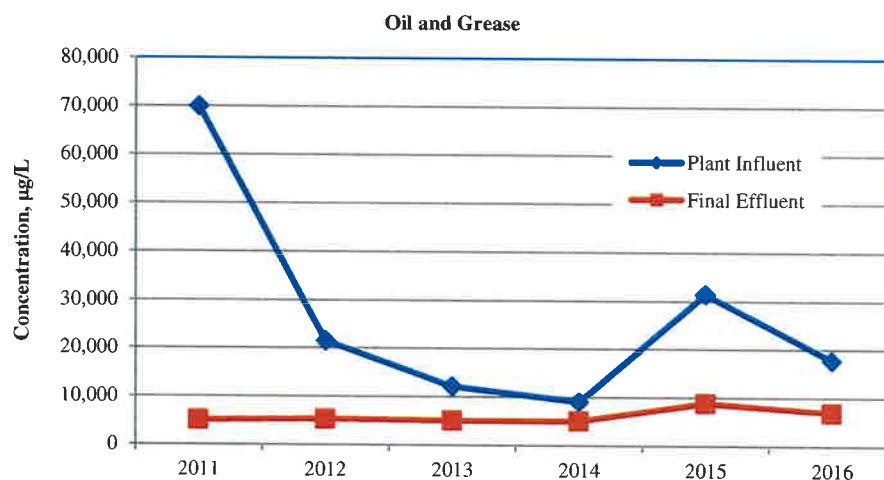
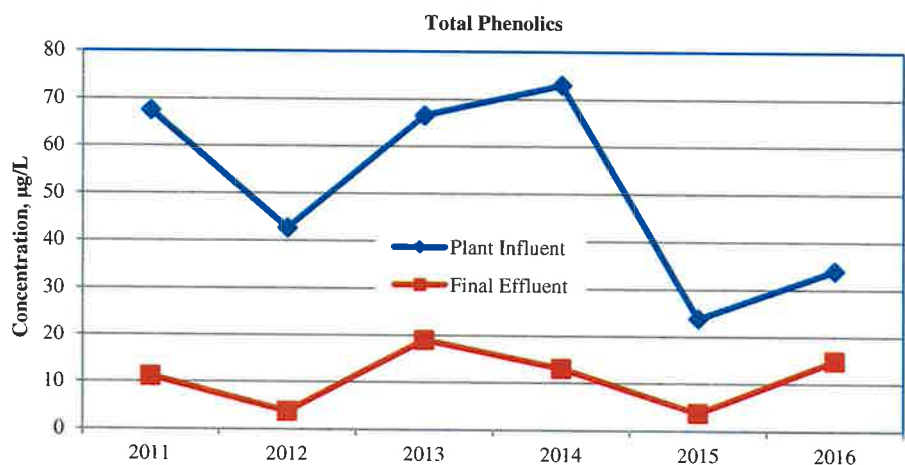
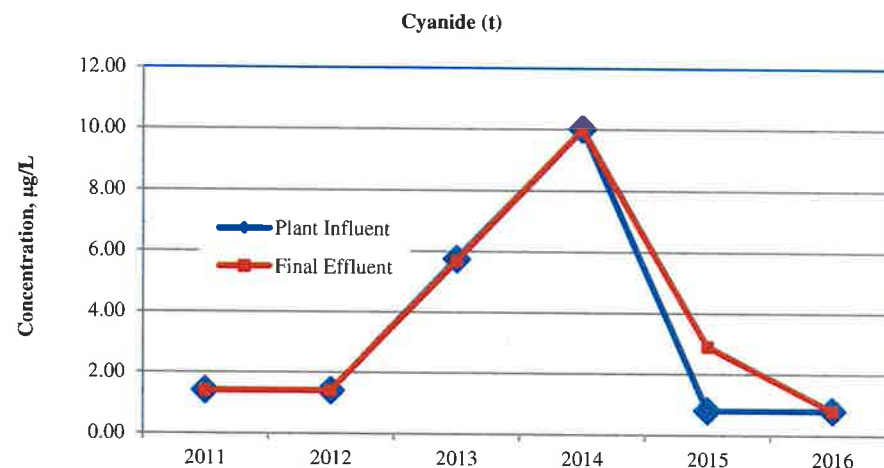
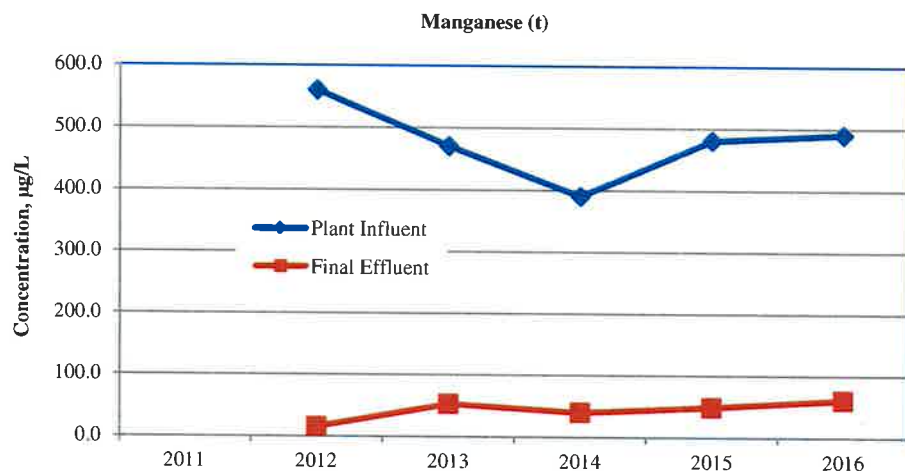


**LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
 2011 THROUGH 2016**



	Thallium (t)	Boron (t)	Molybdenum(t)	Barium(t)
Influent Headworks Limit	None	None	None	None
Effluent Water Quality Criteria (Acute)	N/A	N/A	N/A	N/A

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
2011 THROUGH 2016**



	Manganese (t)	Total Phenols	Cyanide (t)	Oil&Grease
Influent Headworks Limit	None	None	0.09 mg/L	None
Effluent Water Quality Criteria (Acute)	N/A	N/A	N/A	N/A

# **SECTION VII**

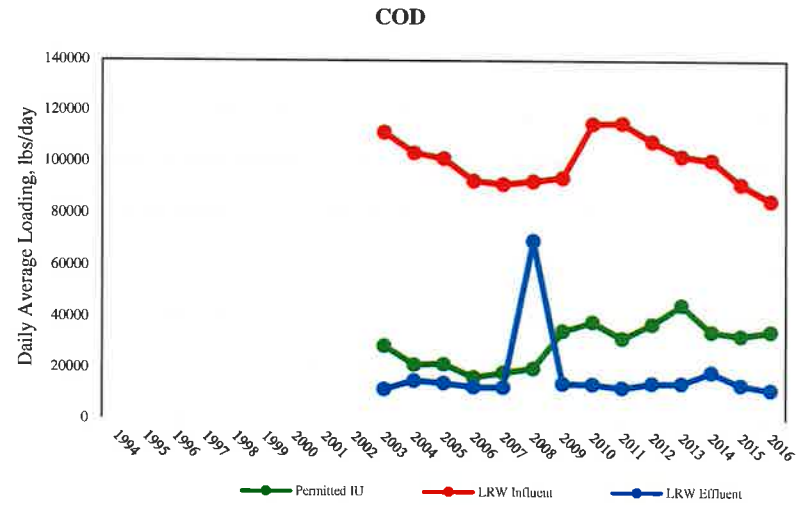
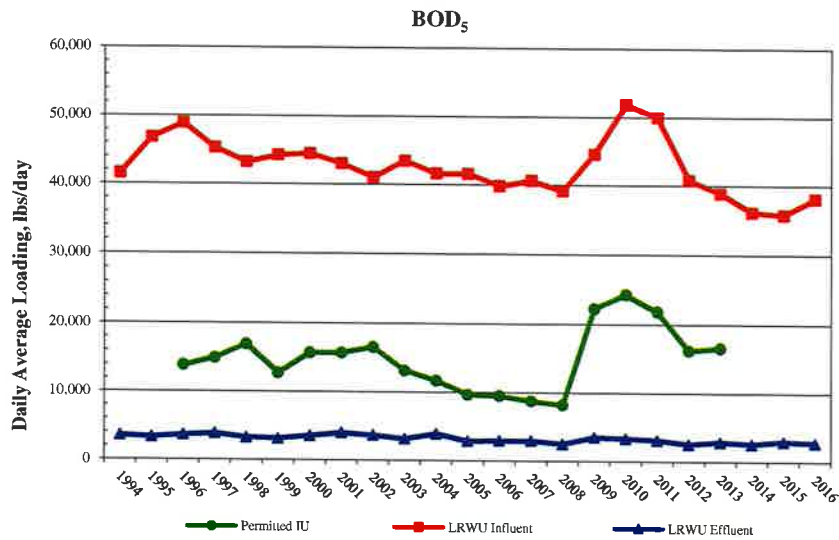
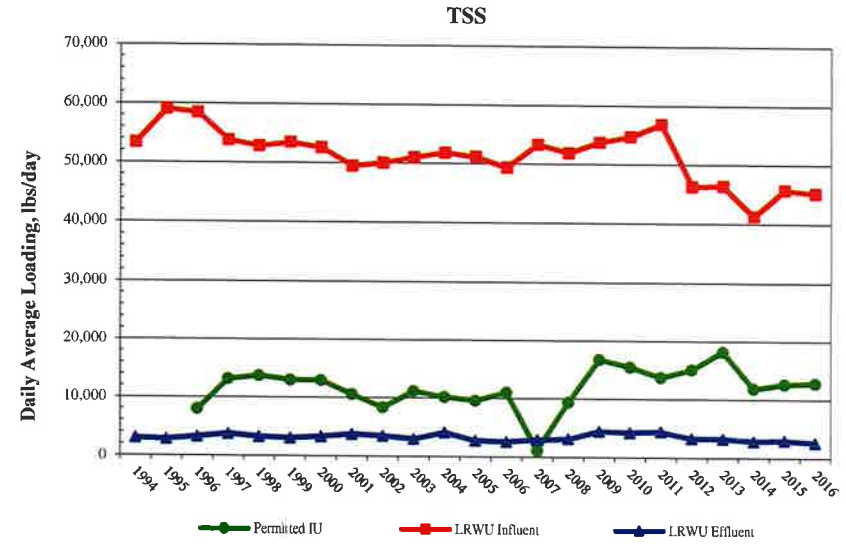
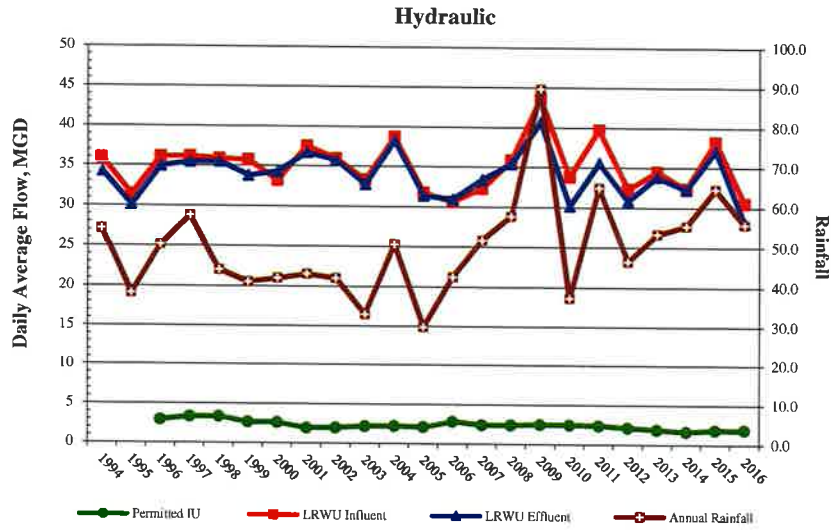
## SUMMARY OF WASTEWATER TREATMENT PLANT LOADING TRENDS

Trend charts are used to evaluate pollutant loading for the Little Rock Wastewater (LRW) system, for each wastewater treatment plant and to evaluate Industrial User (IU) contributions. Little Maumelle Treatment Plant came on line in 2011 and is included on the charts beginning 2011. The charts are organized in the following order:

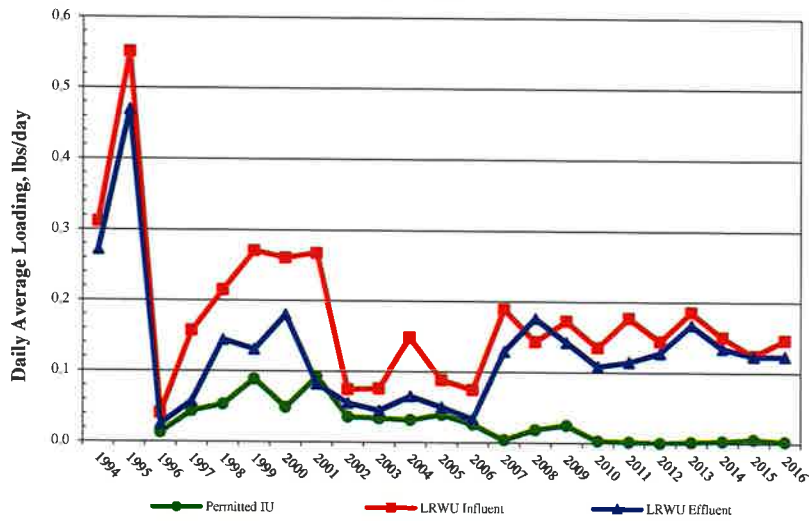
- Total System Loading Trends - These charts show 1994 - 2016 loading, lbs/day, for the total cumulative influent/effluent loading for the AF-WWTP, FC-WWTP, and LM-WWTP. The cumulative loading from permitted IU's is also included. Parameters include flow, BOD, TSS, O&G and local limit pollutant parameters. The BOD trend does not include LM-WWTP data since the NPDES Permit is for CBOD and the BOD trend ends in 2013 due to monitoring changes for surcharge parameters beginning 2014.

For each individual analytical point the lbs/day is calculated using the flow for each sample date. In cases where the concentration is reported as less than the detection limit the detection limit number was used to calculate the lbs/day. This causes the loading (lbs/day) to be higher than what it would be if zero values were used in those instances.

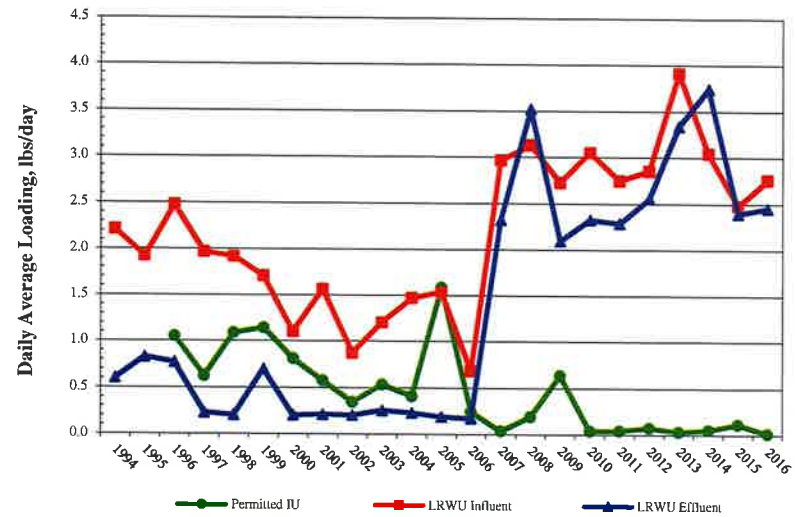
- IU Percent Contributions 1996 - 2016 - These charts show IU percent contributions to the LRW system starting 1996 to date. When test results (IU and LRW) are reported as less than detection or reporting limit, the detection limit value is used to total lbs calculations.
- POTW Loading Trends - Influent/Effluent Loading, lbs/day, comparison charts were developed for the AF-WWTP and FC-WWTP for 1994 - 2016. LM-WWTP loading data (lbs/day) for 2011 - 2016 was added to the comparison charts (except for BOD). These charts reveal trends in loading for each treatment plant. (% removal efficiencies, based on wastewater treatment plant influent/effluent concentration values, can be found in Section IV, V, and VI, of this report.)



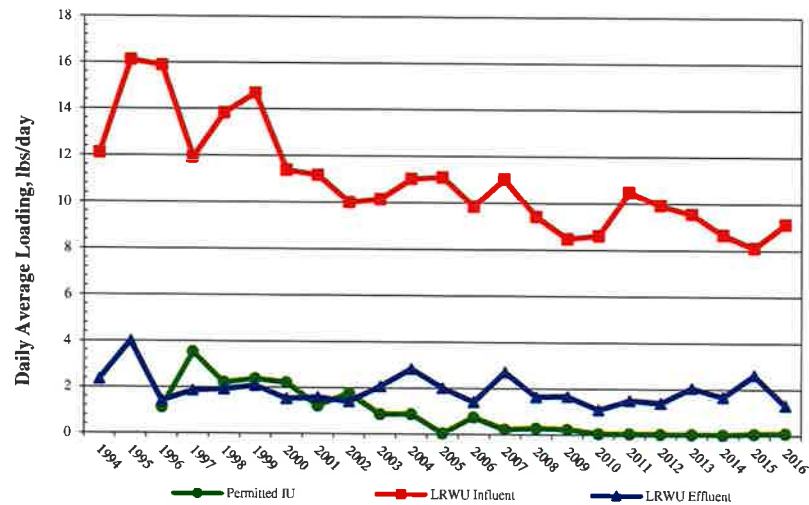
Cadmium (t)



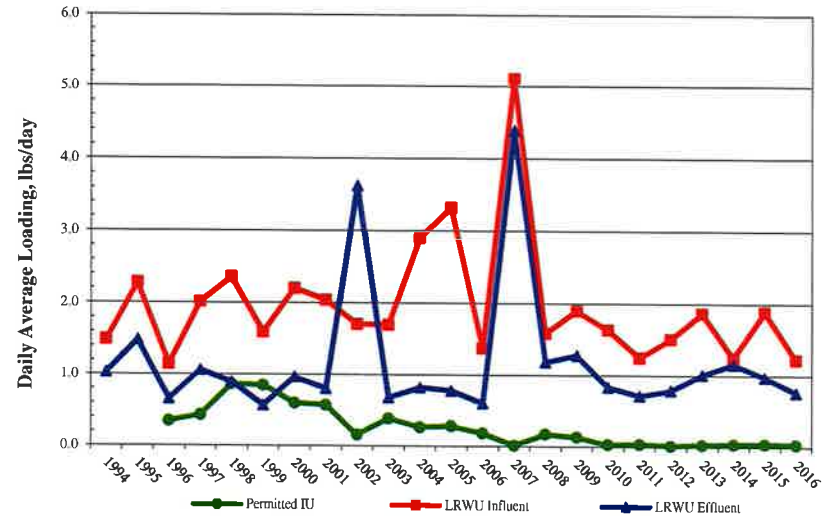
Chromium (t)



Copper (t)

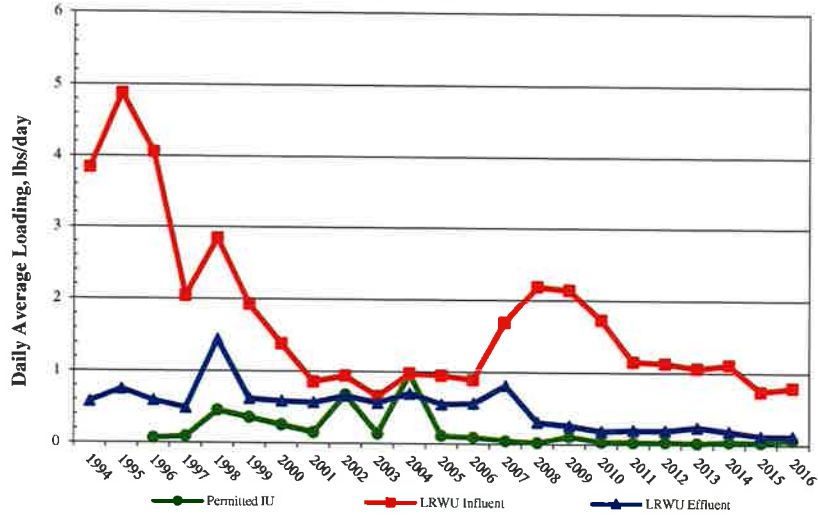


Nickel (t)

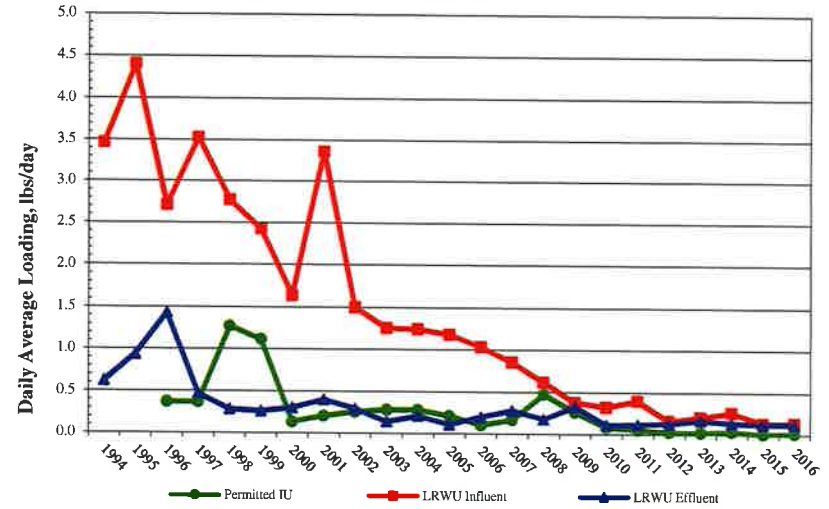




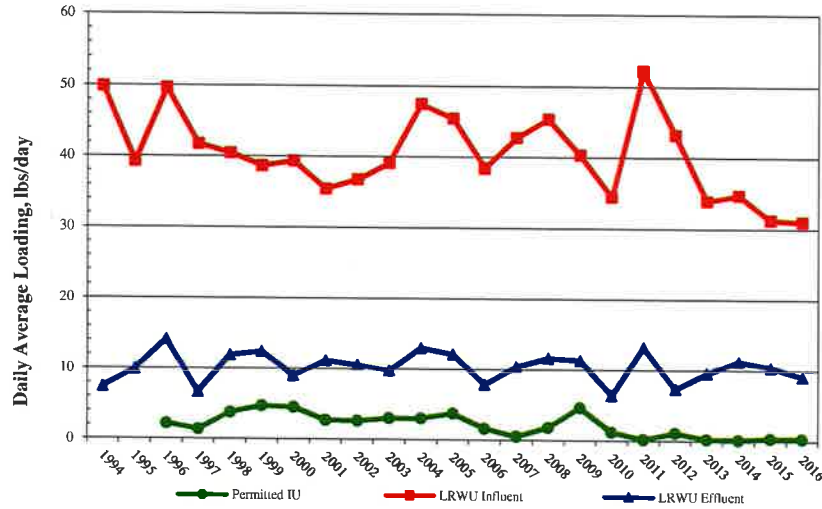
Lead (t)



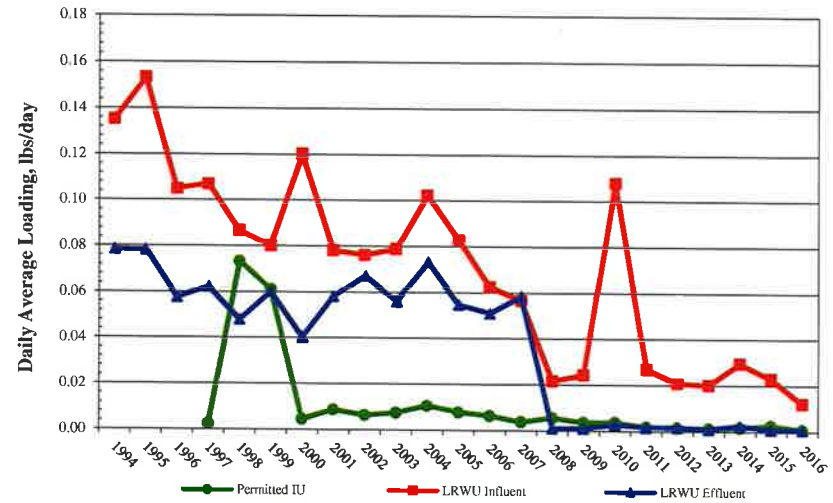
Silver (t)



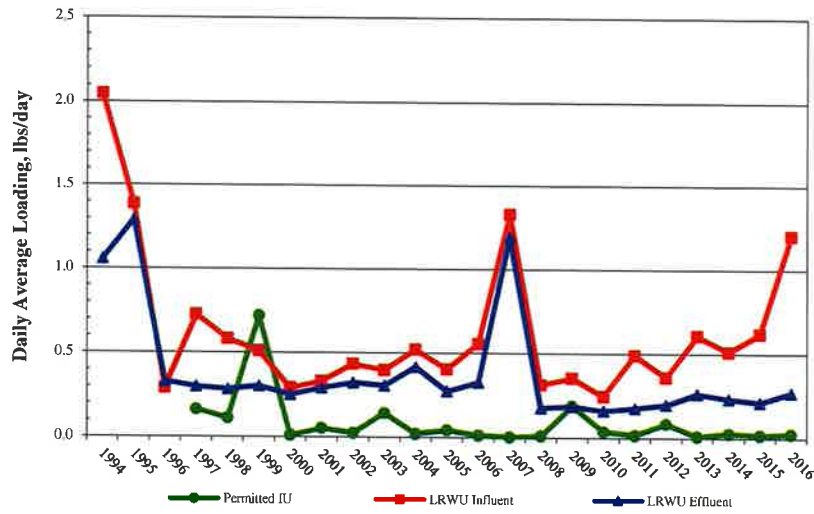
Zinc (t)



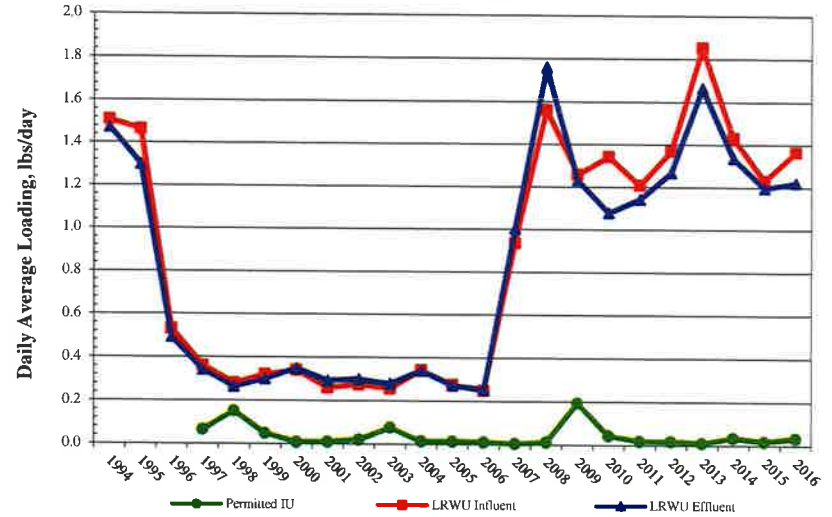
Mercury (t)



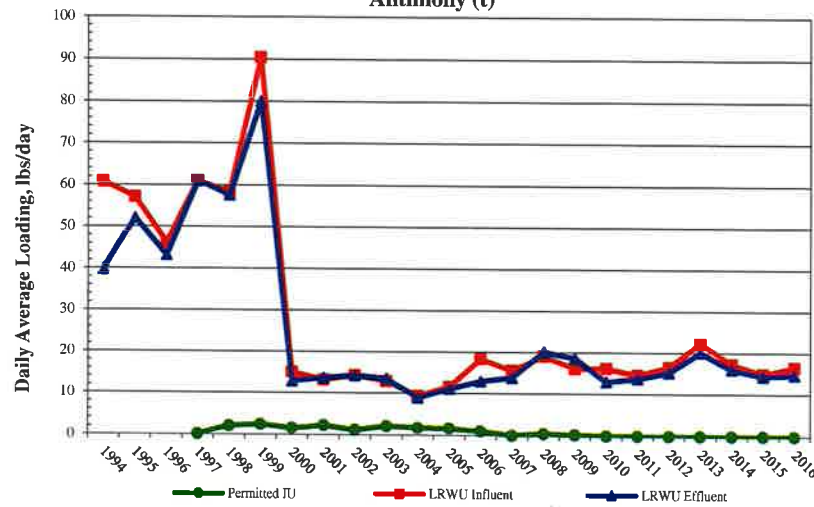
**Arsenic (t)**



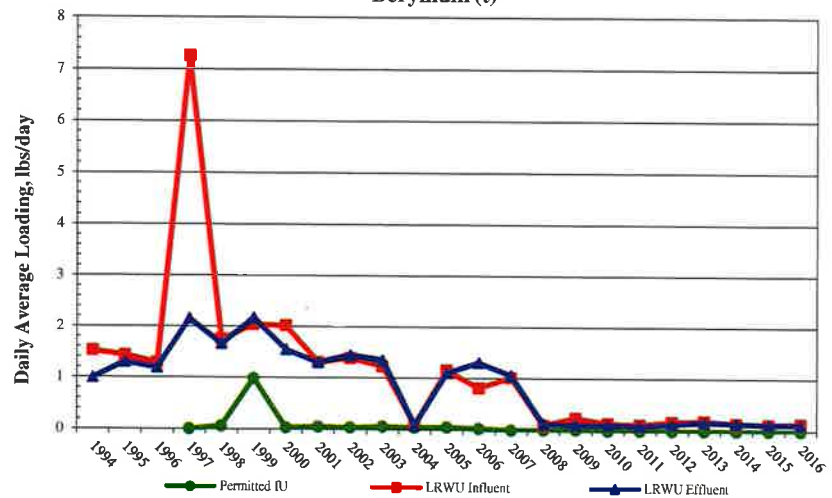
**Selenium (t)**



**Antimony (t)**

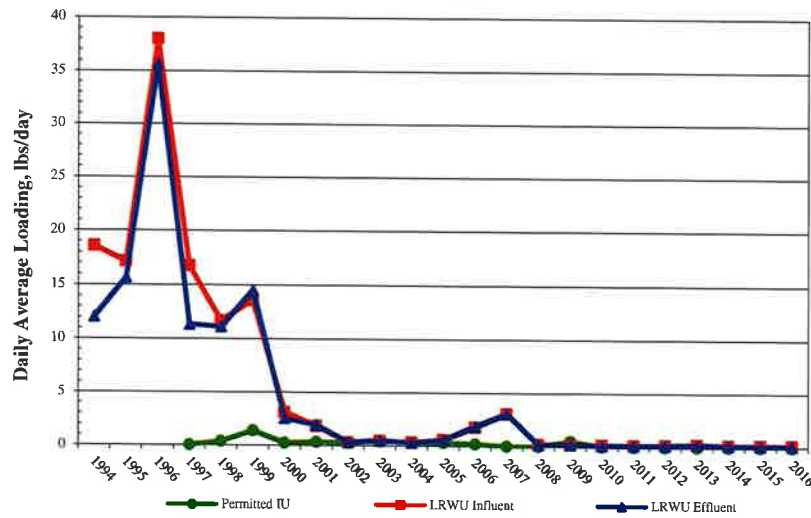


**Beryllium (t)**

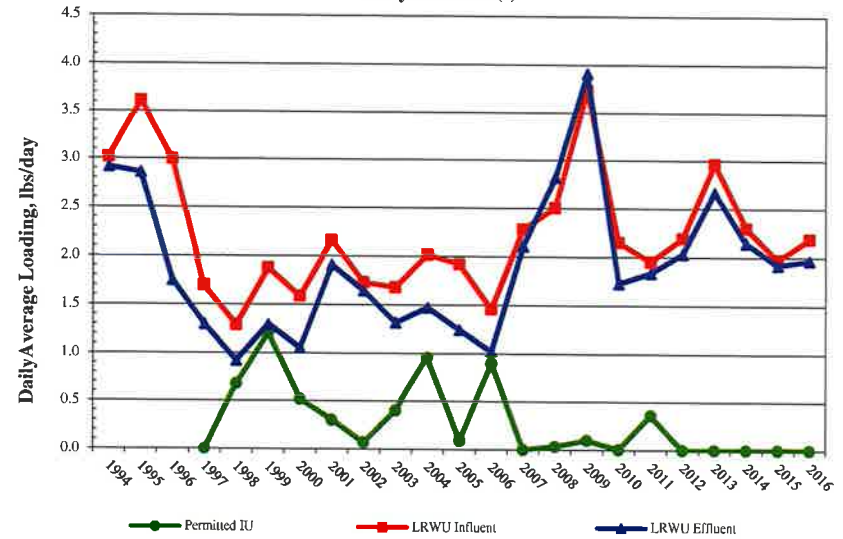




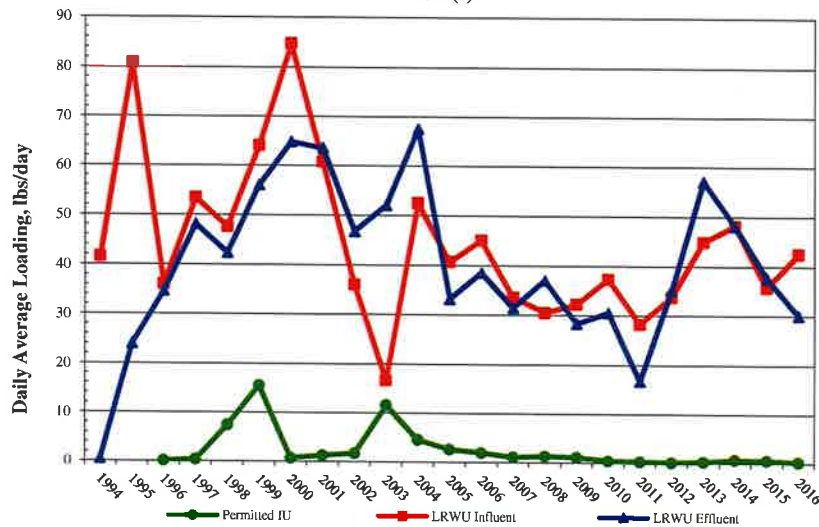
Thallium (t)



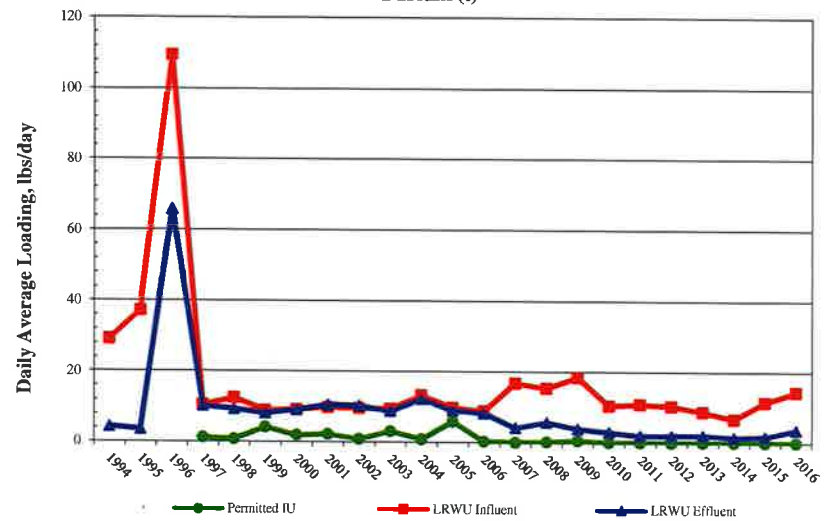
Molybdenum (t)

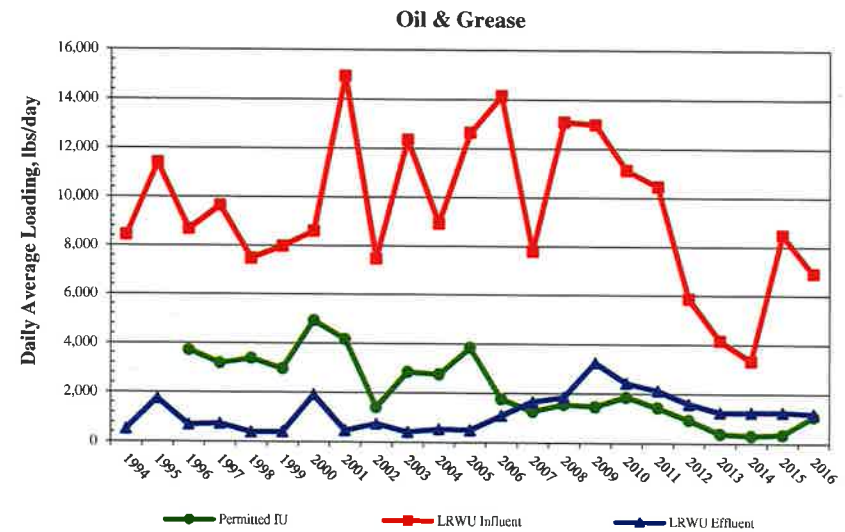
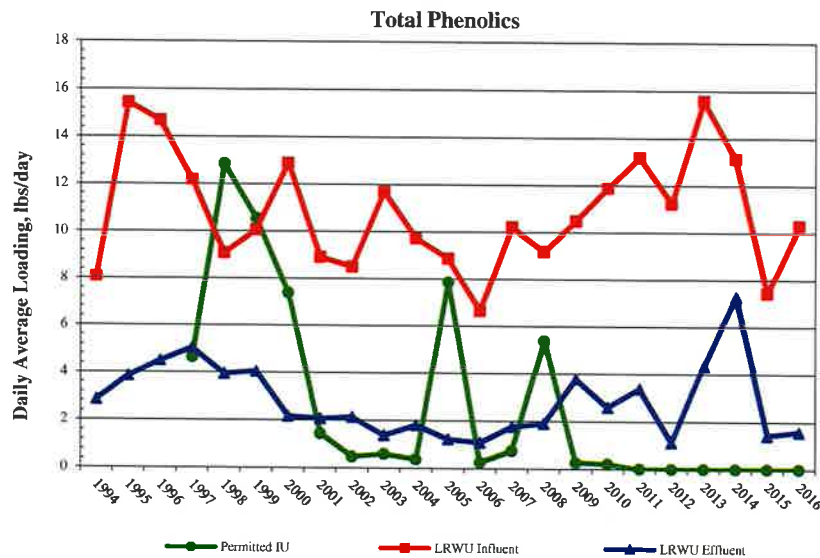
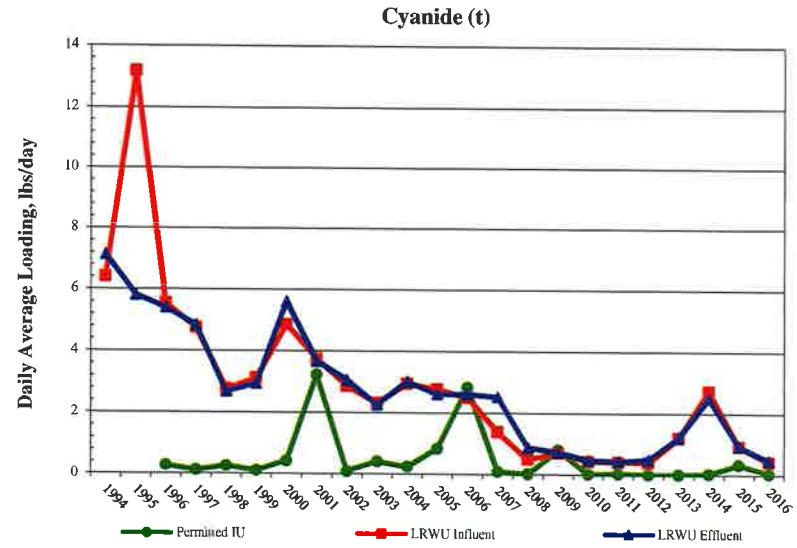
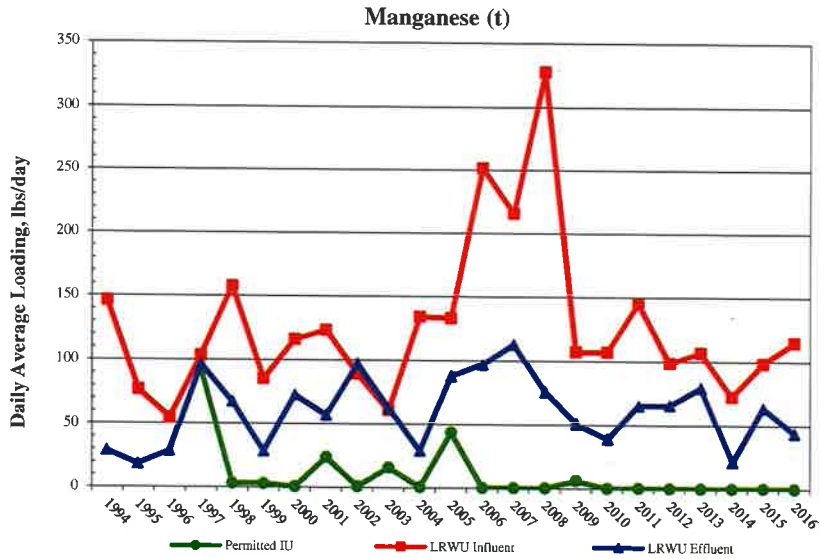


Boron (t)



Barium (t)

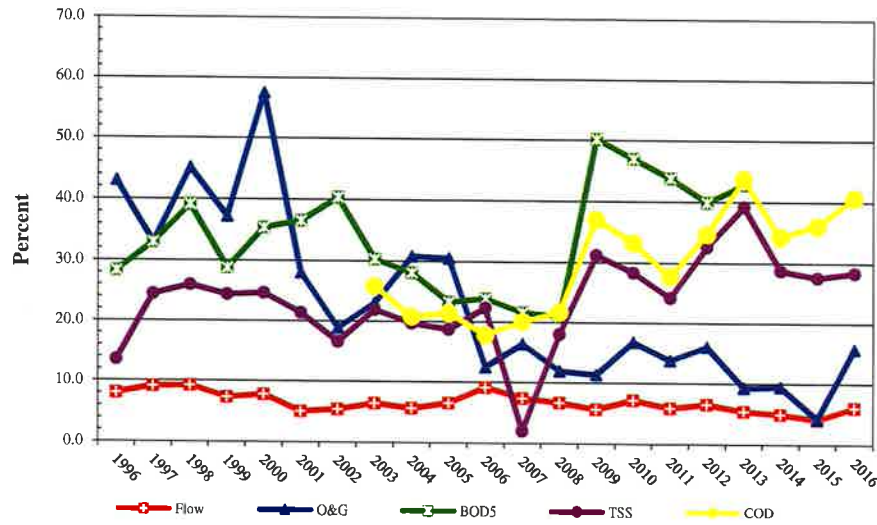




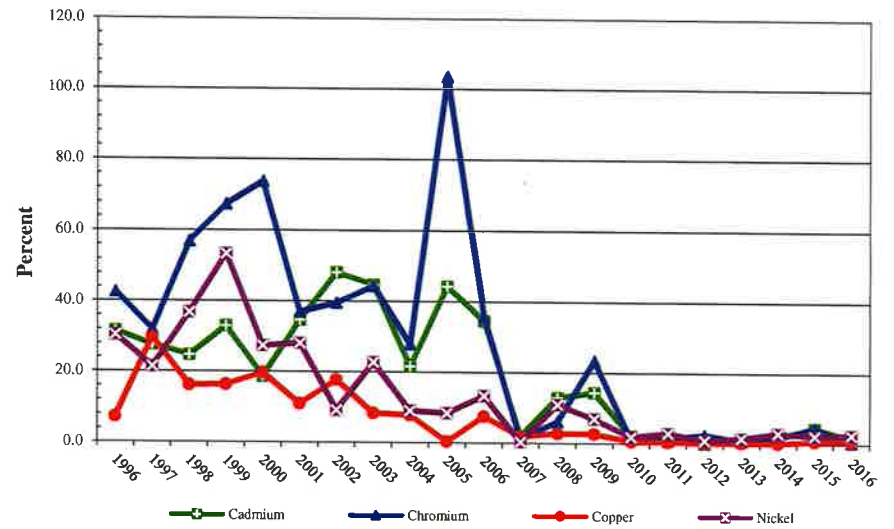
**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
IU PERCENT CONTRIBUTIONS**

March 31, 2017  
Page 1 of 2

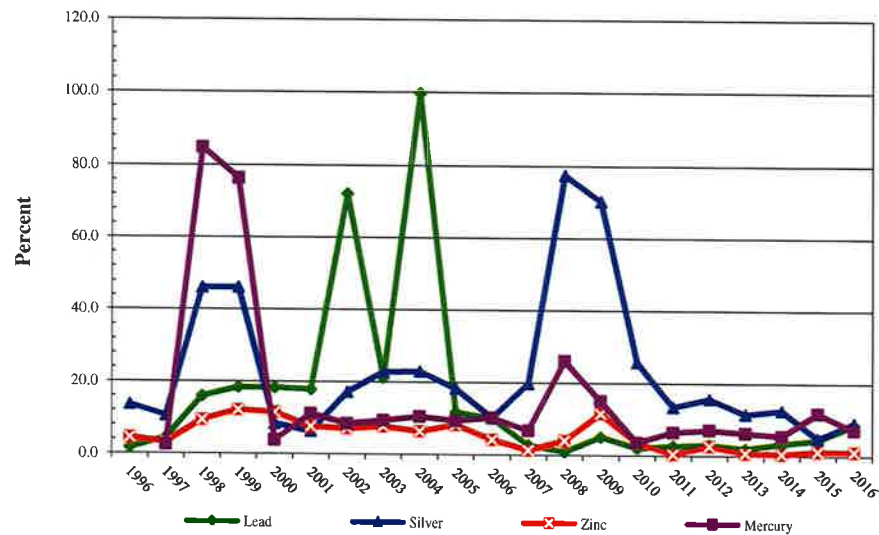
**IU % Contributions**



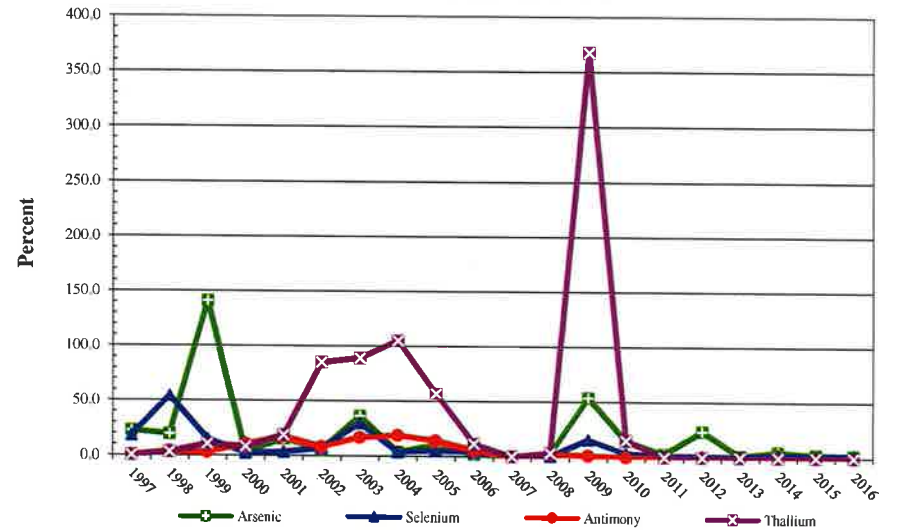
**IU % Contributions**



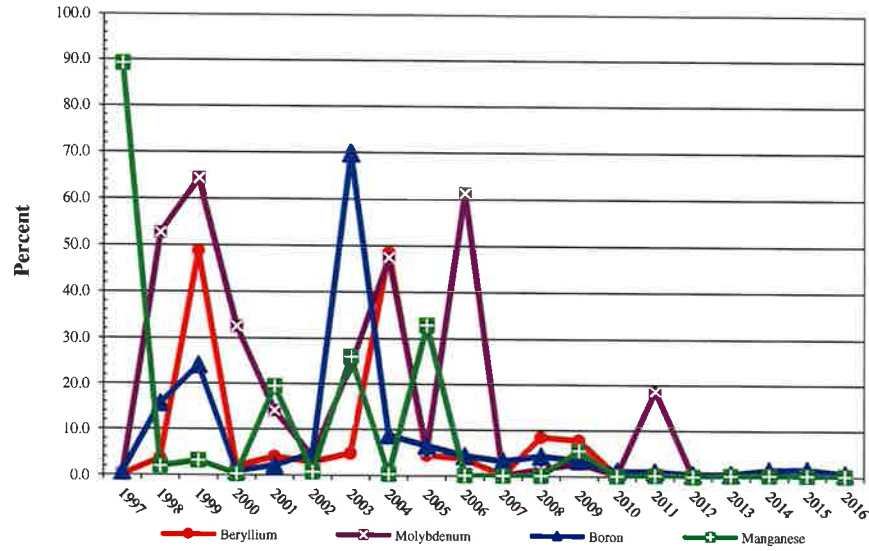
**IU % Contributions**



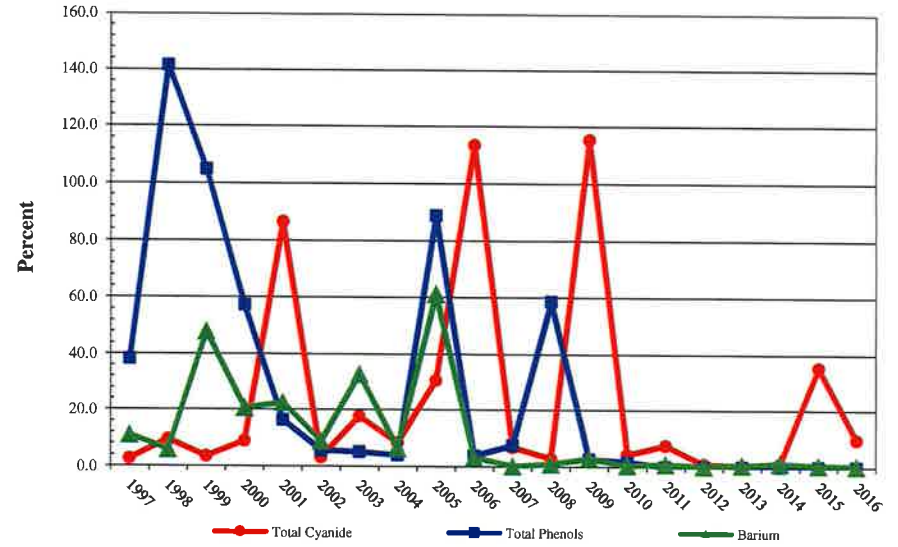
**IU % Contributions**



IU % Contributions



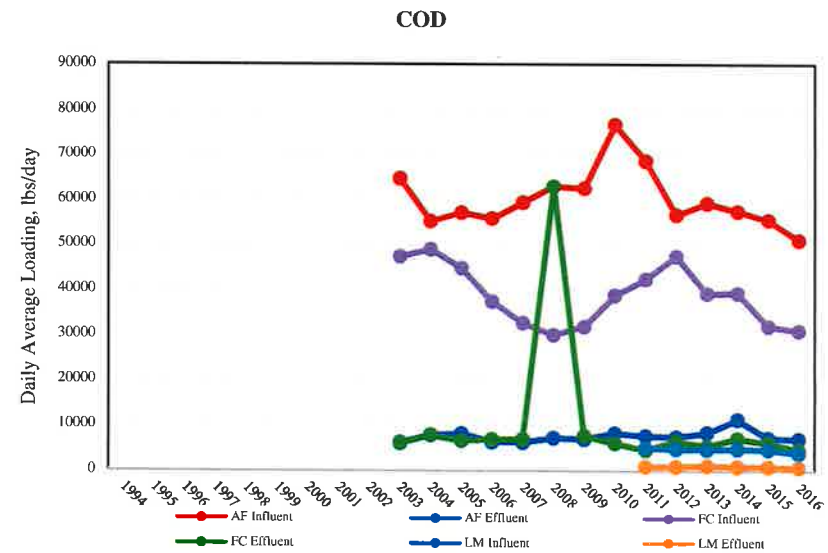
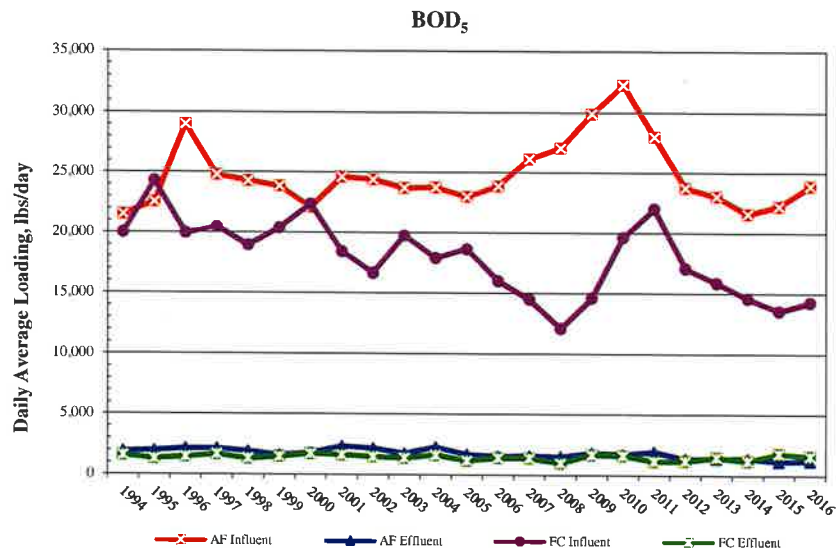
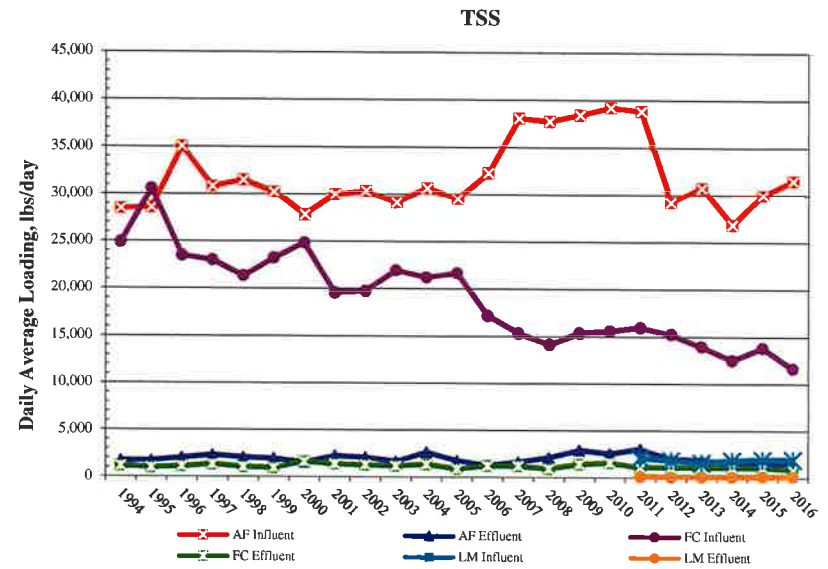
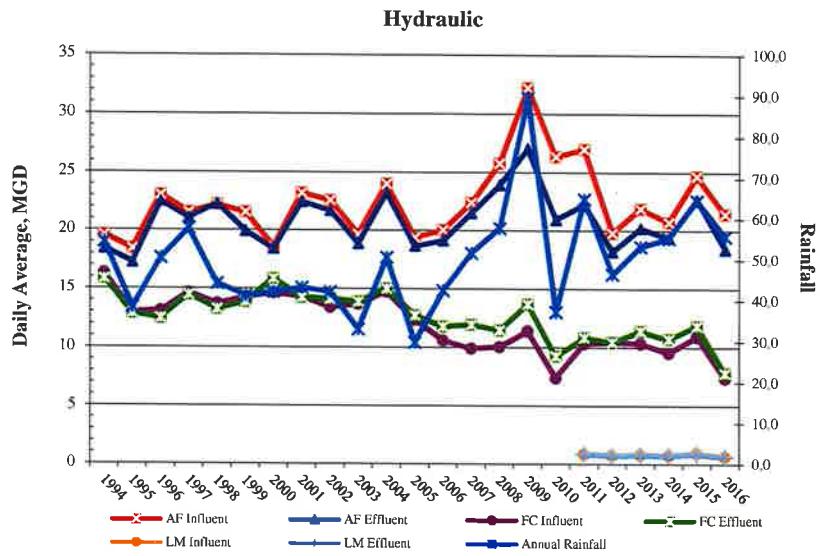
IU % Contributions





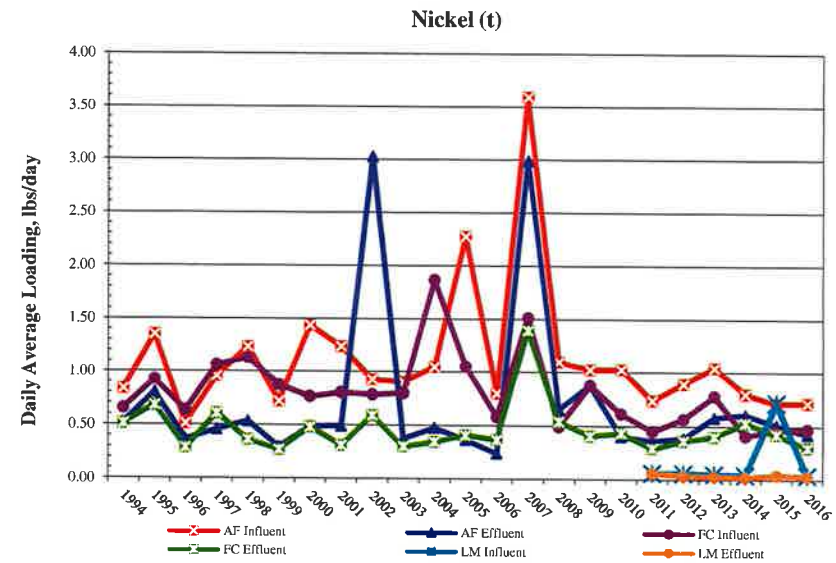
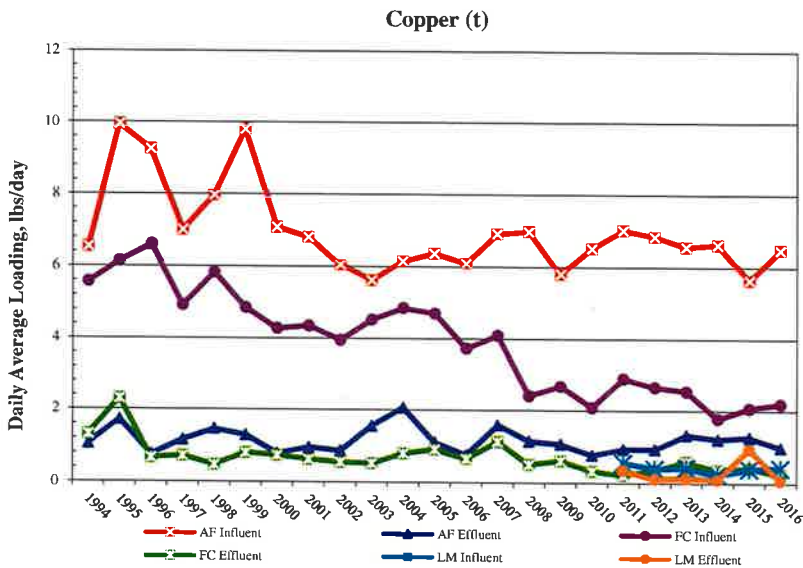
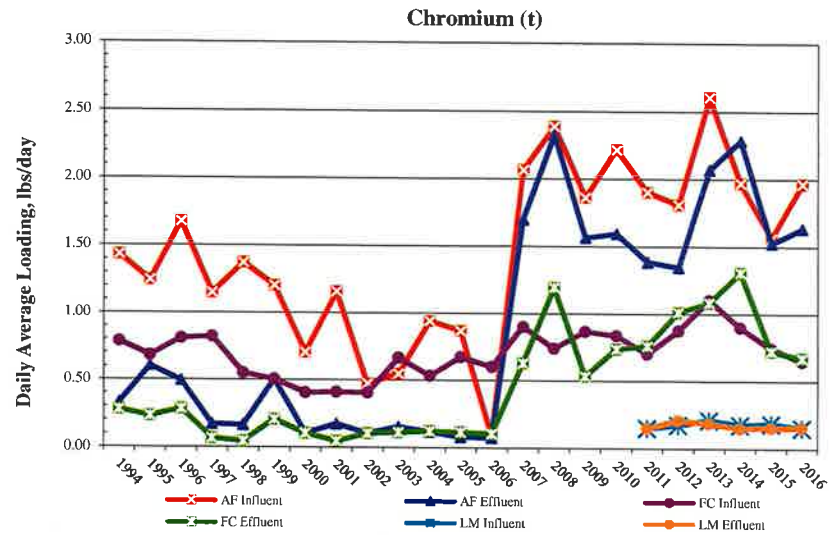
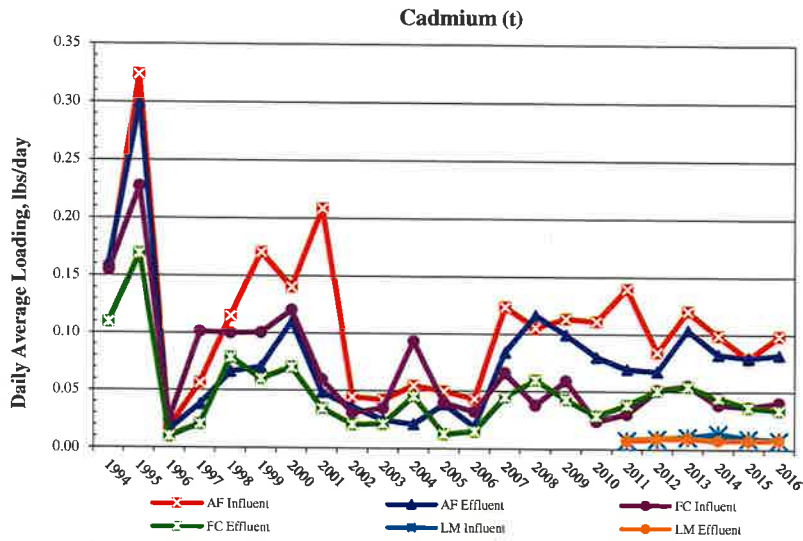
**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
POTW PLANT INFLUENT/FINAL EFFLUENT LOADING TRENDS**

March 31, 2017  
Page 1 of 6



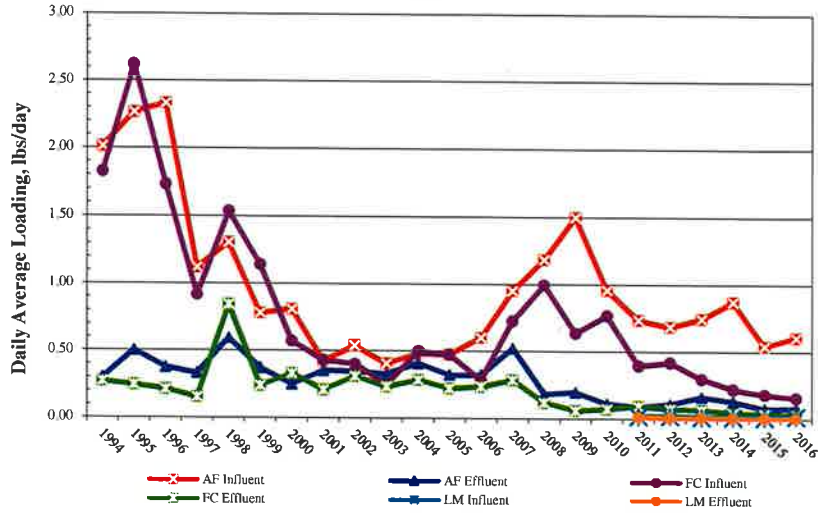
**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
POTW PLANT INFLUENT/FINAL EFFLUENT LOADING TRENDS**

March 31, 2017  
Page 2 of 6

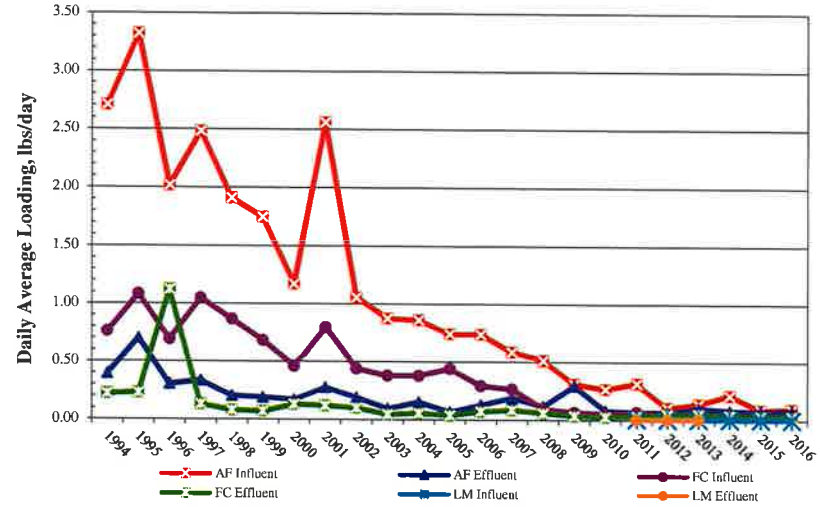


**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
POTW PLANT INFLUENT/FINAL EFFLUENT LOADING TRENDS**

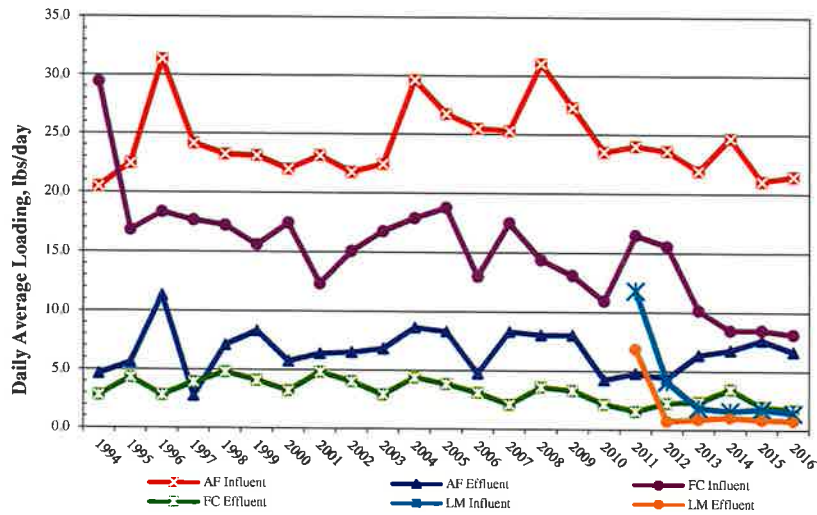
**Lead (t)**



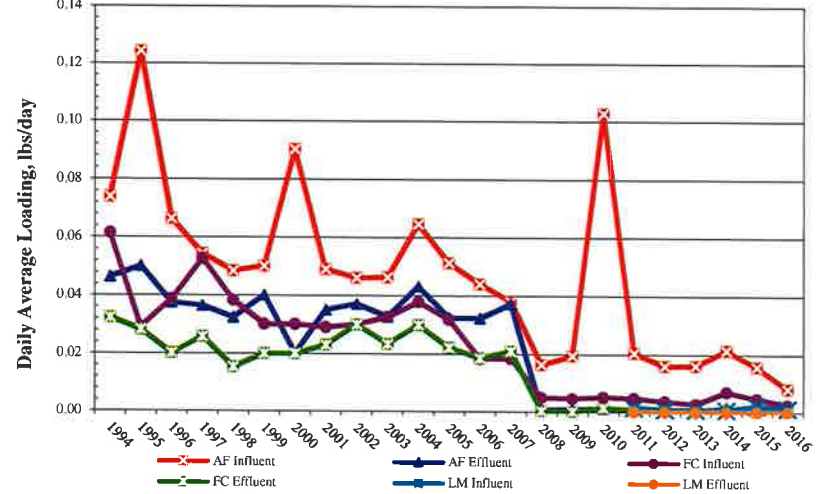
**Silver (t)**



**Zinc (t)**



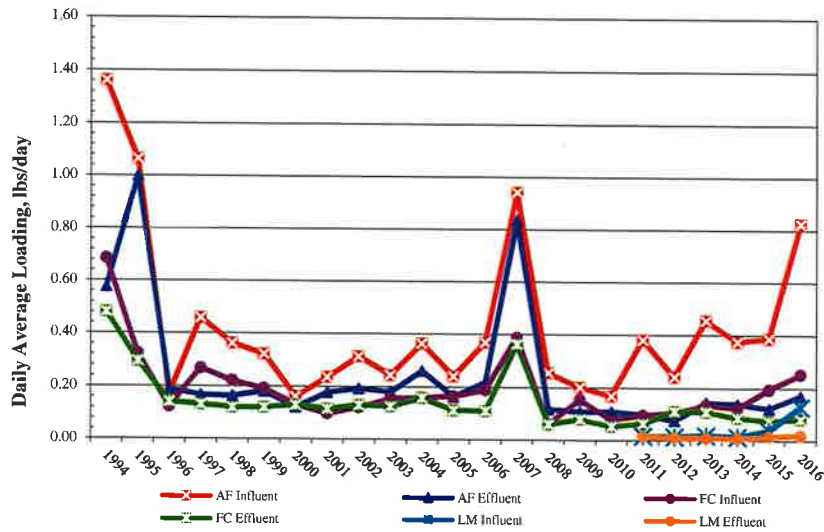
**Mercury (t)**



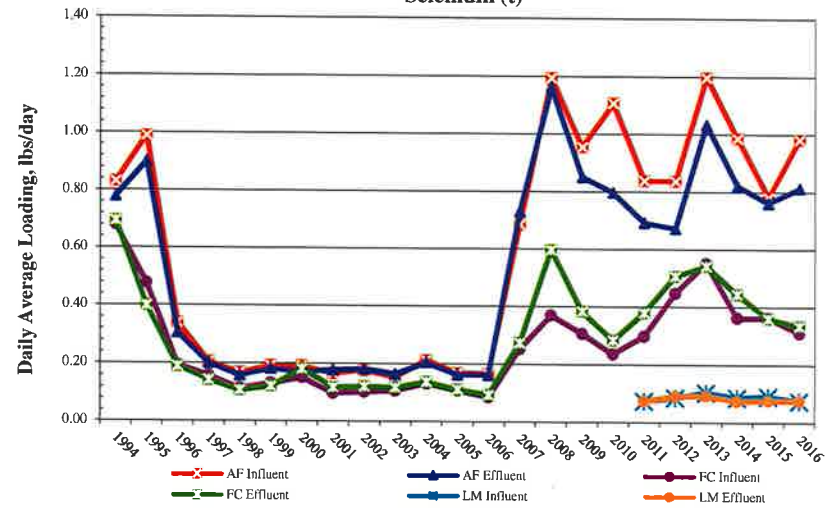


**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
POTW PLANT INFLUENT/FINAL EFFLUENT LOADING TRENDS**

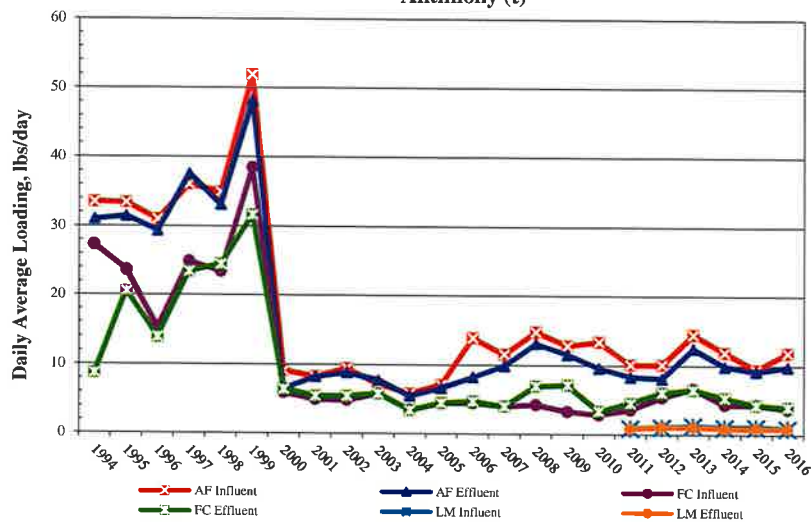
**Arsenic (t)**



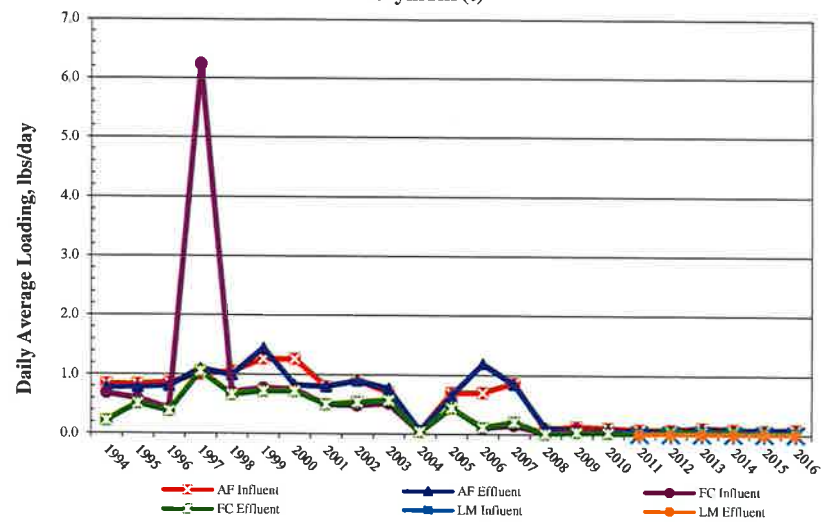
**Selenium (t)**



**Antimony (t)**

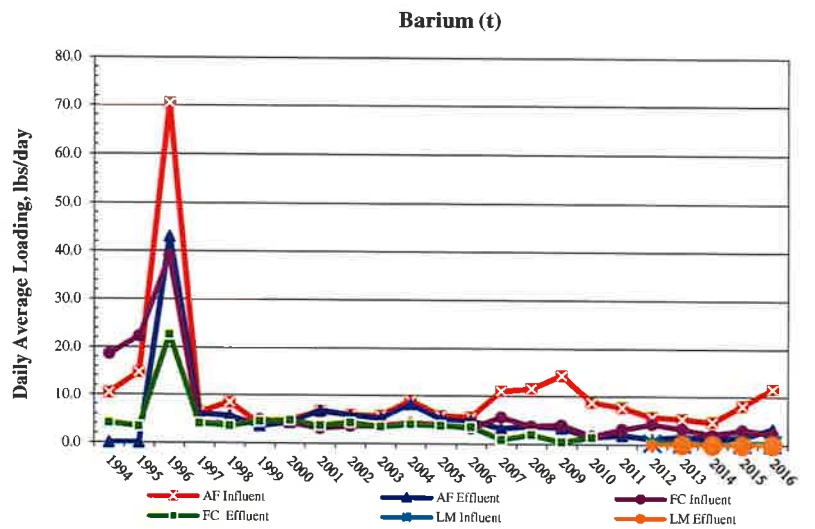
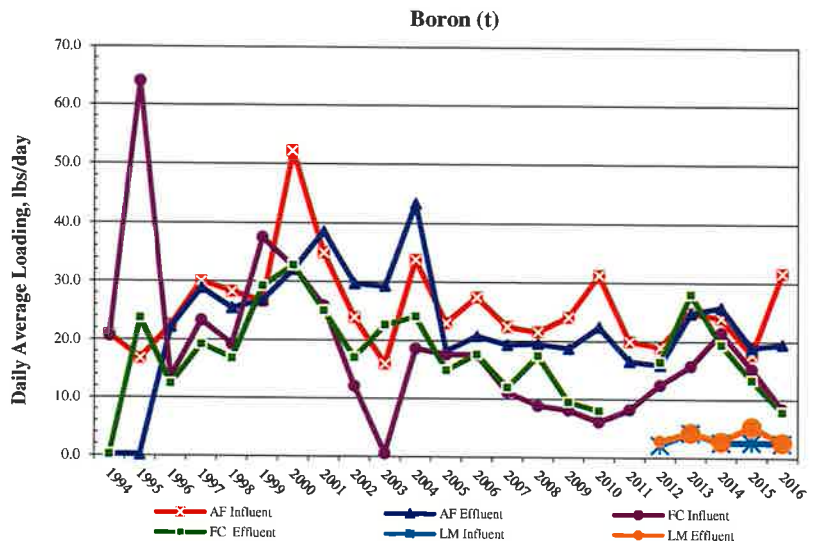
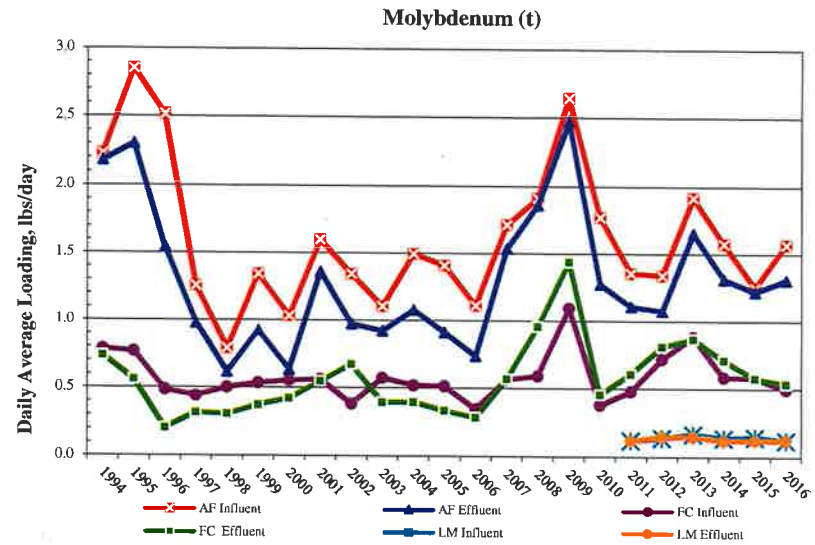
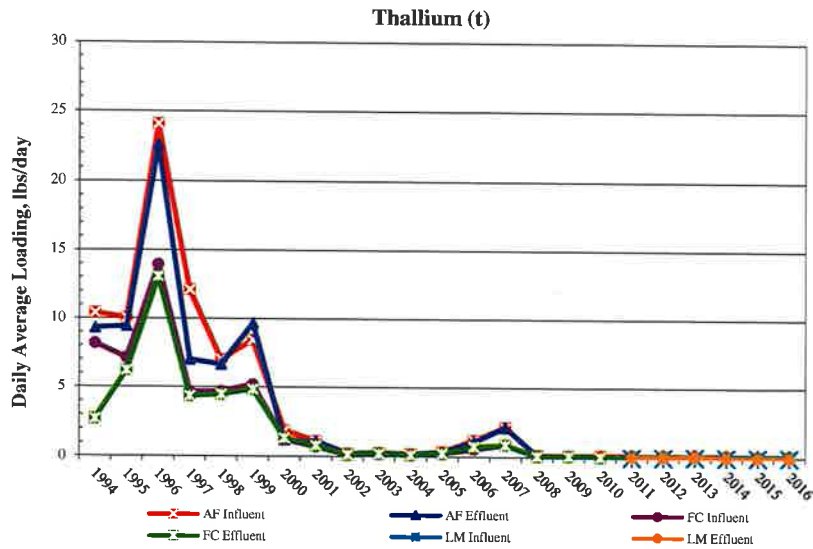


**Beryllium (t)**



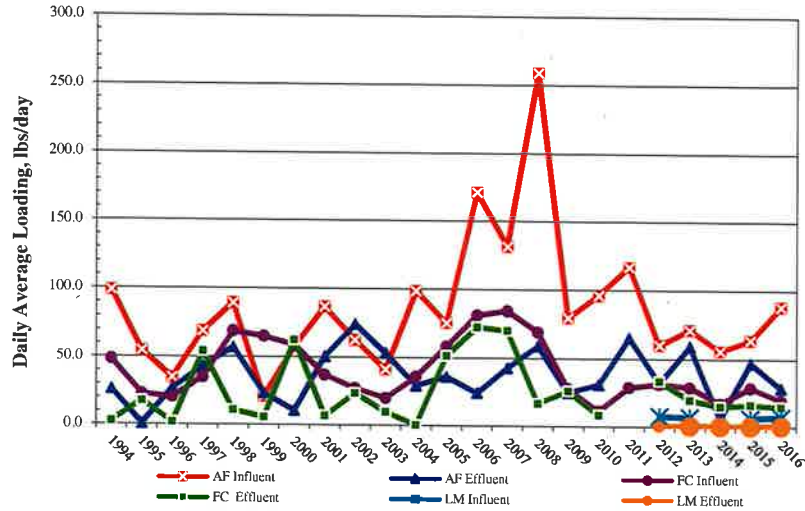


**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
POTW PLANT INFLUENT/FINAL EFFLUENT LOADING TRENDS**

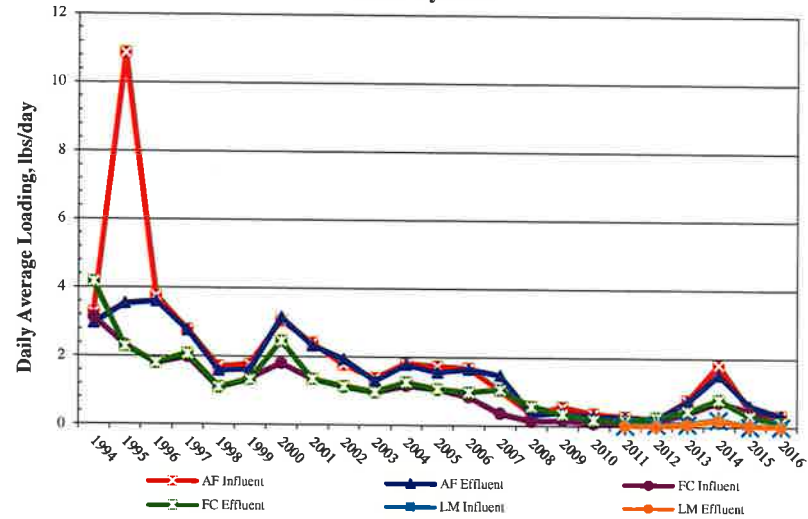


**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
POTW PLANT INFLUENT/FINAL EFFLUENT LOADING TRENDS**

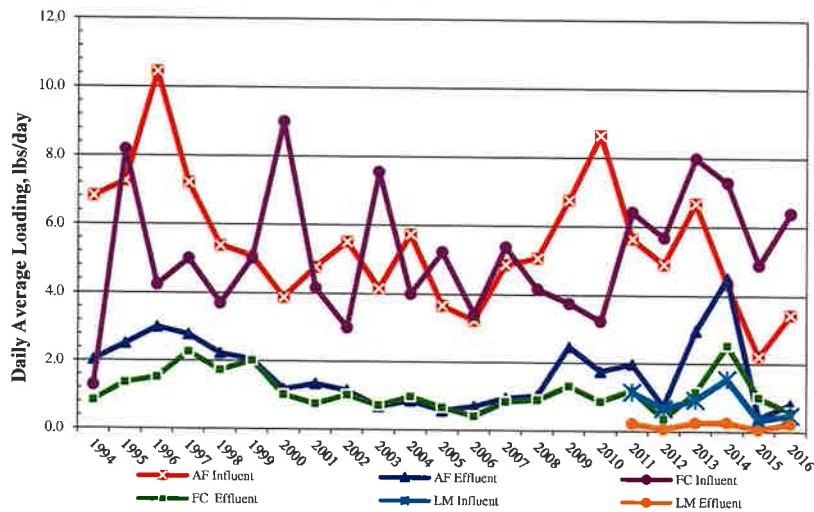
**Manganese (t)**



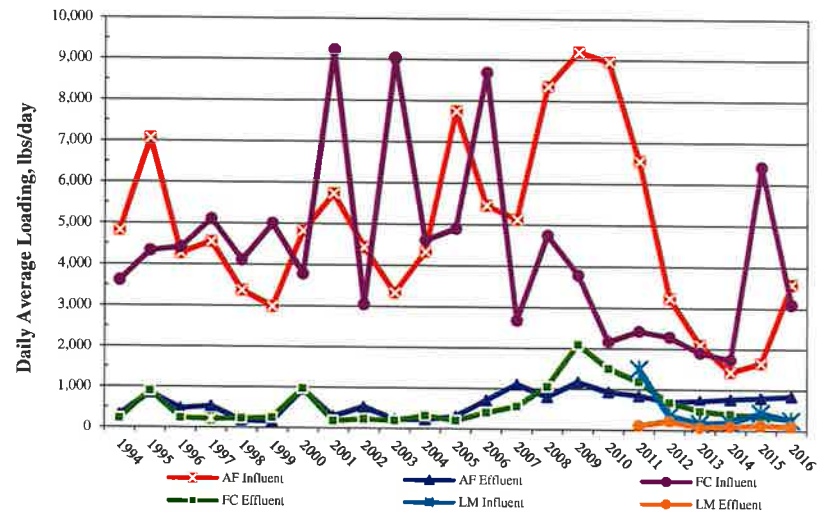
**Total Cyanide**



**Total Phenolics**



**Oil & Grease**



**SECTION**  
**VIII**

**BIOSOLIDS 2016**  
**SUMMARY OF ANALYTICAL RESULTS**

FOURCHE CREEK WASTEWATER TREATMENT PLANT (FC-WWTP)  
BIOSOLIDS ANALYSES

Sludge from Little Maumelle, Adams Field and Fourche Creek Wastewater Treatment Plant's are anaerobically digested at the FC-WWTP. The biosolids are further treated by lagoon stabilizing. Biosolids are land applied as a soil conditioner/fertilizer on lands in Pulaski County, Arkansas. A total of 5,492 dry tons of biosolids were land applied during 2016.

Biosolids from Lagoon 1 and 2 were below the ceiling and pollutant concentrations listed in 40 CFR 503. Biosolids from met Class A pathogen requirements stated in 40 CFR 503.32(a)(6). The data collected prior to land application is organized in the following tables:

- Metal Analyses Summary for FC-WWTP Biosolids Lagoon 1 and 2 - This table includes the required metal test data from 40 CFR Part 503. The metals concentrations were below the 503.13 Table 1 Ceiling Concentrations and the 503.13 Table 3 Pollutant Concentrations. The ceiling concentrations and pollutant concentration limits, where applicable, are included in the table for comparison.
- Nutrient Analyses Summary for FC-WWTP Biosolids Lagoon 1 and 2 - This table includes the Nutrient, PCB, and TCLP results from sampling conducted prior to land application.
- Biosolids % of the 503 Pollutant Concentration (EQ) Limit - This graph is a long term trend chart that plots the actual average values for all metal tests conducted each year against the metal concentrations of 40 CFR 503 Pollutant Concentration Limits (Table 3 of 503.13) required for certification of Exceptional Quality (EQ) Biosolids. For 2016 selenium shows and increase in mg/Kg compared to past years. Review of lab reports show selenium was none detect, but reported at a higher test method detection limit.

**FOURCHE CREEK WASTEWATER TREATMENT PLANT  
BIOSOLIDS 2016-LAGOONS 1 AND 2  
METAL ANALYSIS SUMMARY**

Sample Date	Sample Location	Sample Type	Test Parameters - Reported in mg/kg dry												% volatile		
			As(t)	Cd(t)	Cr(t)	Cu(t)	Pb(t)	Hg(t)	Mo(t)	Ni(t)	Se(t)	Ag(t)	Zn(t)	% solids	solids	pH	
4/18/2016	046-1-001	grab	12.5	< 6.1	40	319	42.0	0.7	< 24.3	18.9	< 18.2	< 9	1050	5.78	54.20	7.51	
	046-1-002	grab	19.7	< 7.4		368	54.8	0.6	< 29.4	22.5	< 22.1		1170	5.73	54.39	7.42	
	046-1-003	grab	< 13.4	< 6.7		329	48.6	0.7	< 26.7	21.2	< 20.1		1050	6.29	53.01	7.55	
	046-1-004	grab	< 13.8	< 6.9		355	52.5	1.0	< 27.5	21.2	< 20.6		1150	5.81	53.99	7.62	
	046-1-005	grab	< 11.5	< 5.8		246	42.0	0.7	< 23.1	23.2	< 17.3		803	6.23	53.23	7.46	
	046-1-006	grab	14.7	< 6.2		367	53.8	1.4	< 24.6	22.6	< 18.5		1210	6.02	54.66	7.44	
	<b>Lagoon 1</b>	<b>AVG</b>	<b>14.3</b>	<b>&lt; 6.5</b>	<b>40</b>	<b>331</b>	<b>49.0</b>	<b>0.8</b>	<b>&lt; 25.9</b>	<b>21.6</b>	<b>&lt; 19.5</b>	<b>&lt; 9</b>	<b>1072</b>	<b>5.98</b>	<b>53.91</b>	<b>7.50</b>	
4/18/2016	046-2-001	grab	15.1	< 5.7	46	363	52.6	0.9	< 22.8	22.5	< 17.1	< 8	1160	6.03	53.83	7.47	
	046-2-002	grab	16.9	< 6.7		343	51.1	0.8	< 26.6	21.7	< 20.9		1150	5.97	53.62	7.46	
	046-2-003	grab	< 14.0	< 7.0		304	47.1	0.7	< 27.9	19.1	< 20.9		986	6.08	53.77	7.51	
	046-2-004	grab	< 16.6	< 8.3		354	48.4	1.0	< 33.2	23.2	< 24.9		1120	6.08	53.9	7.49	
	046-2-005	grab	13.2	< 6.1		333	45.4	0.8	< 24.3	20.2	< 18.2		1100	6.16	53.78	7.39	
	046-2-006	grab	< 13.2	< 6.8		342	55.7	0.7	< 27.1	23.2	< 20.4		1130	6.01	55.31	7.45	
	<b>Lagoon 2</b>	<b>AVG</b>	<b>14.8</b>	<b>&lt; 6.8</b>	<b>46</b>	<b>340</b>	<b>50.1</b>	<b>0.8</b>	<b>&lt; 27.0</b>	<b>21.7</b>	<b>&lt; 20.4</b>	<b>&lt; 8</b>	<b>1108</b>	<b>6.06</b>	<b>54.04</b>	<b>7.46</b>	

<b>Average</b>	<b>14.6</b>	<b>&lt; 6.6</b>	<b>43</b>	<b>335</b>	<b>49.5</b>	<b>0.8</b>	<b>&lt; 26.5</b>	<b>21.6</b>	<b>&lt; 20</b>	<b>&lt; 8</b>	<b>1090</b>	<b>6.02</b>	<b>53.97</b>	<b>7.51</b>
<b>Maximum</b>	<b>19.7</b>	<b>&lt; 8.3</b>	<b>46</b>	<b>368</b>	<b>55.7</b>	<b>1.4</b>	<b>&lt; 33.2</b>	<b>23.2</b>	<b>&lt; 25</b>	<b>&lt; 9</b>	<b>1210</b>	<b>6.29</b>	<b>55.31</b>	<b>7.62</b>
<b>Minimum</b>	<b>&lt; 11.5</b>	<b>&lt; 5.7</b>	<b>40</b>	<b>246</b>	<b>42.0</b>	<b>0.6</b>	<b>&lt; 22.8</b>	<b>18.9</b>	<b>&lt; 17</b>	<b>&lt; 8</b>	<b>803</b>	<b>5.73</b>	<b>53.01</b>	<b>7.39</b>

<b>*Ceiling Conc., mg/kg dry</b>	<b>75</b>	<b>85.0</b>	<b>n/a</b>	<b>4300</b>	<b>840</b>	<b>57.0</b>	<b>75</b>	<b>420.0</b>	<b>100</b>	<b>n/a</b>	<b>7500</b>	<b>n/a</b>
<b>*Pollutant Conc., mg/kg dry</b>	<b>41</b>	<b>39.0</b>	<b>n/a</b>	<b>1500</b>	<b>300</b>	<b>17.0</b>	<b>n/a</b>	<b>420.0</b>	<b>36</b>	<b>n/a</b>	<b>2800</b>	<b>n/a</b>

\*40CFR Part 503.13 Table 1 and 3 Limits for Land Application

Biosolids analysis were performed using EPA SW-846 test methods for evaluation of solid waste

NUTRIENTS

**FOURCHE CREEK WASTEWATER TREATMENT PLANT  
BIOSOLIDS 2016-LAGOONS 1 AND 2  
NUTRIENTS ANALYSIS SUMMARY**

Sample Date	Sample Location	Sample Type	Test Parameters - Reported in mg/kg dry							PCB*	TCLP*
			Nitrate(NO3)	Nitrite(NO2)	Phosphorus	Potassium	Ammonia as N	Total Kjeldahl Nitrogen			
4/18/2016	046-1-001	Grab	78.6	ND	33800	3220	11900	54800			
	046-1-002	Grab	85.7	ND	33700	3380	12800	57900			
	046-1-003	Grab	53.8	ND	34400	3140	NA	64000			
	046-1-004	Grab	74.8	ND	34700	3210	12000	69700			
	046-1-005	Grab	47.8	ND	32300	2290	8860	50200			
	046-1-006	Grab	62.6	ND	33600	3570	11100	59700			
	<b>Lagoon 3</b>	<b>AVG</b>	<b>67.2</b>	<b>ND</b>	<b>33750</b>	<b>3135</b>	<b>11332</b>	<b>59383</b>	<b>ND</b>	<b>Pass</b>	
4/18/2016	046-2-001	Grab	61.6	ND	34100	3440	12500	68500			
	046-2-002	Grab	64.1	ND	34300	3460	12600	70200			
	046-2-003	Grab	53.2	ND	30100	2860	11300	64300			
	046-2-004	Grab	60.9	ND	34200	3350	13100	65700			
	046-2-005	Grab	50.5	ND	NA	3130	13200	64300			
	046-2-006	Grab	54.6	ND	34300	3250	NA	65700			
	<b>Lagoon 4</b>	<b>AVG</b>	<b>57.5</b>	<b>ND</b>	<b>33400</b>	<b>3248</b>	<b>12540</b>	<b>66450</b>	<b>ND</b>	<b>Pass</b>	

<b>Average</b>	<b>62</b>	<b>ND</b>	<b>33575</b>	<b>3192</b>	<b>11936</b>	<b>62917</b>	<b>ND</b>	<b>Pass</b>
<b>Maximum</b>	<b>86</b>	<b>ND</b>	<b>34700</b>	<b>3570</b>	<b>13200</b>	<b>70200</b>	<b>ND</b>	
<b>Minimum</b>	<b>48</b>	<b>ND</b>	<b>30100</b>	<b>2290</b>	<b>8860</b>	<b>50200</b>	<b>ND</b>	

\* 503.6(e) 503 does not establish requirements for use or disposal if determined to be hazardous in accordance to 40CFR261.

\* 503.6(f) 503 does not establish requirements for use or disposal if concentration of PCBs is equal to or greater than 50 mg/kg dry.

Biosolids analysis were performed using EPA SW-846 test methods for evaluation of solid waste

PCB and TCLP sample for each lagoon was 6 part composite intergrated by weight.

ND- No Detection, NA-Not Available due to testing QC criteria.



## Biosolids % of 503 Pollutant Concentration (EQ) Limit

