

## Gage, Hannah

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**From:** Gilliam, Allen  
**Sent:** Friday, April 01, 2016 12:39 PM  
**To:** little rock jeff davis  
**Cc:** Gage, Hannah; McWilliams, Clark  
**Subject:** AR0021806\_Little Rock AR0040177 AR0050849 March 2016 annual Pretreatment report\_20160401  
**Attachments:** Opener and Section I.pdf; Section II.pdf; Section III.pdf; Section IV.pdf; Section V.pdf; Section VI.pdf; Section VII.pdf; Section VIII.pdf

Jeff,

Little Rock Wastewater's March 2016 annual Pretreatment Program report was hand delivered on 3/31/16, reviewed, deemed complete and compliant with the reporting requirements in 40 CFR 403.12(i). No further actions are necessary at this time.

Thank you for the special delivery.

Sincerely,

Allen Gilliam  
ADEQ State Pretreatment Coordinator  
501.682.0625

E/NPDES/NPDES/Pretreatment/Reports



March 31, 2016

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

RE: 2015 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 40 CFR 403.12(i) and the referenced NPDES permits issued to Little Rock Wastewater (LRW). During 2015 LRW continued activities pursuant to maintaining compliance with the General Pretreatment Regulations (40 CFR 403). Enclosed with this letter is the 2015 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 2015 no industry was in significant noncompliance with applicable pretreatment requirements according to criteria published in 40 CFR 403 and EPA, Region VI, policy on quarterly reviews of industrial user compliance.

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 2015 sampling results for the three (3) Wastewater Treatment Plants influent, effluent and biosolids sampling results 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



Signature



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**

**2015 ANNUAL  
PRETREATMENT  
PROGRAM REPORT**

**Submitted March 31, 2016**

**LITTLE ROCK WASTEWATER  
2015 ANNUAL PRETREATMENT PROGRAM REPORT**

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# SECTION I

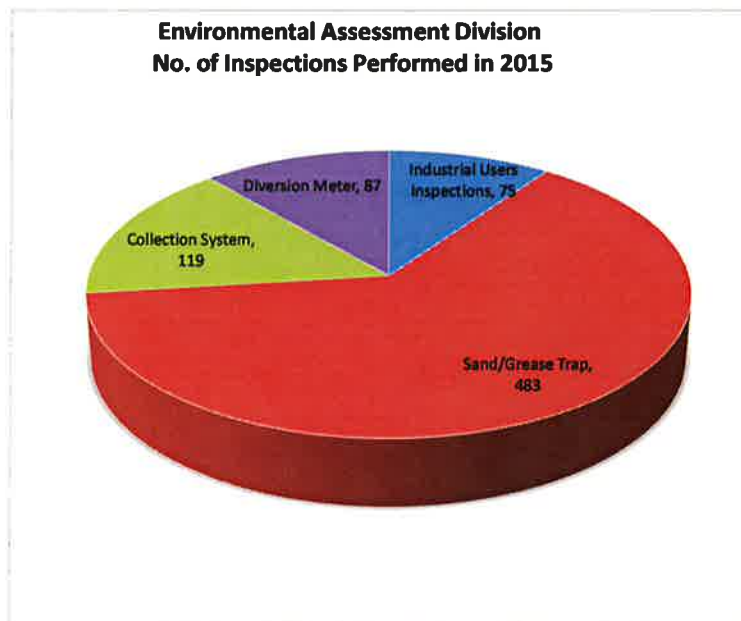
**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION**

**Approved Pretreatment Program  
2015 Accomplishments**

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

There were thirty-four (34) Significant Industrial Users (SIU), with active Industrial Wastewater Discharge Permits during 2015. 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. Permits issued by LRW provide a control mechanism for sampling, inspecting, and tracking compliance with applicable Federal, State, and Local regulations.

A total of 764 inspections and investigations were conducted at industrial and commercial facilities. For industries subject to permit requirements, 75 inspections were conducted to evaluate wastewater sources and compliance. EAD also performed 483 Trap/Interceptor Program inspections at commercial facilities as measures to prevent discharge of prohibited solids, O&G and storm inflow. Trap/Interceptor inspections identified 169 items requiring and completing corrective action. EAD conducted 87 inspections of diversion meters, used for non-sewered flow where users are allowed credit on sewer charges. EAD also conducted 119 collection system new connections and user investigations.



EAD was successful with addressing industry non-compliance and requiring necessary corrective measures to obtain a return to compliance. During 2015, eighteen (18) 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 \$928,584. The City of Little Rock Water Reclamation Commission's adoption of the 2015 Consolidated Fee Schedule allowed EAD to administer fees totaling \$127,570 (permits/inspection fees, special discharge fees, Trap Control Program). Additionally, Landfill Leachate billing revenue was \$318,334. (Revenues are itemized in the Funding/Expenditure Report located at the end of this Section.)

During 2015, LRW implemented and accomplished the following Pretreatment Program activities:

### **Program Development**

- Annual Pretreatment Program Report for 2014 was completed and delivered to ADEQ on March 31, 2015 as required by NPDES Permit #s AR0040177, AR0021806, and AR0050849. 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).
- Pretreatment Program Staff Training:
  1. Pretreatment Program Supervisor and Director of EAD attended EPA Region VI Pretreatment Workshop, August 2015.
  2. The Pretreatment Inspectors attended the *Plumbing Inspector Training Course* that was held August 13-14 2015, at Arkansas Rural Water Association. Inspectors received their annual training for the Arkansas Department of Health Plumbing Inspectors License.
  3. EAD Pretreatment Inspectors attended the 84<sup>th</sup> Annual AWW&WEA conference in Hot Springs AR on April 27&28, 2015.
  4. EAD Pretreatment Staff attended the webinar titled Managing Conflict from the High Road on January 28, 2015.
  5. September 2015, EAD Pretreatment Inspectors manned the LRW booth for the Arkansas Hospitality Association (AHA) showroom held at the State House Convention Center and provided FOG (Fats, Oil and Grease) outreach on restaurant best management practices and Can the Grease.



- Emergency spill kits are located at AF-WWTP and FC-WWTP. EAD maintains these kits so sampling containers and preservatives are on site for immediate sampling if an industrial slug or spill occurs. EAD Pretreatment Inspectors also keep one mobile kit available in an inspection vehicle.
- Biosolids were certified as Class A Exceptional Quality for land application. (see Section VIII).
- LRW Inspector position was filled when the EAD Pretreatment Inspector position was offered and accepted by Sylvie Berry, previous EAD Environmental Sampling Technician.

### **Industrial Relations**

- In 2015, LRW mailed out forty-three (43) Pretreatment Excellence Certificates Awards to those industries with perfect compliance for 2014.
- Special permitting activities in 2015 (new, modifications/extensions, and closures):
  1. G&K Services, a new industrial laundry that started operations on July 6, 2015, has been issued an Industrial Wastewater Discharge Permit. Inspections of operations and pretreatment equipment were conducted during construction. The IU estimates wastewater discharge of up to 100,000 gpd.
  2. Little Rock Quick Rice, formerly known as Sage V Foods, received a permit revision to reflect the new name and signatory authority changes. The permit revision was issued July 1, 2015. As the permit was due to expire August 31, 2015, an extension was made so permit renewal would coincide with the Special Industrial Sewer Use Agreement, signed February 23, 2015, with an effective date of September 23, 2015. Permit renewal was issued September 23, 2015.
  3. 3M submitted an application for a Restricted Short Term Authorization (RSTA) to discharge storm water contaminated with a pigment. Water was retained in frac tanks. 3M was issued a Restricted Short Term Authorization (RSTA) for the discharge (180,000 gallons). LRW sampling showed compliance with LRW local limits. LRW restricted the discharge to a rate at 200 gallons per minute.
  4. Skippy Foods requested to discharge 15,000 gallons of storm water contaminated with 30 gallons of propylene glycol to the sanitary sewer. Inspection was conducted at the IU storm water containment basin. Propylene glycol is nonhazardous and nontoxic to aquatic life but is an oxygen demanding material. LRW Operations Superintendent agreed to allow conditions for sanitary sewer discharge and LRW issued a Restricted Short Term Authorization (RSTA). The approved discharge was completed on March 11, 2015.
  5. Arkansas Portable Toilets requested authorization for hauling liquid waste to AF-WWTP from River fest. A RSTA was issued for River fest hauled liquid waste disposal to AF-WWTP. All fees were waived.

- In 2015, 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 violations listed in the table below:

**Reported Pretreatment Violations**

IU	Sample Date	Monitoring		Test Parameter	Reported Value	Violation of Limit	
		LRW	Self			Daily S.U. / ° C	Weekly avg lbs / day
Hiland Dairy	1/5/2015	X		pH	4.54	5.0-12.0	n/a
Welspun Tubular, LLC	1/13/2015	X		pH	3.54	5.0-12.0	n/a
Sage V Foods	4/1/2015	X		pH	4.67	5.0-12.0	n/a
Sage V Foods	4/20/2015	X		pH	3.25	5.0-12.0	n/a
Little Rock Quick Rice	5/28/2015	X		pH	4.76	5.0-12.0	n/a
Little Rock Quick Rice	6/17/2015	X		pH	4.21	5.0-12.0	n/a
Shooting Star Beverages	6/18/2015	X		pH	4.05	5.0-12.0	n/a
Welspun HFW	7/22/2015	X		pH	2.56	5.0-12.0	n/a
Hiland Dairy	8/13/2015	X		pH	3.15	5.0-12.0	n/a
Hiland Dairy	8/14/2015	X		pH	4.68	5.0-12.0	n/a
Little Rock Quick Rice	10/4-10/2015	X		COD	7,764	n/a	8,000-47,000
Little Rock Quick Rice	10/4-10/2015	X		TS	7,051	n/a	7,500-40,500
Little Rock Quick Rice	10/11-17/2015	X		COD	7,196	n/a	8,000-47,000
Little Rock Quick Rice	10/11-17/2015	X		TS	6,813	n/a	7,500-40,500
Little Rock Quick Rice	10/27/2015	X		Temp° C	46.0	43.3	n/a
Little Rock Quick Rice	11/6/2015	X		Temp° C	45.0	43.3	n/a
Little Rock Quick Rice	11/10/2015	X		Temp° C	45.0	43.3	n/a
Little Rock Quick Rice	11/12/2015	X		Temp° C	44.0	43.3	n/a

1. LRW sampling revealed a January 2015 pH violation of 4.54 S.U. at Hiland Dairy. The plant supervisor was contacted and the IU returned to compliance with pH values of 9.69 S.U. and 10.90 S.U. In August 2015, LRW sampling revealed pH violations at Hiland Dairy of 3.15 & 4.68 S.U. Investigation revealed the Clean In Place (C.I.P.) system in the tea room may have overloaded the equalization tank

- with low pH waste resulting in the violation. The IU agreed to review the CIP process and determine if additional neutralization is necessary prior to discharge to the equalization tank. LRW sampling confirmed the IU returned to compliance.
2. Welspun Tubular LLC, inspection revealed the January 2015 pH violation occurred during startup of the coating line. Improper neutralization allowed a small amount of acidic wastewater to discharge at the time of the pH sample. The pH at each monitoring point was rechecked and found acceptable. Review of the FC-WWTP influent pH trend chart showed no effect from the violation at the IU.
  3. LRW sampling in July 2015 at Welspun HFW (High Frequency Weld) revealed a pH violation at 2.56 S.U. Investigation revealed the operator of the phosphoric acid coating station noted a low pH but did not act upon the reading and notify the proper personnel of the issue. The chemical neutralization system did not function due to a malfunctioning probe. LRW Operations Superintendent was notified. FC-WWTP influent pH trend did not show a low pH impact. A Notice of Violation (NOV) letter was sent to the IU. The notice advised of the standards set forth by the LRW Pretreatment Ordinance 19,895 and the possible actions that can be taken if there are future violations of this nature. Welspun responded by letter with corrections. Inspection was performed to observe the pretreatment area and the new method of checking pH in the area. IU returned to compliance.
  4. LRW sampling at Sage V Foods during April 2015 revealed 2 pH violations (4.67 S.U. and 3.25 S.U.). These violations occurred at the clean-up/disinfection wastewater outfall. Corrective actions included new parts to replace the pH meter sensors and computer boards in the meters. IU advised LRW that for the second violation, an operation error ruined a batch of rice. The error occurred just after addition of citric acid, used as a preservative, and as the batch was discharged to the wastewater room, the pH of the batch was too low for the pH neutralization system with the volume of wastewater discharged. Larger pumps will now maintain sufficient neutralization. Follow up pH testing shows a return to compliance.
  5. Little Rock Quick Rice, LLC, formerly known as Sage V Foods, had pH violations (4.76 S.U. and 4.21 S.U.) occur in May and June at the high strength process outfall. The first event lasted for approximately three hours before corrective action was implemented. FC-WWTP Superintendent was notified and no impact noted. The IU advised the feed line from the neutralization chemical tote had a crystallized substance prohibiting the chemical pump from properly administering the neutralization chemical to the waste stream. The second violation lasted 18 minutes based on IU data. Inspection was conducted. During the month of October 2015, Little Rock Quick Rice did not meet the minimum pounds per day weekly average limit for COD and TS for two weekly periods. Sampling during October and November 2015 also revealed the IU exceeded temperature limits for the wastewater to the FC-WWTP EQ basin. The facility was notified of the violation of limitations listed in the Special Industrial Sewer Use Agreement and Industrial Wastewater Discharge Permit No. S-98. The IU returned to compliance for all violation events in 2015.
  6. Shooting Star Beverages pH violation at 4.05 S.U. occurred during June 2015. During fruit juice mixing (citrus), a mix tank leak discharged to the floor drain,

resulting in the pH violation. The leak has since been repaired and the facility has returned to compliance.

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

- Permitted IU investigations and actions implemented:
  1. FC-WWTP reported the influent pH had a series of spikes near 9.00 S.U. during May 2015. Pretreatment inspectors contacted industries in the Port Authority area to investigate possible sources. No industry identified any spills or occurrences that may have caused the higher than normal pH. EAD collected pH samples at the Welspun Tubular pump station and total flow manhole, and at the Port Authority Pump Station. All pH values were normal. On September 7, 2015, FC-WWTP influent pH SCADA trend chart showed a lower than normal pH (near 5.0 S.U.) occurring at the plant influent during the night. An influent grab sample revealed zinc and chromium at normal levels. The COD value was 900 mg/L, twice the normal level for the influent. LRW pretreatment inspectors contacted several permitted IU's to inquire about activities which may have caused a low pH wastewater discharge. LRW mailed letters to 84 commercial/industrial customers located up stream of Arch Pump Station to notify them LRW is tracking occurrences of wastewater with low pH levels coming into FC-WWTP. The letter requests that the customers evaluate activities to affirm compliance with wastewater pH limitations is being obtained. LRW is continuing investigation to locate source(s) of pH abnormalities and initiate activities necessary for corrective action.
  2. Fiber Glass Systems reported high flow in their pretreatment plant on December 28, 2015. LRW inspection was conducted and storm water inflow sources were identified. A NOV was mailed requiring the IU to seal a busted standpipe drain, repair roof guttering, and re-evaluate storm water sources to remove other existing storm water contributions. As part of the initial pre-permitting process for Fiber Glass Systems, the IU was required to re-route all storm water inflow from the treatment plant to the storm water conveyance system. The IU has completed corrective action to remove storm water sources from wastewater pretreatment.
  3. Hillcrest Camshaft plans to expand by adding a new building to contain cam shaft refurbishing operations for larger rail engines. The IU will discharge parts cleaning wastewater through a solids interceptor to the sanitary sewer from this operation. The IU is a categorical industry for chrome electroplating as a core process listed in Code of Federal Regulations Title 40 Part 433 Metal Finishing (zero discharge). Hillcrest Camshaft was notified the proposed wastewater discharge from parts cleaning operations will not be regulated as metal finishing subject to federal pretreatment standards since there is no connection to the zero discharge core metal finishing operation.
  4. Hulett Grease Trap Service was issued an NOV letter for prohibited discharge to AF-WWTP. Hauled Waste Dump Manifest revealed that hauled waste being disposed was waste activated sludge from Saline County Water. This is not an approved source under Hauled Liquid Waste Disposal Guidelines.

5. Little Rock Quick Rice process sewer meter flow was found consistently surging into the process outfall sample/inspection manhole. The surging appeared when a second pit pump was activated. The surging effected the accuracy of the sewer meter. To correct the problem the IU replaced the process line outfall parshall flume with a new electromagnetic meter to provide accuracy with registering process flow variability. New meter specifications and installation plans were approved by LRW. This new set up, beginning in March 2015, provides an automatic email notice of the meter daily totalizer value to LRW each morning at 9:00 a.m. and is used for daily/weekly loading pounds calculation.
  6. Ozark Ridge Landfill holds Industrial Wastewater Discharge Permit SP-L6, issued by LRW for the purpose of regulating landfill leachate received in 6,000 gallon tankers at AF-WWTP. Generally very few loads are received. However, due to apparent storm water leaking into the cells, transport loads have increase to the AF-WWTP during wet weather periods of 2015.
  7. Porocel Corporation sewer meter and wastewater pump station was disabled by a lightning strike. This caused a private sanitary sewer overflow to the storm ditch. LRW inspection revealed cleanup and corrective action to the pump station were completed. In September 2015, the IU notified LRW that the wastewater holding tank on the Tri-Mer NO<sub>x</sub> air scrubber system registered a pH of 13.0 S.U. LRW investigation revealed alarms and shut off values were activated to prevent discharge to the sanitary sewer. After neutralization the wastewater was approved to discharge to the LRW collection system. LRW sampling of the IU wastewater discharge was conducted for Arsenic, Chromium, Copper, Nickel, and Zinc. All test results were within permit limits.
  8. Shooting Star Beverages, on December 22, 2015, reported a slug discharge of juice to the sanitary sewer. LRW demand inspection revealed an accidental spill of 2,800 gallons of dilute orange fruit juice occurred when a chemical feed system valve was stuck open, allowing disinfectant to dispense to the juice holding tank. The industry operator allowed all the product to discharge through a floor drain to the sanitary sewer. EAD monitoring at Arch Street Pump Station and the FC-WWTP influent trend for pH showed no slug impact. The IU provided the required written response with corrective measures to the inadvertent discharge.
  9. Skippy Foods, LLC reported glycol accidently being leaked to the sewer by the failure in a heat exchanger. LRW inspection revealed the heat exchanger has been taken out of service and replaced. Approximately 55 gallons glycol discharged to FC-WWTP. No impact was noted by FC-WWTP Superintendent.
- EAD mailed five (5) Wastewater Survey Forms to those industries identified as having a component that may cause it to be subject to pretreatment program requirements. The 2015 Industrial User Survey was conducted by LRW Pretreatment staff. These 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. The ADEQ Hazardous Waste Generators List,

3. Arkansas Business License,
  4. New construction plans as routed by City Planning,
  5. Addition drive by surveys were conducted at existing locations to confirm no new businesses have opened:
    - a. Eagle Ford Reclamation Company 1901 Napa Valley Drive,
    - b. River City Cold Storage 5301 Scott Hamilton Drive (formerly Brown Packing),
    - c. Silverwood Products 3215 Brown Street,
    - d. Smith Glass 2223 Wright Avenue,
    - e. Smoky Hollow Foods 2901 W 32<sup>nd</sup> Street,
    - f. Porter of Arkansas, Inc 6001 Murray Street (formerly National Uniform),
    - g. Wes Pak 11610 Vimy Ridge Road,
    - h. Smurfit-Stone Container 6101 Patterson Road,
    - i. Weyerhaeuser Company 1901 E 22<sup>nd</sup> Street,
    - j. Little Rock Powder Coating 4302 W 65<sup>th</sup> Street,
    - k. Ace Powder Coating 5207 Scott Hamilton Road,
    - l. Ace Plating Company 2615 W 12<sup>th</sup> Street,
    - m. JBD Inc 12401 I-30 (Jacuzzi).
- Inspections/evaluations for the 2015 Survey Screening Processes:
    1. Beudet Aviation, Inc. 6001 Lindsey Road, no process wastewater, aviation cabinet building.
    2. Boyd Metals 4324 Mauney Road, no process wastewater, metal distribution.
    3. Clean Uniform operates a small industrial laundry in the city. Clean Uniform estimated wastewater flow is 3,000 gallons per week. Sewer billing will be based on their (CAW) consumption meter unless a sewer meter is installed. The facility is not permitted but is inspected under the FOG Program.
    4. Eagle Ford Reclamation Company, located at 1901 Napa Valley Drive, survey inspection was initiated. The facility was brought to LRW attention by e-mail from Allen Gilliam, ADEQ Pretreatment Coordinator, as a possible oil and gas reclamation facility (Centralized Waste Treatment). Upon inspection, the facility was found to be only an office building. Contact by telephone with a representative indicates the business operations are in Three Rivers, Texas.
    5. G&K Services continued renovation at 5510 West 65th Street to house the new industrial laundry. LRW approved sewer metering requirements for the sewer billing of process and domestic flows for the two separate outfalls. Inspections were conducted to observe the status of process meters, wash operations, pretreatment area and the wastewater equalization tank. G&K submitted an Industrial Wastewater Discharge Permit Application. Pretreatment of process wastewater is expected to reduce pollutant loading below surcharge levels.
    6. Lost 40 Brewery was evaluated for the high strength surcharge program (Rate Ordinance No. 20,594.) but were below high strength levels. A survey form and Industrial Wastewater Discharge Permit Application have been provided to the owner. The facility is not permitted but is inspected under the FOG Program.

7. Moon Distributor's, 2800 Vance Street, survey inspection conducted. The location is a warehouse for distribution of alcohol in state. Product damaged or slated for disposal is poured into a two-compartment sink that discharges to the sanitary sewer. Approximately 200-gallons is discharged monthly. Warehouse renovations added beer in can, bottle, and keg distribution. No keg wash is planned. The facility also has a vehicle wash (exterior only) with two sand interceptors cleaned twice per year. The facility is not permitted but is inspected under the FOG Program.
  8. Parker Solvents, 8909 Mabelvale Pike, no process wastewater. Solvent storage and distribution. Ground water remediation treatment facility was not in service.
- Grease related and other Sanitary Sewer Overflows (SSO) Collection System Investigations
    1. Pulaski County Detention Facility (PCDF) was identified as the source of prohibited materials to the sanitary sewer. LRW maintenance crews reported problems with ropes made of linen shreds tangling in the Arch Pump Station mechanical screens and also causing blockages in the collection system downstream of PCDF. EAD investigation revealed that PCDF inmates flush the linen ropes, entangle them and retrieve to pass information across cell blocks. As corrective action PCDF obtained funds to install a grinder pump to prevent prohibited materials from causing blockages in the downstream sewer system.
    2. Kent Walker Cheese on Cross Street was inspected during installation of a GB250 interceptor installation. A new variance for this installation was issued for the location. The facility is not permitted but is inspected under the FOG Program.
    3. Moses Tucker Realty notified LRW of a grease trap overflow at 307 President Clinton Avenue and requested assistance in determining the cause of the overflow. EAD found the grease trap filled with domestic waste. Inspection revealed a possible obstruction in the private service line just downstream causing the domestic waste to back up into the grease interceptor.
    4. Hermitage Pump Station clogging problems were investigated by EAD pretreatment inspections. FC-WWTP Maintenance Supervisor reported that towels/rags were clogging the Hermitage Pump Station and requested assistance. Pretreatment inspectors inspected several manholes in the area and at the pump station to track a source of the rags; however there was no evidence in the lines at that time. LRW hydro cleaned sewer lines servicing commercial sources to the pump station and flushed out a few rag materials that may have caused the problems. Commercial facilities up stream were inspected to try and identify the source of the prohibited materials.
    5. Cupcakes on Kavanaugh private interceptor and pump station were dye tested by pretreatment inspectors to assist Little Rock Public Works with verifying the facility was again the source of sewage leaking to the adjacent street curb. Investigation revealed the sump pump holding tank is not sealed properly and allowing infiltration into the ground when the tank level becomes too high. Ricky White, LR Public Works, required corrective action for the facility to seal the pump station tank.

6. Oasis Cantina & Sports Bar 7121 Geyer Springs Road – Overflow was cleaned up. EAD Invoice was sent to customer. During special follow up inspection, inspector noticed an illegal connection to the grease interceptor operation and cleanout caps that were taken out of the cleanouts. A sump pump was put into the sampling manhole that would discharge on the parking lot. An appointment was set up to discuss it with the manager. The manager has corrected the plumbing.

**LRW Trap/Interceptor Program**

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 756 inspections of some type of interceptor or trap. Of those inspections, 13.5% (102) corrective action items were required to clean or repair the interceptor or trap.

A total of 85 Construction Plans were reviewed with 68 Plan Approvals issued in 2015. 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, 2015 through December 31, 2015		

<b>II. Trap Control Compliance Monitoring</b>		
1.	Number of Trap Inspections Performed	483
2.	Number of Traps Requiring Cleaning	87
3.	Number of Traps Requiring Cleanout Replacement or Repair	79
4.	Number of Traps Requiring Repair	0
5.	Number of Facilities Requiring Trap Installation	3



<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**

	2015 Actual	2016 Estimated
<b>Funding</b>		
Surcharge Program	\$928,584	\$947,156
Landfill Leachate Program	\$318,334	\$324,701
Permitted Industrial Wastewater Discharge Fees	\$66,764	\$68,099
Trap/Interceptor Control Program Fees	\$755	\$770
Domestic Septage Waste Hauler Fees	\$21,345	\$21,772
Landfill Permit Fees	\$3,375	\$3,443
Diversion / Sewer Meter Fees	\$14,443	\$14,732
HLW/Special Discharge-Restricted Short Term Fees	\$20,888	\$21,306
<b>Total Funding</b>	<b>\$1,374,488</b>	<b>\$1,401,978</b>
<b>O&amp;M Expenditures</b>		
Salary		
Employee Salaries	\$558,342	\$590,863
Employee Benefits	\$225,121	\$236,107
Supplies/Maintenance		
Supplies/Equipment Maintenance	\$36,204	\$38,016
Vehicle Maintenance	\$10,452	\$11,034
Other		
Auto Liability	\$2,217	\$2,550
Training and Development	\$2,650	\$2,920
Contract Services	\$24,267	\$22,499
Telephone	\$4,817	\$5,860
<b>Total O&amp;M Expenditures</b>	<b>\$864,070</b>	<b>\$909,849</b>
<b>Capital Expenditures</b>		
None		
<b>Total Capital Expenditures</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Expenditures</b>	<b>\$864,070</b>	<b>\$909,849</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	<u>Little Rock Wastewater</u>		
Address	<u>11 Clearwater Drive</u>		
City	<u>Little Rock</u>	State/Zip	<u>AR 72204</u>
Contact Person	<u>Stanley Suel</u>	Position	<u>Director EAD</u>
Contact Telephone Number	<u>(501) 688-1486</u>		
NPDES Permit No's.	<u>AR 0040177, AR 0021806, and AR 0050849</u>		
Reporting Period	<u><b>January 1, 2015 through December 31, 2015</b></u>		
Total Number of Categorical IUs	<u>14</u>		
Total Number of Significant Non-categorical IUs	<u>20</u>		

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

III. Compliance Monitoring Program			
		Significant Industrial Users	
		Categorical	Noncategorical
1	No. of Control Documents Issued or Renewed / Total Number Required 2015	3 / 3	10 / 10
2	No. of Non-sampling Inspections Conducted	17	30
3	No. of Sampling Visits Conducted	78	434
4	No. of Facilities Inspected (non-sampling)	14	20
5	No. of Facilities Sampled	10*	20

IV. Enforcement Actions			
		Significant Industrial Users	
		Categorical	Noncategorical
1	No. of Compliance Schedules Issued/No. of Schedules Required	0 / 0	0 / 0
2	No. of Notices of Violations issued to SIUs	1	1
3	No. of Administrative Orders Issued to SIUs	0	0
4	No. of Civil Suits Filed	0	0
5	No. of Criminal Suits Filed	0	0
6	No. of Significant Violators (attach newspaper publication)	0	0
7	Amount of Penalties Collected (total dollars/IUs assessed) **	\$489 / 1	\$1,207 / 3
8	Other Actions (sewer bans, etc.)	0	0

\* Categorical IU's: Four (4) sampled for regulated wastewater discharges: CertainTeed Corp., Interstate Highway Sign, Welspun Tubular, and Welspun HFW. Six (6) sampled for unregulated wastewater only: Cameron Valve, Central Jet Flying Service, Dassault Falcon Jet, PPG Industries, Rheim Chemie Little Rock, and St. Vincent Hospital. Four (4) domestic wastewater discharge only - not sampled: Accessories Marketing, Arkansas Painting and Specialty, Hillcrest Camshaft, 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*

\_\_\_\_\_  
Authorized Representative

Stanley B. Suel, Director of Environmental Assessment

*3/31/2016*

\_\_\_\_\_  
Date

**LITTLE ROCK WASTEWATER  
SUMMARY OF INDUSTRIAL USER NONCOMPLIANCE  
1986 THROUGH 2015**

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	0 – Significant Noncompliance
2011	0 – Significant Noncompliance
2012	0 – Significant Noncompliance
2013	0 – Significant Noncompliance
2014	0 – Significant Noncompliance
2015	0 – Significant Noncompliance

# **SECTION III**



# LITTLE ROCK WASTEWATER 2015 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 01/01/2014	Y	N	1	0	RD 02/10/2006	RD*	RD	RD	NO 433 DISCHARGE
ITW Accessories Marketing	2869	325199	40 CFR 414	Fourche Creek	RENEWED 04/01/2014	Y	N	1	0	RD 03/12/2012	NR	NR	NR	NO 414 DISCHARGE
Cameron Valve	3544	333511	40 CFR 433	Fourche Creek	RENEWED 10/01/2014	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 09/01/2014	Y	N	1	4	NR	NR	NR	NR	C - NO 433 DISCHARGE
CertainTeed Corporation	2952	324122	40 CFR 443	Adams Field	RENEWED 05/01/2014	Y	N	1	2	RD 04/14/2000	RD	RD	RD	C
Dassault Falcon Jet Corporation	3728	336413	40 CFR 433	Adams Field	RENEWED 12/01/2014	Y	N	1	6	RD 09/09/1990	RD*	NR	NR	NO 433 DISCHARGE
Hillcrest Camshaft Service, Inc.	3714	336310	40 CFR 433	Fourche Creek	RENEWED 09/01/2014	Y	N	1	0	RD 11/20/1995	RD*	NR	NR	C - NO 433 DISCHARGE
Interstate Highway Sign	3993	339950	40 CFR 433	Fourche Creek	RENEWED 02/01/2014	Y	N	1	14	RD 03/25/1992	RD	RD	RD	C
Progress Rail Services	3562 3471	332991 332813	40 CFR 433	Fourche Creek	RENEWED 05/01/2015	Y	N	1	0	NR	NR	NR	NR	NO 433 DISCHARGE
PPG Industries	2851	325510	40 CFR 446	Fourche Creek	RENEWED 07/01/2014	N	N	1	2	NR	NR	NR	NR	C - NO 446 DISCHARGE
Rhein Chemie Little Rock	3011	326211	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 03/01/2014	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 06/01/2014	Y	N	1	11	RD 11/30/2007	RD	RD	RD	C
Welspun Tubular HFW	3317	331210	40 CFR 433	Fourche Creek	RENEWED 04/01/2015	Y	N	4	24	RD 01/17/2013	RD	RD	RD	NC - pH
Ameripride Linen Apparel Services	7218	812332	N/A	Adams Field	RENEWED 12/31/2015	Y	N	1	12			BY POTW		C
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 Mental Health Services	8063	622210	N/A	Adams Field	RENEWED 05/01/2013	Y	N	1	7			BY POTW		C
Baptist Health Medical Center	8062	622110	N/A	Adams Field	RENEWED 07/01/2013	Y	N	1	24			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 2015 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	
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	3	5			BY POTW		C - pH
George Fischer Sloane	3084	326122	N/A	Fourche Creek	RENEWED 11/01/2014	Y	N	1	2			BY POTW		C
Griffin Industries	2077 4214	311613 4844220	N/A	Fourche Creek	REVISED 05/01/2014	Y	N	1	8			BY POTW		C
Hiland Dairy	2026	311511	N/A	Fourche Creek	RENEWED 10/01/2015	Y	N	6	30			BY POTW		NC - pH - (3)
Jack Wilson WTP	4941	221310	N/A	Adams Field	RENEWED 02/01/2014	Y	N	2	24			BY POTW		C
Baptist Health Laundry	7218	812332	N/A	Fourche Creek	RENEWED 06/01/2015	Y	N	1	4			BY POTW		C
Little Rock City Landfill	4953	562212	N/A	Fourche Creek	RENEWED 04/01/2014	Y	N	1	2			BY POTW		C
McClellan VA Medical Hospital	8062	622110	N/A	Adams Field	RENEWED 06/01/2014	Y	N	1	5			BY POTW		C
Shooting Star Beverages	5149	312112	N/A	Fourche Creek	RENEWED 12/20/2014	Y	N	1	23			BY POTW		NC - pH
Ozark Point WTP	4941	221310	N/A	Adams Field	RENEWED 12/01/2015	Y	N	1	9			BY POTW		C
Porocel Corporation	2819	331311	N/A	Fourche Creek	RENEWED 07/01/2015	Y	N	1	9			BY POTW		C
Little Rock Quick Rice	2038 2044	311412 311212	N/A	Fourche Creek	RENEWED 09/23/2015	Y	N	1	199			BY POTW		NC - pH, Temp, COD, TS
Skippy Foods LLC	2099	311911	N/A	Fourche Creek	RENEWED 04/01/2015	Y	N	3	13			BY POTW		C
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  
2015 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>12</b>
<b>Number of Special Permits for Landfill Leachate or RSTA</b>	<b>4</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	527	22	No 433 Discharge in 2014
Cameron Valve	Categorical	433	Steel Oil Field Valves	13,036	22	Zn, Pb, pH, Ni, Permit to discharge nonregulated wastewater
Central Flying Service - Little Rock	Categorical	433	Aircraft Refurbishing	783	30	pH, Permit to discharge nonregulated wastewater
CertainTeed Corporation	Categorical	443	Asphalt Rolled Roofing Production	24,335	30	TSS, O&G, pH
Dassault Falcon Jet Corporation	Categorical	433	Custom Jet Aircraft	16,186	22	COD, pH, Permit to discharge domestic wastewater only
Hillcrest Camshaft Service, Inc.	Categorical	433	Electroplating New Source	2,627	22	Permit to discharge domestic wastewater only
Interstate Highway Sign	Categorical	433	Highway Signs	7,063	22	Cr, pH, Cu, Zn, Pb, Cd, Ni, Ag, CN, TTO
ITW Accessories Marketing	Categorical	414	Tire Sealant	3,207	22	Permit to discharge domestic wastewater only
PPG	Categorical	446	Paint and Coating	4,267	22	COD, pH, Permit to discharge domestic wastewater only
Progress Rail Services	Categorical	433	Chrome Plating	1,777	22	Permit to discharge domestic wastewater only
Rhein Chemie Little Rock	Categorical	428	Rubber Tire Curing Bladders	7,523	30	pH, Zn, Ni, Cu, O&G, Permit to discharge nonregulated wastewater
St. Vincent Hospital	Categorical	439	Hospital / PETNET	117,689	30	COD, pH, Hg, Zero discharge for 40 CFR 439.
Welspun Tubular	Categorical	433	Spiral Pipe and Coating	122,104	30	Zn, Cr, Pb, pH, Cd, CN, Ni, Cu, Ag, COD, TSS, O&G
Welspun Tubular HFW	Categorical	433	High Frequency Welding, Steel Pipe	52,719	30	Zn, Cr, Pb, pH, Cd, CN, Ni, Cu, Ag, TTO

**LITTLE ROCK WASTEWATER  
2015 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	63,926	22	COD, TSS, O&G, pH
Arkansas Children's Hospital	Significant		Hospital	81,245	30	East: COD, TSS, pH West: COD, TSS, O&G, pH South: COD, TSS, O&G, pH
Arkansas Heart Hospital	Significant		Hospital	26,444	30	COD, TSS, O&G, pH, Hg
Arkansas Mental Health Services	Significant		Hospital	19,527	30	COD, TSS, O&G, pH
Baptist Health Medical Center	Significant		Hospital	224,030	30	COD, TSS, O&G, pH, Hg
Hiland Dairy	Significant		Dairy Products, Juice, Tea	86,797	30	COD, TSS, O&G, pH
Fiber Glass Systems	Significant		Fiberglass reinforced epoxy and vinyl ester resin piping systems	20,718	22	As, Cd, Cu, Cr, Pb, Ni, Hg, Ag, Se, Zn, B, Mn, pH, CN, TTO
G & K Services	Significant		Laundry	27,693	30	COD, TSS, O&G, pH
George Fischer Sloane, Inc.	Significant		Plastic Molding	13,864	30	COD, TSS, O&G, pH
Griffin Industries - Thibault Road	Significant		Grease Recycling	1,346	22	COD, TSS, O&G, pH
Jack Wilson WTP	Significant		Water Treatment Plant	127,062	30	COD, TSS, pH
Baptist Health Laundry	Significant		Industrial Laundry	27,416	22	COD, TSS, O&G, pH
Little Rock Landfill	Significant		Municipal Landfill	28,848	26	COD, TSS, O&G, pH, NH3-N, As, Cd, Cu, Cr, Pb, Ni, Hg, Ag, Se, Zn, B, Mn, CN, volatiles, pesticides
McClellan VA Hospital	Significant		Hospital	157,599	30	COD, pH, Hg, Ag
Shooting Star Beverages	Significant		Fruit Juice and Water Bottling	26,353	22	COD, TSS, O&G, pH
Ozark Point WTP	Significant		Water Treatment Plant	43,706	30	COD, TSS, pH
Porocel Corporation	Significant		Mineral Milling	2,171	30	COD, TSS, pH, Zn, As, Cu, Cr, Ni, Hg
Little Rock Quick Rice	Significant		Rice Cooking	181,611	30	BOD, COD, TSS, O&G, TS, pH, Temperature
Skippy Foods LLC	Significant		Peanut Butter	30,954	22	COD, TSS, O&G, pH
University of Arkansas Medical Center	Significant		Hospital	88,205	30	COD, TSS, O&G, pH, Hg, Ag

**LITTLE ROCK WASTEWATER  
2015 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	3,627	22	COD, TSS, O&G, pH
BHMC-LR South Campus	Non-Significant		Hospital	2,046	30	COD, TSS, O&G, pH, Hg, Ag
BFI Landfill	Non-Significant		Landfill	4,170	30	COD, TSS, O&G, pH, NH3-N, As, Cd, Cu, Cr, Pb, Ni, Hg, Ag, Se, Zn, B, Mn, Ba, volatiles, pesticides
Clark Machinery	Non-Significant		Construction Equipment	1,249	22	COD, TSS, O&G, pH
Democrat Printing and Lithographing	Non-Significant		Printing Company	3,023	22	COD, TSS, O&G, pH
Dusty Mop and Mat Rentals	Non-Significant		Industrial Laundry	11,171	18	COD, TSS, O&G, pH
Good Old Days Foods	Non-Significant		Frozen Fruit Cobbler	3,405	22	COD, TSS, O&G, pH
Griffin Industries	Non-Significant		Pork Hide Drying	1,346	22	COD, TSS, O&G, pH
I-30 Tank Wash	Non-Significant		Truck Wash	1,292	22	COD, TSS, O&G, pH
Martinous Oriental Rug Company	Non-Significant		Retail Rug Sales & Cleaning	365	22	pH
Phelps Fan	Non-Significant		Fan Manufacturer	5,400 / Batch	22	pH, Cr, Ni, Cu
Ryerson	Non-Significant		Metal Fabrication	1,060	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
3M	RSTA		Pigment-contaminated Stormwater	180000 (9 fracktanks)	3/31/2015	As, Cd, Cr, Cu, Pb, Ni, Se, Ag, Zn, Hg, CN
Arkansas Portable Toilets	RSTA		Portable	6,000 / Truck	N/A	Approved Domestic Only
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 2015 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 2015 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 2015. Item II: Influent/Effluent organic fraction detections trend chart for 1991 through 2015. Item III is the long term summary of positive results. 40 CFR Part 122, Appendix D, Table II monitoring frequency for 2015 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 one years, 1994-2015. Some peaks may be due to changes in test methods and detection limits.

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT**  
**REPORTING YEAR: JANUARY 1, 2015 TO DECEMBER 31, 2015**  
**CITY OF LITTLE ROCK - ADAMS FIELD WASTEWATER TREATMENT PLANT**  
**NPDES PERMIT NO.: AR0021806**

**AVERAGE POTW FLOW: 24.68 MGD**

**PERCENT (%) IU FLOW: 4.0 %**

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)
		1/13/2015	4/6/2015	7/13/2015	10/13/2015		1/13/2015	4/6/2015	7/13/2015	10/13/2015			
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	0.6	0.5	200.8	0.5
Copper	270	29.0	38.0	34.0	47.0	214	11.0	7.4	6.6	6.4	0.5	200.8	0.5
Lead	50	3.3	2.6	4.4	4.2	198	< 0.50	< 0.50	< 0.50	< 0.50	0.5	200.8	0.5
Mercury	0.20	0.1220	0.0632	0.1210	0.1040	0.1	0.0049	0.0012	0.0007	0.0060	0.0002	1631E	0.0002
Nickel	160	3.4	4.4	6.0	5.6	4,990	3.2	3.3	4.0	2.8	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	0.9	57	< 0.5	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Zinc	360	130	110	140	180	1,700	73	35	36	47	20	200.8	20
Chromium	260	< 10	< 10	< 10	< 10	11,200	< 10	< 10	< 10	< 10	10	200.8	10
Cyanide	90	< 10.0	1.1	< 0.8	< 0.8	50	< 10.0	< 0.8	7.1	< 0.8	10/0.8	SM20 4500 C&E	10
Arsenic	14	1.5	2.2	2.9	4.1	2,380	0.61	0.62	1.00	1.30	0.5	200.8	0.5
Molybdenum		< 8	< 8	< 8	< 8		< 8	< 8	< 8	< 8	8	200.8	8
Phenols		22.8	10.9	13.8	8.4		< 2.2	3.0	2.8	< 2.2	2.2	420.1	5
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				64					12		2	200.7	2
Boron				140					150		100	200.7	100
Manganese				500					370		2	200.7	2
Oil and Grease		6,300	< 5,000	14,400	16,700		< 5,000	< 5,000	7,100	< 5,000	5000	1664A	5,000
Flow, MGD		22.34	24.15	15.19	13.21		24.62	24.15	15.19	13.21			



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

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

NPDES PERMIT NO.: AR0021806

AVERAGE POTW FLOW: 24.68 MGD

PERCENT (%) IU FLOW: 4 %

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	1664A	SML200b-4500 C&E	200.8	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	10/0.8	20	0.5	10	0.5	0.5	8	0.5	0.5	0.5	0.5	5	0.0002	2.2	60	0.5	0.5	2	2	100
01/13/2015	22.34			130 <	0.50 <	10 <	0.5	29.0 <	8	3.4	3.30	1.50 <	5			< 60 <	0.5 <	0.5			
01/29/2015	16.90	6300	< 10.0											0.1220	22.8						
04/06/2015	24.15			110 <	0.50 <	10 <	0.5	38.0 <	8	4.1	2.60	2.20 <	5			< 60 <	0.5 <	0.5			
06/04/2015	26.55	< 5000	1.1											0.0632	10.9						
07/13/2015	15.19			140 <	0.50 <	10 <	0.5	34.0 <	8	6.0	4.40	2.90 <	5			< 60 <	0.5 <	0.5	500	64	140
09/03/2015	16.20	14400	< 0.8											0.1210	13.8						
10/13/2015	13.21			180 <	0.50 <	10	0.9	47.0 <	8	5.6	4.20	4.10 <	5			< 60 <	0.5 <	0.5			
11/12/2015	18.91	16700	< 0.8											0.1040	8.4						
<b>Average</b>	19.18	10600	3.2	140 <	0.50 <	10	0.6	37.0 <	8	4.8	3.63	2.68 <	5	0.1026	14.0	< 60 <	0.5 <	0.5	500	64	140
<b>Maximum</b>	26.55	16700	10.0	180 <	0.50 <	10	0.9	47.0 <	8	6.0	4.40	4.10 <	5	0.1220	22.8	< 60 <	0.5 <	0.5	500	64	140
<b>Minimum</b>	13.21	< 5000	< 0.8	110 <	0.50 <	10 <	0.5	29.0 <	8	3.4	2.60	1.50 <	5	0.0632	8.4	< 60 <	0.5 <	0.5	500	64	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, 2015 TO DECEMBER 31, 2015**

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

NPDES PERMIT NO.: AR0021806

AVERAGE POTW FLOW: 24.68 MGD

PERCENT (%) IU FLOW: 4 %

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	1664A	SM201h 4500 C&E	200.8	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
Detection Level Achieved	5000	1000.8	20	0.5	10	0.5	0.5	8	0.5	0.5	0.5	0.5	5	0.0002	2.2	0.06	0.5	0.5	2	2	100
01/13/2015	24.62			73 <	0.50 <	10 <	0.5 <	11.0 <	8 <	3.2 <	0.50 <	0.61 <	5 <			< 60 <	0.5 <	0.5 <			
01/29/2015	15.04	< 5000 <	10.0 <											0.0049 <	2.2 <						
04/06/2015	22.28			35 <	0.50 <	10 <	0.5 <	7.4 <	8 <	3.3 <	0.50 <	0.62 <	5 <			< 60 <	0.5 <	0.5 <			
06/04/2015	23.47	< 5000 <	0.8 <											0.0012	3.0						
07/13/2015	15.17			36 <	0.50 <	10 <	0.5 <	6.6 <	8 <	4.0 <	0.50 <	1.00 <	5 <			< 60 <	0.5 <	0.5 <	370	12	150
09/03/2015	14.70	7100	7.1											0.0007	2.8000						
10/13/2015	10.96			47	0.63 <	10 <	0.5 <	6.4 <	8 <	2.8 <	0.50 <	1.30 <	5 <			< 60 <	0.5 <	0.5 <			
11/12/2015	16.28	< 5000 <	0.8 <											0.0060 <	2.2 <						
<b>Average</b>	17.82	5525	4.7	48	0.53 <	10 <	0.5 <	7.9 <	8 <	3.3 <	0.50 <	0.88 <	5 <	0.0032	2.6 <	< 60 <	0.5 <	0.5 <	370	12	150
<b>Maximum</b>	24.62	7100	10.0	73	0.63 <	10 <	0.5 <	11 <	8 <	4 <	0.50 <	1.30 <	5 <	0.0060	3.0 <	< 60 <	0.5 <	0.5 <	370	12	150
<b>Minimum</b>	10.96	< 5000 <	0.8 <	35 <	0.50 <	10 <	0.5 <	6.4 <	8 <	2.8 <	0.50 <	0.61 <	5 <	0.0007	2.2 <	< 60 <	0.5 <	0.5 <	370	12	150
<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, 2015 TO DECEMBER 31, 2015**

**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
01/13/2015			43.8%	0.0%	0.0%	0.0%	62.1%	0.0%	5.9%	84.8%	59.3%	0.0%			0.0%	0.0%	0.0%			
01/29/2015	20.6%	0.0%											96.0%	90.4%						
04/06/2015			68.2%	0.0%	0.0%	0.0%	80.5%	0.0%	19.5%	80.8%	71.8%	0.0%			0.0%	0.0%	0.0%			
06/04/2015	0.0%	27.3%											98.1%	72.5%						
07/13/2015			74.3%	0.0%	0.0%	0.0%	80.6%	0.0%	33.3%	88.6%	65.5%	0.0%			0.0%	0.0%	0.0%	26.0%	81.3%	-7.1%
09/03/2015	50.7%	-787.5%											99.4%	79.7%						
10/13/2015			73.9%	-26.0%	0.0%	42.5%	86.4%	0.0%	50.0%	88.1%	68.3%	0.0%			0.0%	0.0%	0.0%			
11/12/2015	70.1%	0.0%											94.2%	73.8%						
Average	35.3%	-190.1%	65.1%	-6.5%	0.0%	10.6%	77.4%	0.0%	27.2%	85.6%	66.2%	0.0%	96.9%	79.1%	0.0%	0.0%	0.0%	26.0%	81.3%	-7.1%

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

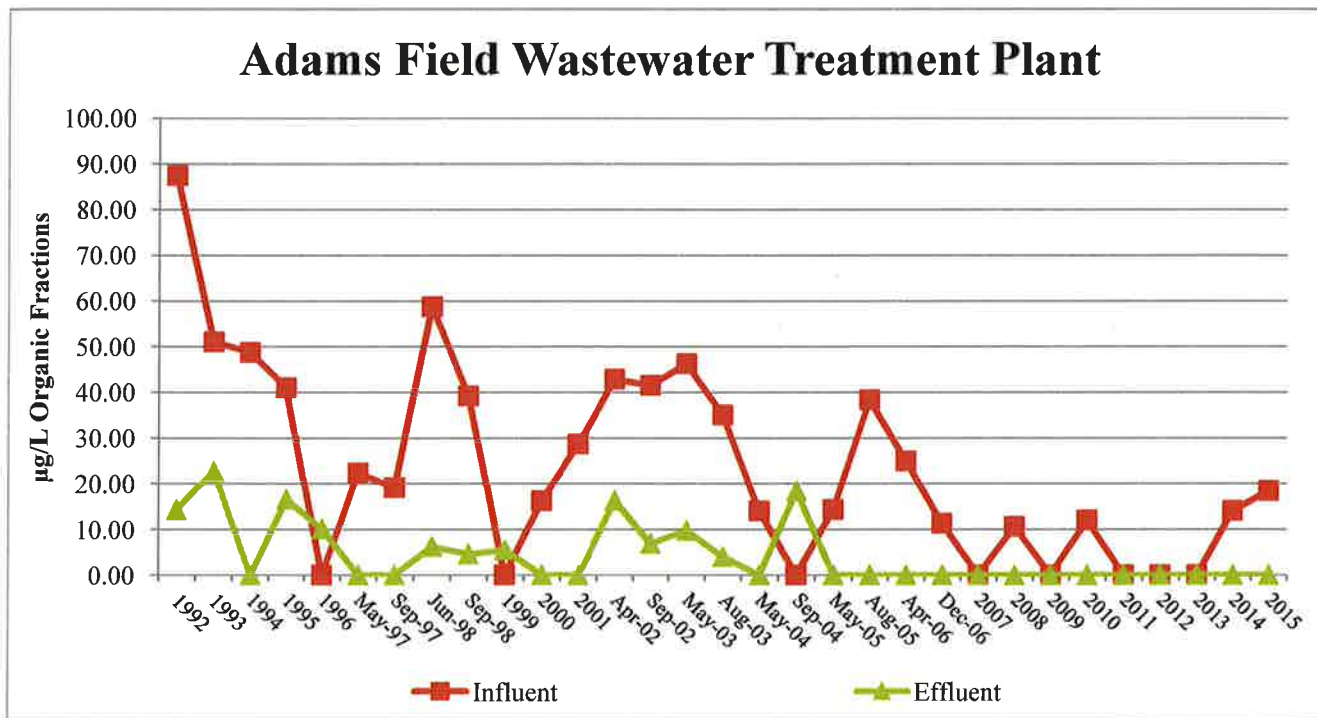
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**I. 2015 POSITIVE RESULTS, µg/L**

ADAMS FIELD WASTEWATER TREATMENT PLANT		
Sample Date	Compound	Influent
9/8/2015	Volatiles	ND
	bis(2-ethylhexyl)phthalate	13
	Phenol	5.4
Sample Date	Compound	Effluent
9/8/2015	Volatiles	ND
	Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND

Comments: ND - No Detection

**II. TREND OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 2015**



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

March 31, 2016  
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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	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	ND
Tetrachlorethylene	ND	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	ND
Gamma-BHC	ND	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	ND
Heptachlor	ND	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	ND
Diethylphthalate	ND	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	ND
Di-n-butylphthalate	ND	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	ND
Phenol	ND	ND	ND	ND	12.0	ND	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	ND
Methylene Chloride	ND	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	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>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.

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

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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.

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

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

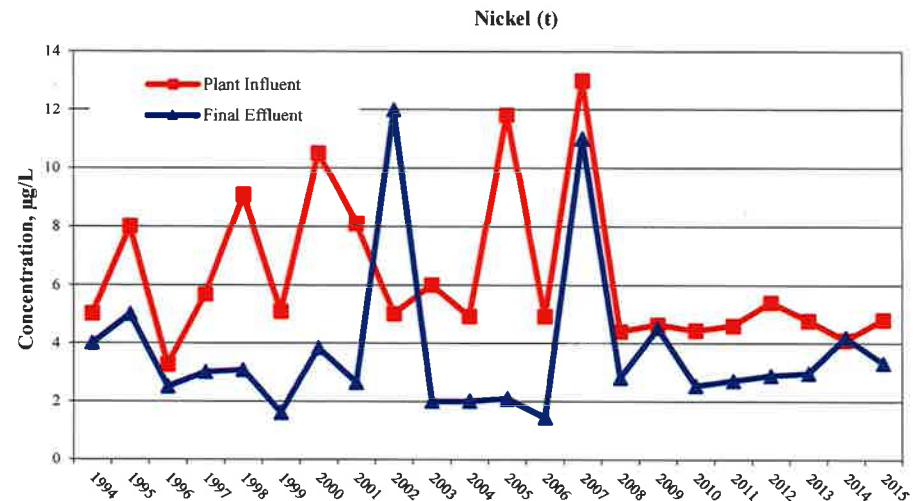
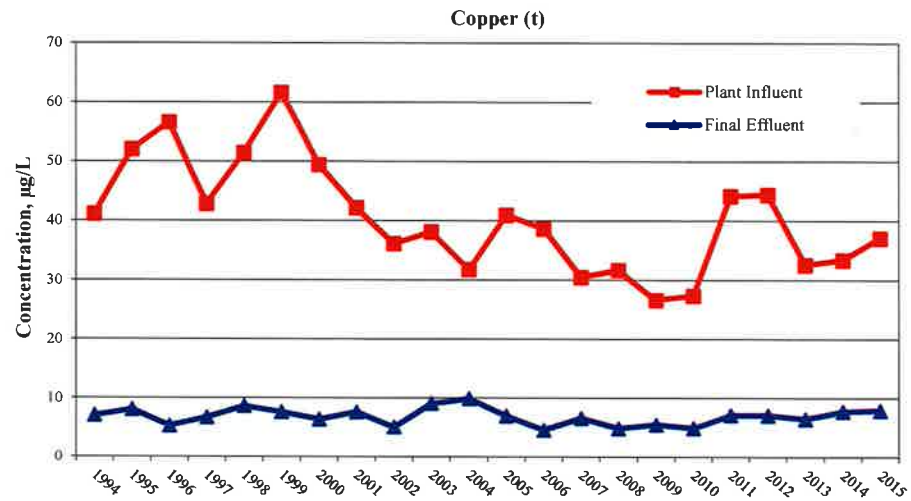
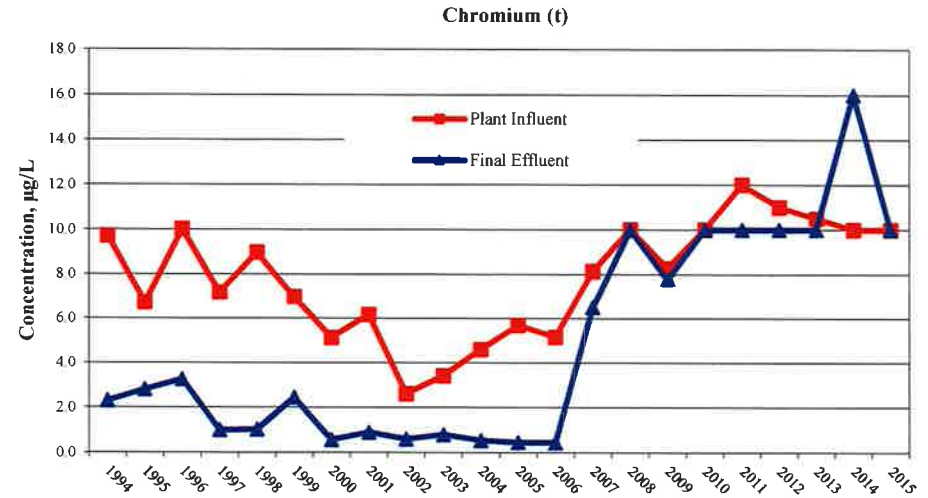
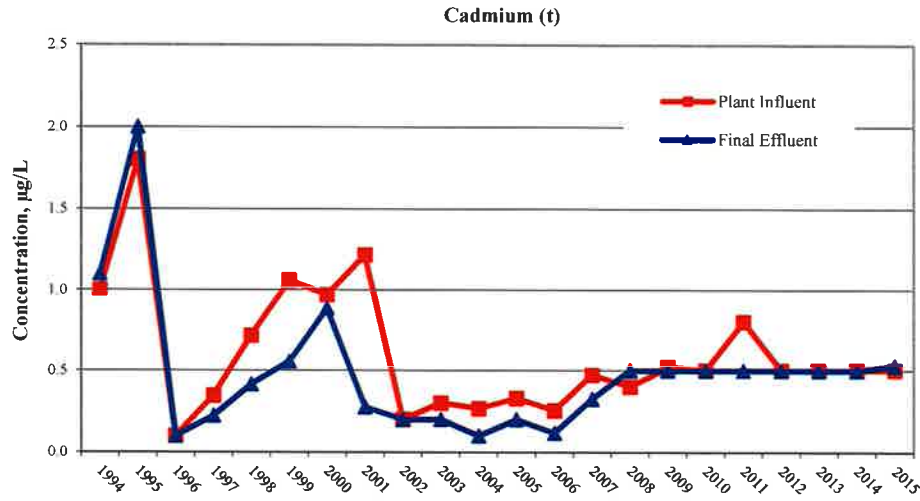
Adams Field Wastewater Treatment Plant

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

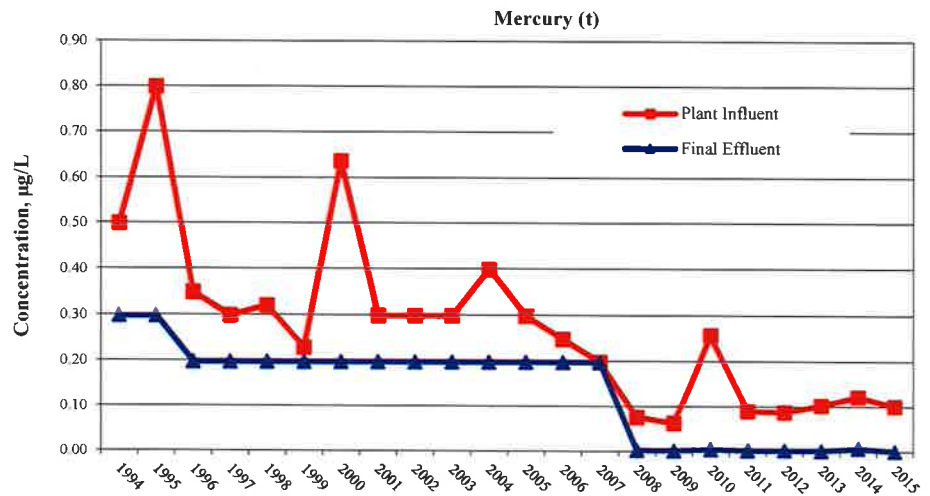
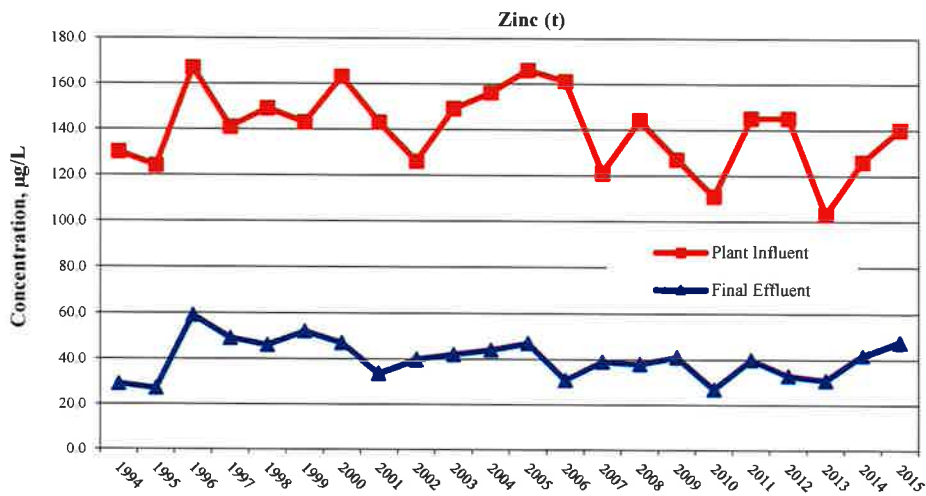
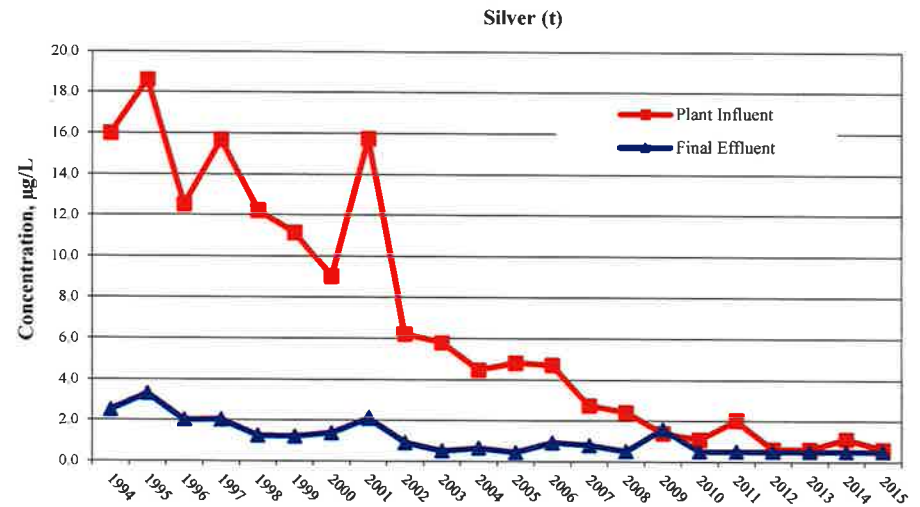
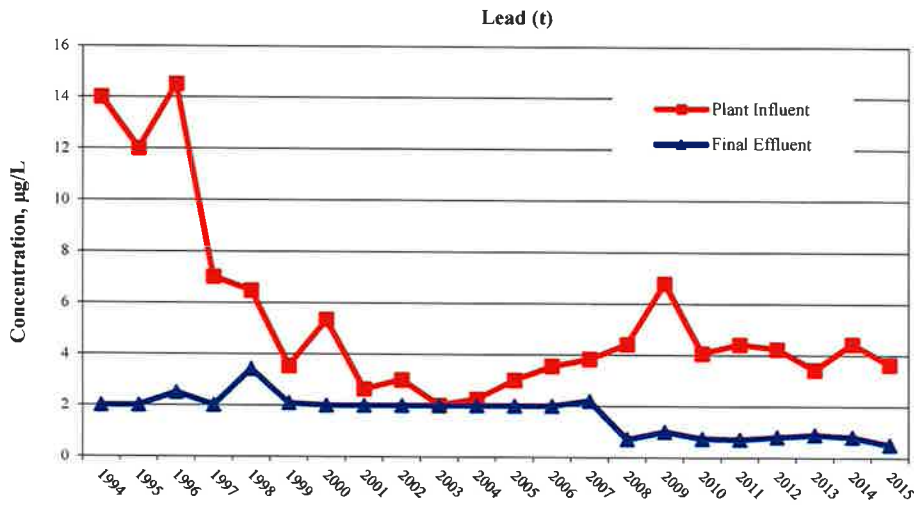


**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2015**



	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

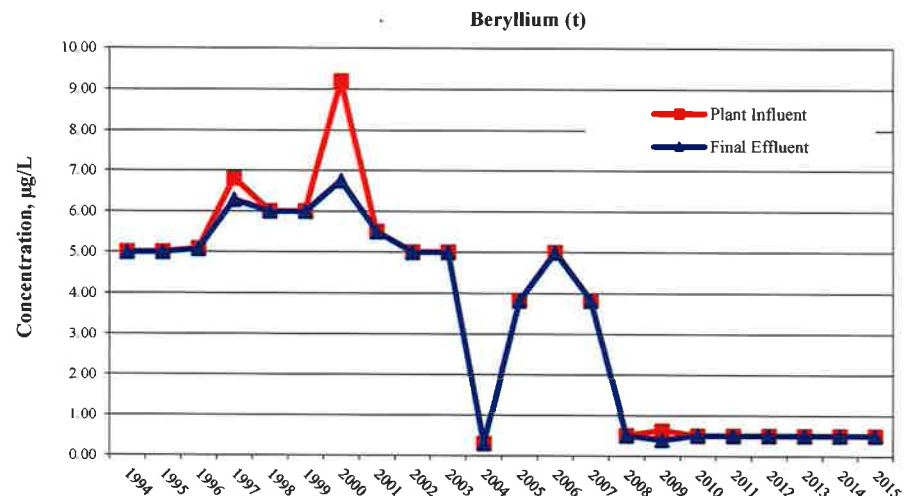
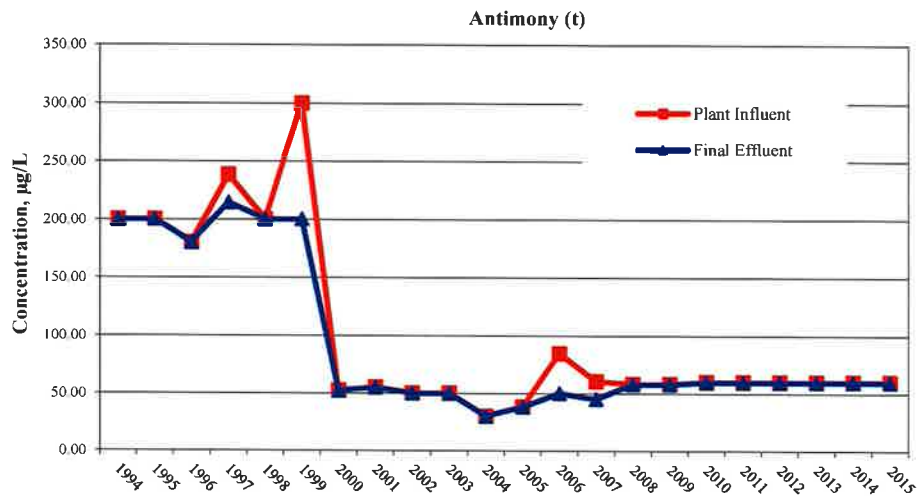
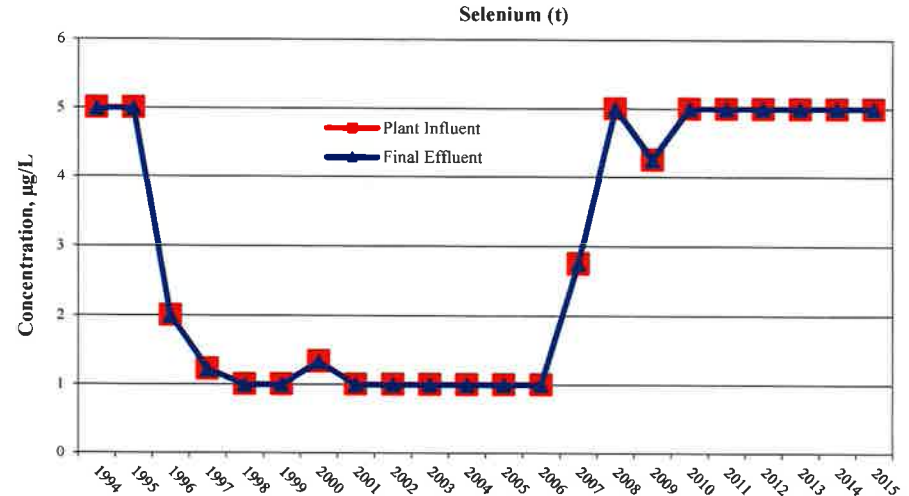
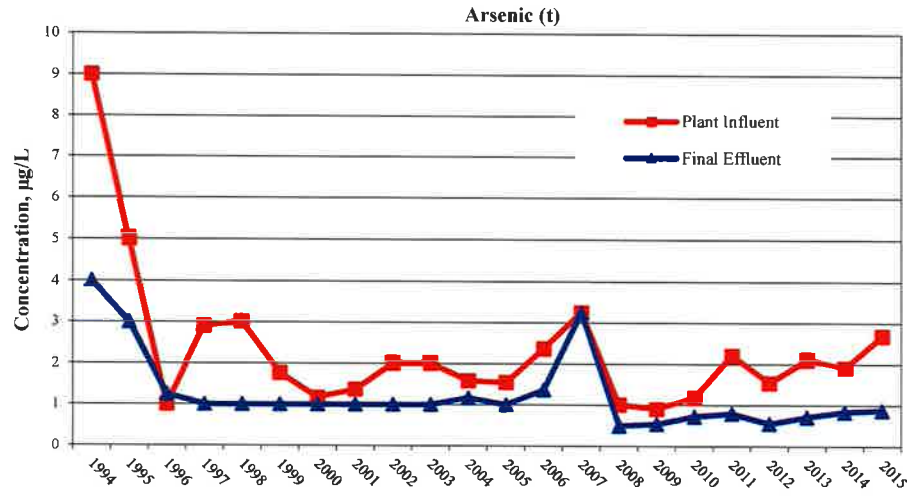
LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
 1994 THROUGH 2015



	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)	98 ug/L	0.85 mg/L	28 ug/L	0.07 ug/L

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2015**

March 31, 2016  
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**Influent Headworks Limit**  
**Effluent Water Quality Criteria (Acute)**

**Arsenic(t)**  
**14 ug/L**  
**1,190 ug/L**

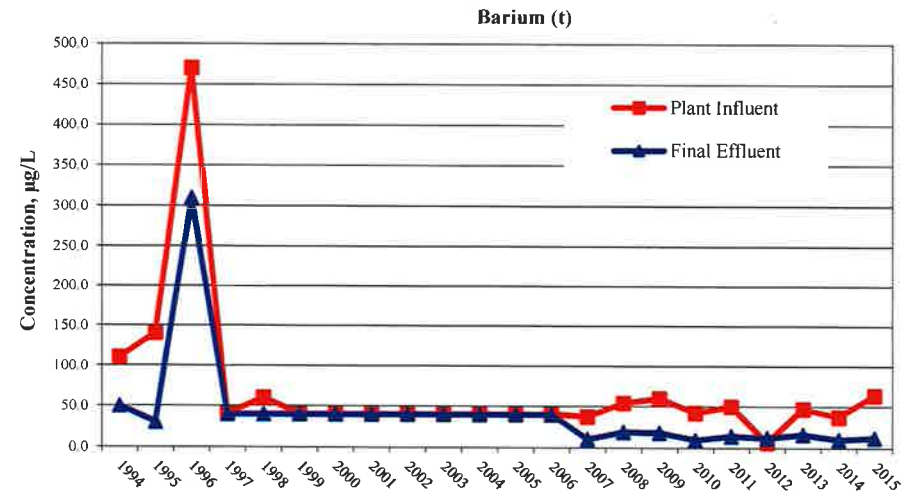
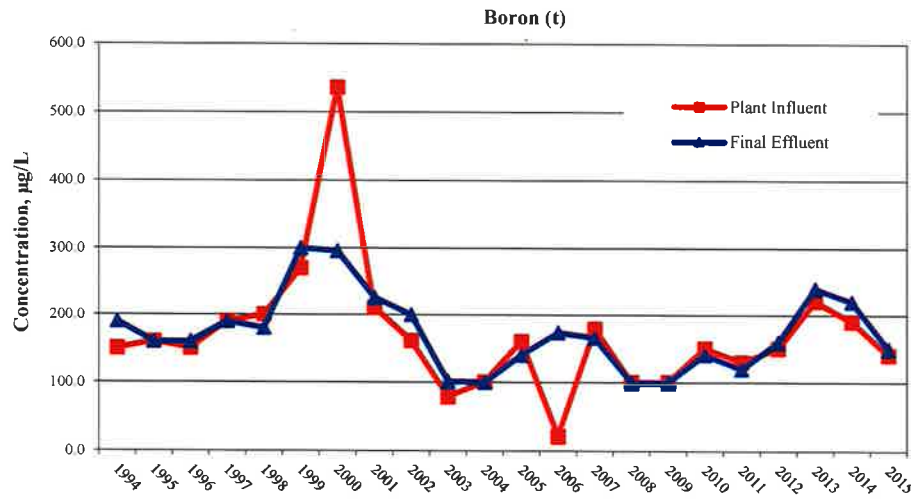
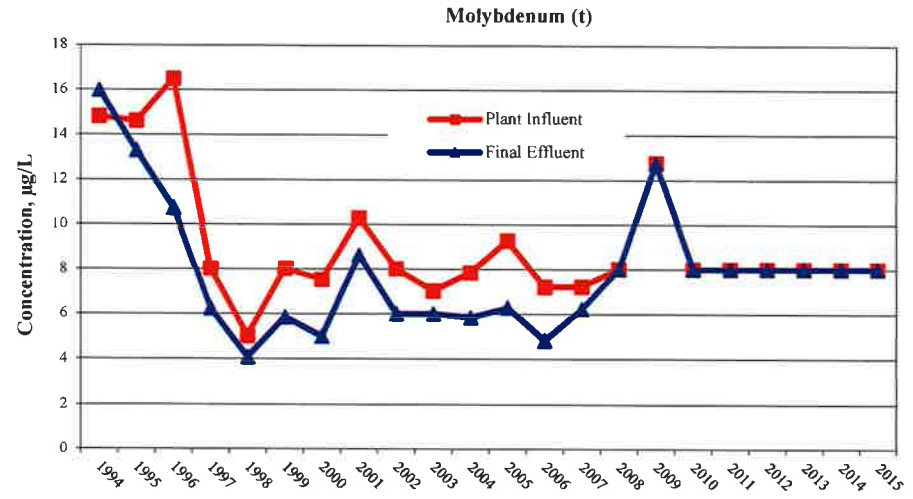
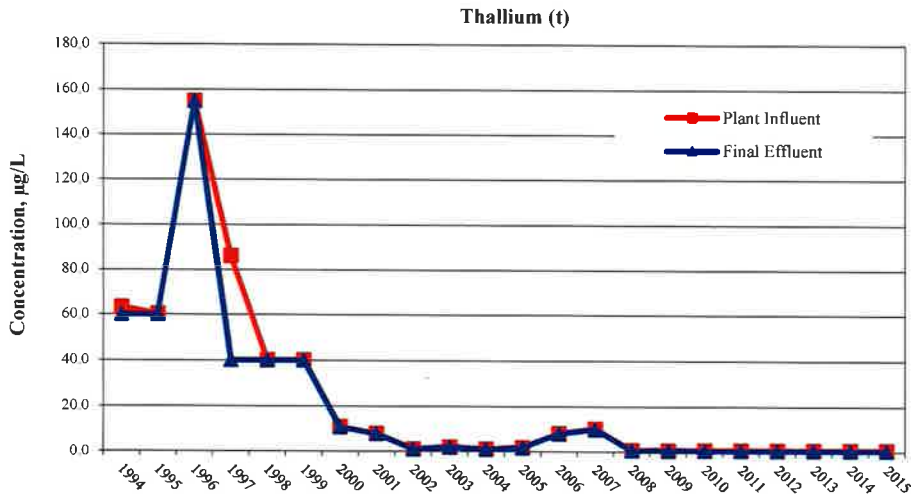
**Antimony (t)**  
**None**  
**None**

**Selenium (t)**  
**10 ug/L**  
**28 ug/L**

**Beryllium (t)**  
**None**  
**None**

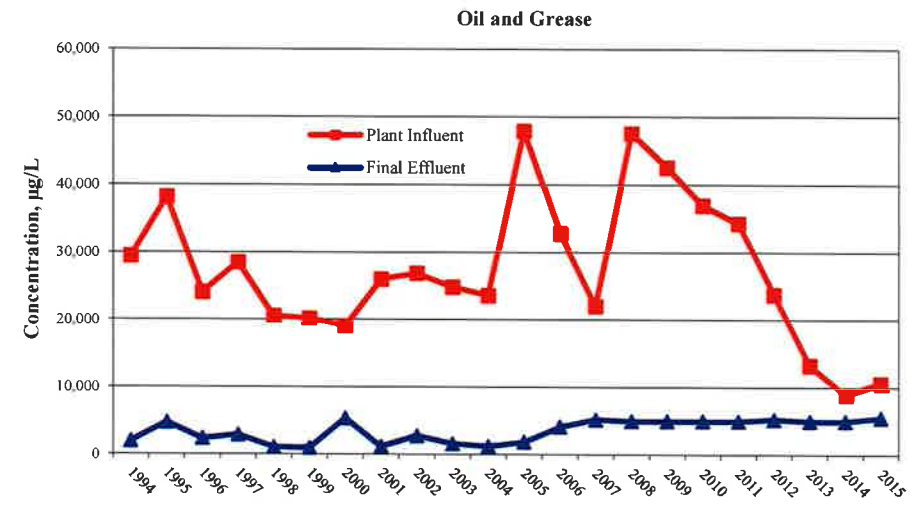
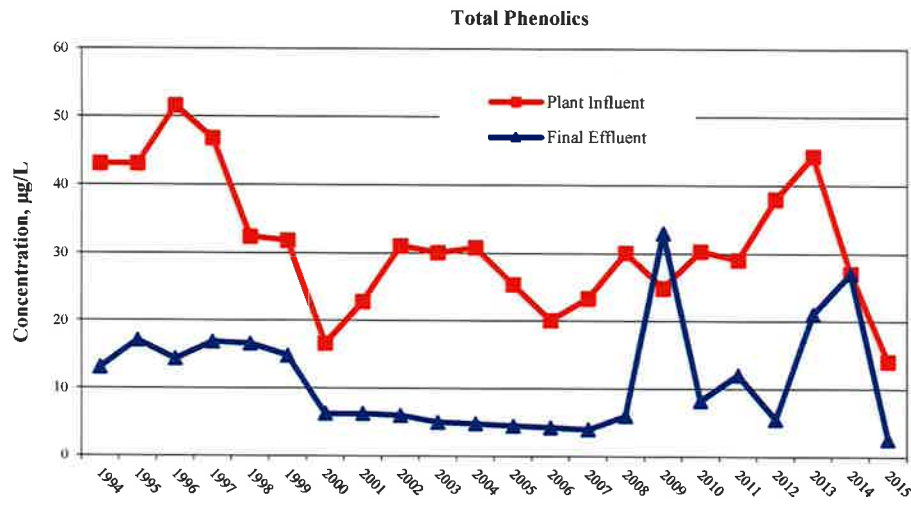
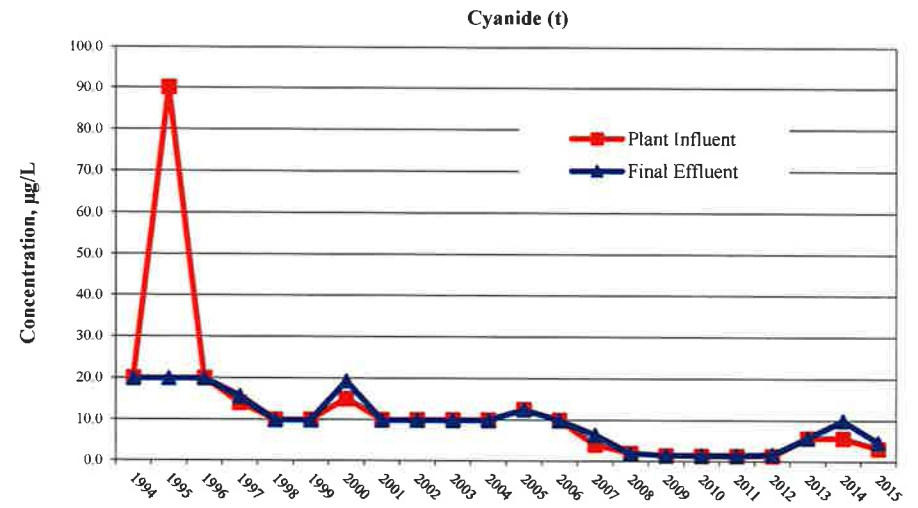
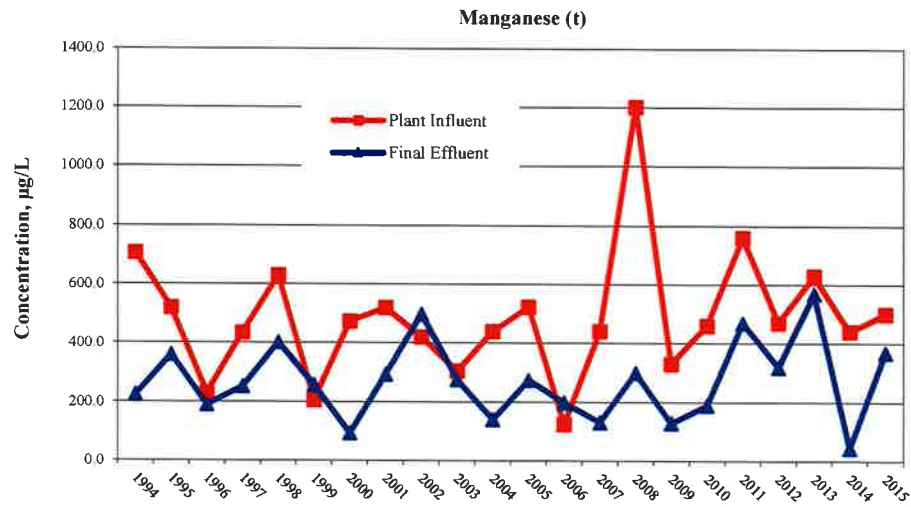
**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2015**

March 31, 2016  
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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 2015**



	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 2015 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 2015 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 2015. Item II: Influent/Effluent organic fraction detections trend chart for 1991 through 2015. Item III is the long term summary of positive results. 40 CFR Part 122, Appendix D, Table II monitoring frequency for 2015 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 one years, 1994-2015. Some peaks may be due to changes in test methods and detection limits.

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT**  
**REPORTING YEAR: JANUARY 1, 2015 TO DECEMBER 31, 2015**  
**CITY OF LITTLE ROCK - FOURCHE CREEK WASTEWATER TREATMENT PLANT**  
**NPDES PERMIT NO.: AR0040177**

**AVERAGE POTW FLOW: 10.91 MGD**

**PERCENT (%) IU FLOW: 7.0 %**

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)
		1/13/2015	4/6/2015	7/20/2015	10/20/2015		1/14/2015	4/7/2015	7/20/2015	10/21/2015			
Antimony		< 60	< 60	< 60	< 60		< 60	< 60	< 60	< 60	60	200.8	60
Cadmium	9	< 0.5	< 0.5	< 0.5	< 0.5	107	< 0.5	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Copper	270	26.0	20.0	34.0	36.0	619	7.2	5.4	3.5	6.7	0.5	200.8	0.5
Lead	50	3.10	1.50	2.30	3.40	395	0.60	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Mercury	0.20	0.0430	0.0248	0.1470	0.0975	0.27	0.0013	0.0043	0.0047	0.0046	0.0002	1631E	0.0002
Nickel	160	6.0	5.5	7.9	6.2	9,980	4.2	11.0	4.4	3.1	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	0.54	< 0.5	165	< 0.5	< 0.5	< 0.5	< 0.5	0.5	200.8	0.5
Zinc	360	110	80	110	180	4,940	30	23	< 20	40	20	200.8	20
Chromium	260	< 10	< 10	11	< 10	23,500	< 10	< 10	< 10	< 10	10	200.8	10
Cyanide	90	< 10.0	< 0.8	1.0	16.9	116	12.0	< 0.8	< 0.8	3.5	10/0.8	SM20 4500 C&E	10
Arsenic	14	1.30	1.90	4.90	2.70	6,900	1.20	< 0.50	1.40	1.10	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		72.3	59.5	108.9	82.0		10.9	< 2.2	45.4	< 2.2	5	420.1	5
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				42						2	2	200.7	2
Boron				210						200	100	200.7	100
Manganese				390						240	2	200.7	2
Oil and Grease		49,000	28,000	232,200	111,200		< 5,000	< 5,000	< 5,000	< 5,000	5000	1664A	5000
Flow, MGD		6.70	8.64	6.93	8.05		11.19	9.36	8.01	5.92			



**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: 10.91 MGD

PERCENT (%) IU FLOW: 7 %

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	1664A	SM2270b-4350 C&E		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
Detection Level Achieved	5000	1000.8		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
01/13/2015	8.94			110	< 0.5	< 10	< 0.50	26.0	< 8.0	6.0	3.10	1.30	< 5			< 60	< 0.5	< 0.5			
01/29/2015	6.70	49000	< 10.0											0.0430	72.3						
04/06/2015	9.66			80	< 0.5	< 10	< 0.50	20.0	< 8.0	5.5	1.50	1.90	< 5			< 60	< 0.5	< 0.5			
06/04/2015	8.64	28000	< 0.8											0.0248	59.5						
07/20/2015	8.73			110	< 0.5	11	0.54	34.0	< 8.0	7.9	2.30	4.90	< 5			< 60	< 0.5	< 0.5	390	42	210
09/03/2015	6.93	232200	1.0											0.1470	108.9						
10/20/2015	7.33			180	< 0.5	< 10	< 0.50	36.0	< 8.0	6.2	3.40	2.70	< 5			< 60	< 0.5	< 0.5			
11/12/2015	8.05	111200	16.9											0.0975	82.0						
<b>Average</b>	8.12	105100	7.2	120	< 0.5	10	0.51	29.0	< 8.0	6.4	2.58	2.70	< 5	0.0781	80.7	< 60	< 0.5	< 0.5	390	42	< 210
<b>Maximum</b>	9.66	232200	16.9	180	< 0.5	11	0.54	36.0	< 8.0	7.9	3.40	4.90	< 5	0.1470	108.9	< 60	< 0.5	< 0.5	390	42	< 210
<b>Minimum</b>	6.70	28000	< 0.8	80	< 0.5	< 10	< 0.50	20.0	< 8.0	5.5	1.50	1.30	< 5	0.0248	59.5	< 60	< 0.5	< 0.5	390	42	< 210
<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: 10.91 MGD

PERCENT (%) IU FLOW: 7 %

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	1664A	SM1201-4500 C&E	200.8	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	1000.8	0.02	0.5	10	0.5	0.5	8	0.5	0.5	0.5	0.5	5	0.0002	2.2	0.06	0.5	0.5	2	2	100
01/14/2015	11.19			30	< 0.5	< 10	< 0.50	7.2	< 8.0	4.2	0.60	1.20	< 5			< 60	< 0.5	< 0.5			
01/29/2015	8.60	< 5000	12.0											0.0013	10.9						
04/07/2015	9.36			23	< 0.5	< 10	< 0.50	5.4	< 8.0	11	< 0.50	< 0.50	< 5			< 60	< 0.5	< 0.5			
06/04/2015	8.70	< 5000	< 0.8											0.0043	< 2.2						
07/20/2015	8.01			< 20	< 0.5	< 10	< 0.50	3.5	< 8.0	4.4	< 0.50	1.40	< 5			< 60	< 0.5	< 0.5	240	2	200
09/03/2015	7.60	< 5000	< 0.8											0.0047	45.4						
10/21/2015	5.92			40	< 0.5	< 10	< 0.50	6.7	< 8.0	3.1	< 0.50	1.10	< 5			< 60	< 0.5	< 0.5			
11/12/2015	8.85	< 5000	3.5											0.0046	< 2.2						
<b>Average</b>	8.53	< 5000	4.3	28	< 0.5	< 10	< 0.50	5.7	< 8.0	5.7	0.53	1.05	< 5	0.0037	15.2	< 60	< 0.5	< 0.5	240	2	200
<b>Maximum</b>	11.19	< 5000	12.0	40	< 0.5	< 10	< 0.50	7.2	< 8.0	11.0	0.60	1.40	< 5	0.0047	45.4	< 60	< 0.5	< 0.5	240	2	200
<b>Minimum</b>	5.92	< 5000	< 0.8	< 20	< 0.5	< 10	< 0.50	3.5	< 8.0	3.1	< 0.50	0.50	< 5	0.0013	2.2	< 60	< 0.5	< 0.5	240	2	200
<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, 2015 TO DECEMBER 31, 2015**

**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
01/13/2015			72.7%	0.0%	0.0%	0.0%	72.3%	0.0%	30.0%	80.6%	7.7%	0.0%			0.0%	0.0%	0.0%			
01/29/2015	89.8%	-20.0%											97.0%	84.9%						
04/06/2015			71.3%	0.0%	0.0%	0.0%	73.0%	0.0%	-100.0%	66.7%	73.7%	0.0%			0.0%	0.0%	0.0%			
06/04/2015	82.1%	0.0%											82.5%	96.3%						
07/20/2015			81.8%	0.0%	9.1%	7.4%	89.7%	0.0%	44.3%	78.3%	71.4%	0.0%			0.0%	0.0%	0.0%	38.5%	95.2%	4.8%
09/03/2015	97.8%	20.0%											96.8%	58.3%						
10/20/2015			77.8%	0.0%	0.0%	0.0%	81.4%	0.0%	50.0%	85.3%	59.3%	0.0%			0.0%	0.0%	0.0%			
11/12/2015	95.5%	79.3%											95.3%	97.3%						
<b>Average</b>	<b>91.3%</b>	<b>19.8%</b>	<b>76.9%</b>	<b>0.0%</b>	<b>2.3%</b>	<b>1.9%</b>	<b>79.1%</b>	<b>0.0%</b>	<b>6.1%</b>	<b>77.7%</b>	<b>53.0%</b>	<b>0.0%</b>	<b>92.9%</b>	<b>84.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>38.5%</b>	<b>95.2%</b>	<b>4.8%</b>

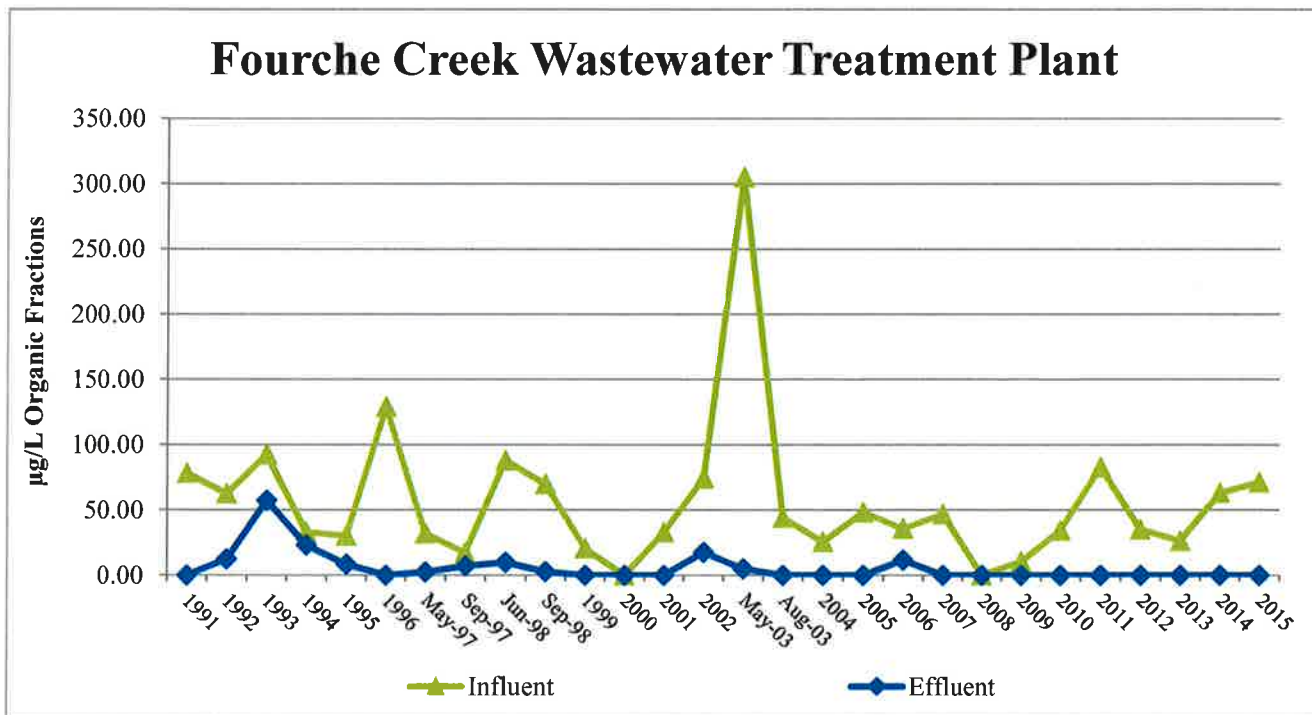
**LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 FOURCHE CREEK WASTEWATER TREATMENT PLANT INFLUENT/FINAL EFFLUENT  
 PRIORITY POLLUTANT SCAN - ORGANIC FRACTIONS**

**I. 2015 POSITIVE RESULTS, µg/L**

FOURCHE CREEK WASTEWATER TREATMENT PLANT		
Sample Date	Compound	Influent
9/15/2015	toulene	22
	bis(2-ethylhexyl)phthalate	27
	phenol	22
Sample Date	Compound	Effluent
9/15/2015	Volatiles	ND
	Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND

Comments: ND - No Detection

**II. TREND OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 2015**



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

March 31, 2016  
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III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 2015

Fourche Creek Wastewater Treatment Plant

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

Comments

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

1. 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 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, 2016  
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III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 1997

Fourche Creek Wastewater Treatment Plant

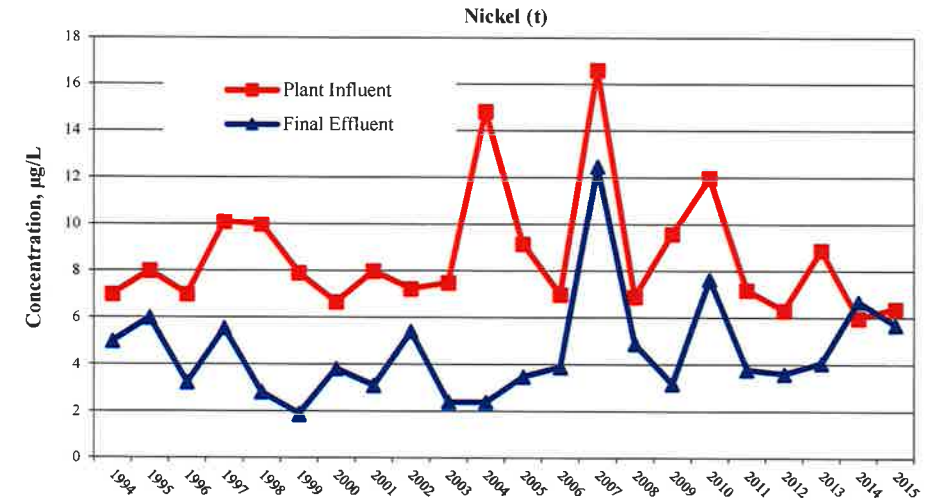
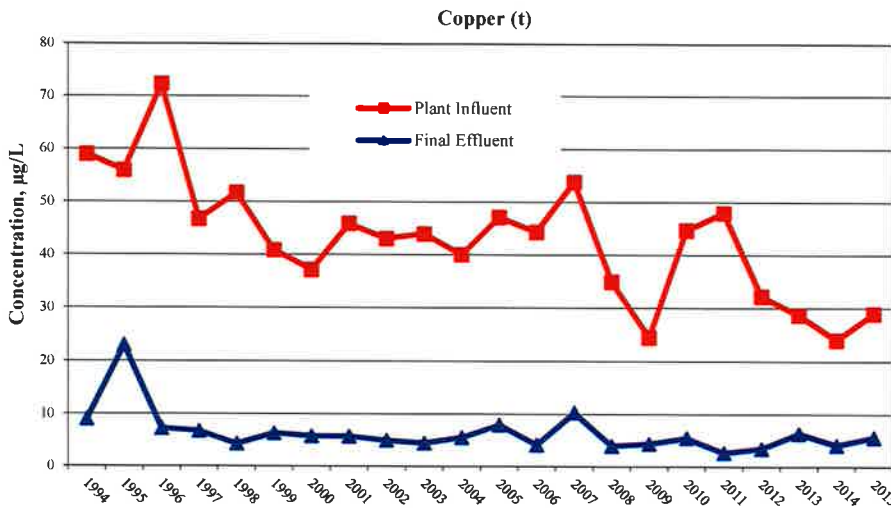
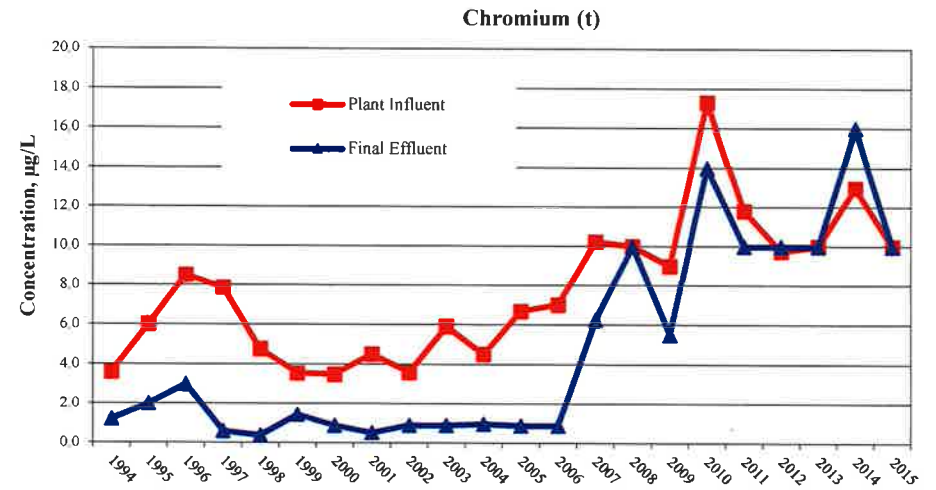
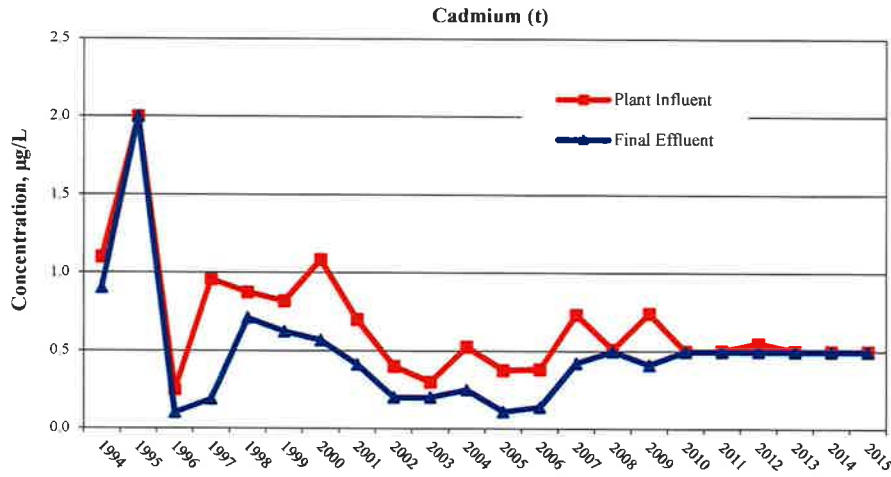
PPS, µg/L Parameter	1991		1992		1993		1994		1995		1996		May-97		Sep-97	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF
Bis(2-ethylhexyl)Phthalate	24.00	ND	23.0	7.0	44.0	18.0	11.60	ND	30.0	5.8	ND	ND	17.2	ND	ND	6.98
Chloroform	ND	ND	17.0	5.4	8.9	27.0	10.70	ND	ND	ND	ND	ND	14.50	ND	8.0	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 2014**

March 31, 2015  
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**Influent Headworks Limit  
Effluent Water Quality Criteria**

**Cadmium(t)  
9 µg/L  
53 µg/L**

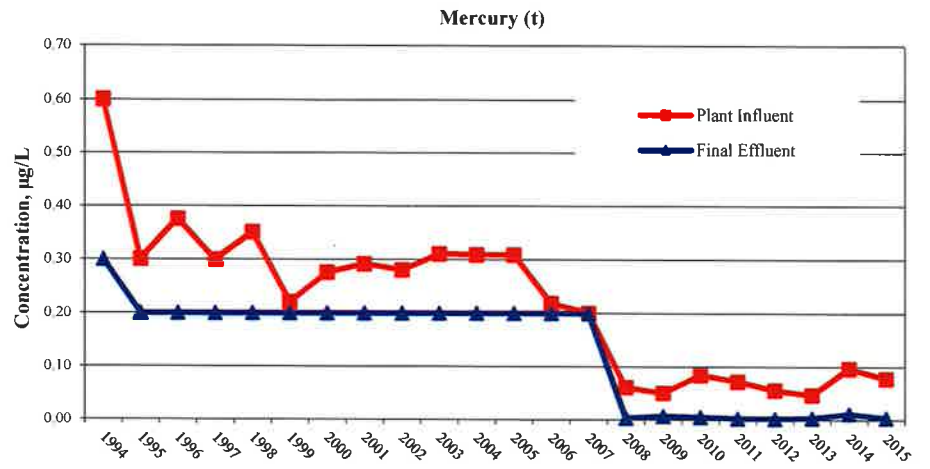
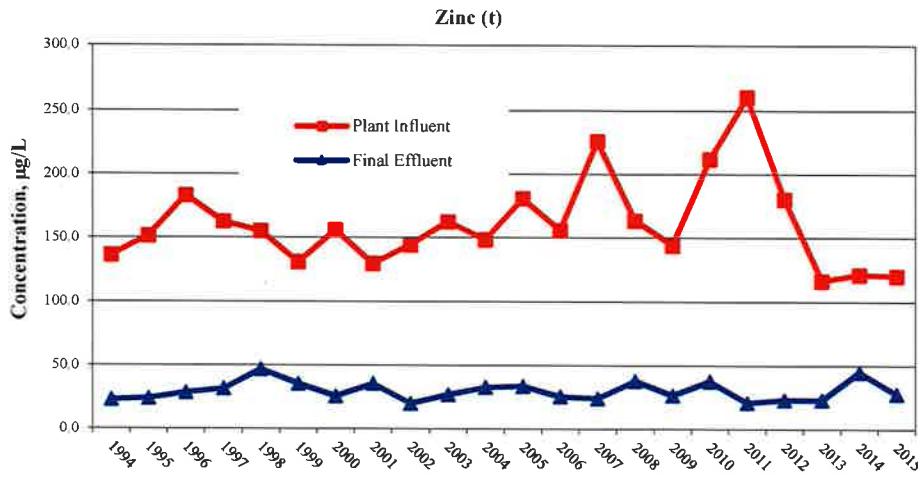
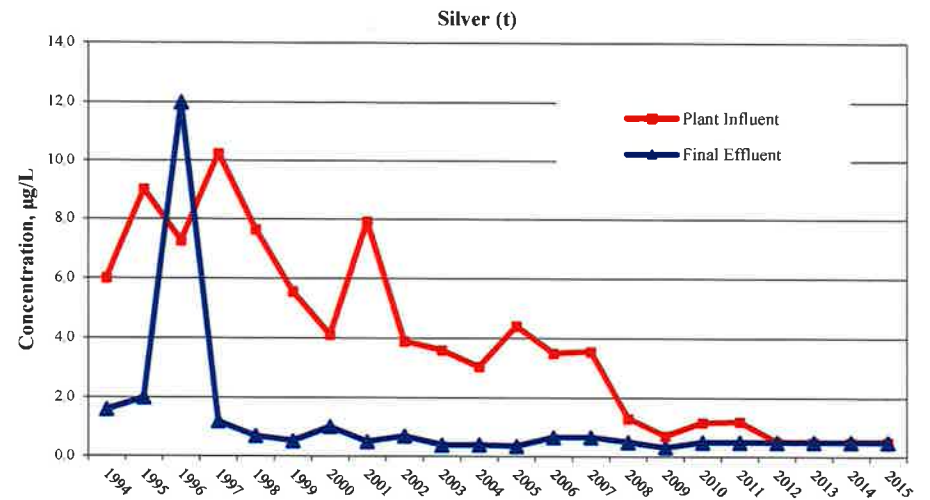
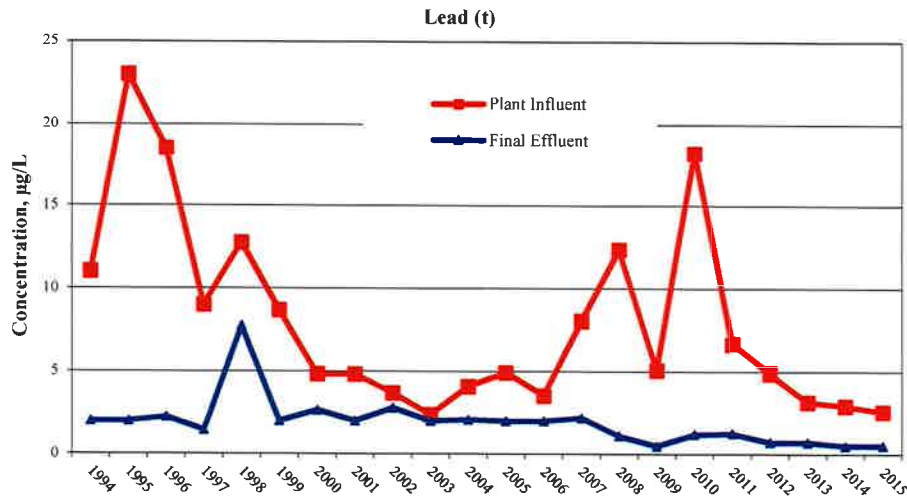
**Copper (t)  
270 µg/L  
395 µg/L**

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

**Nickel(t)  
160 µg/L  
4,980 µg/L**

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
FOURCHE CREEK TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2014**

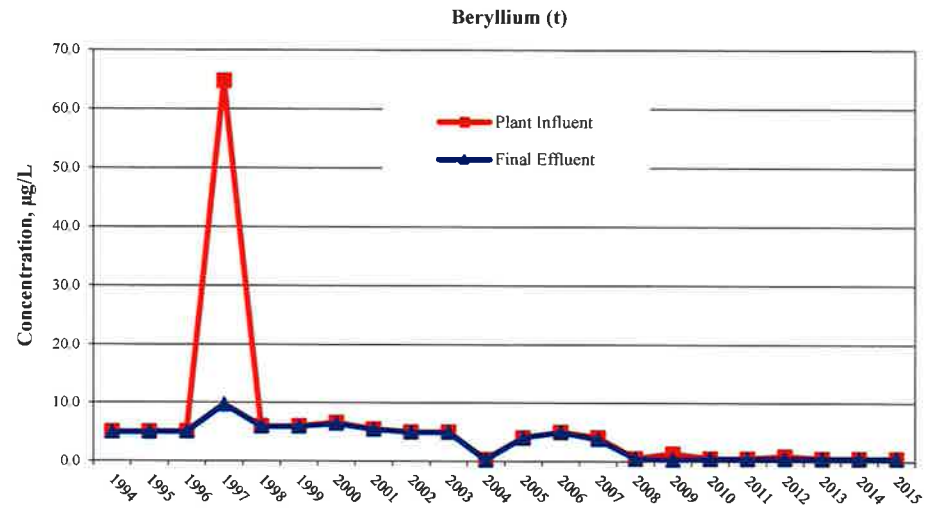
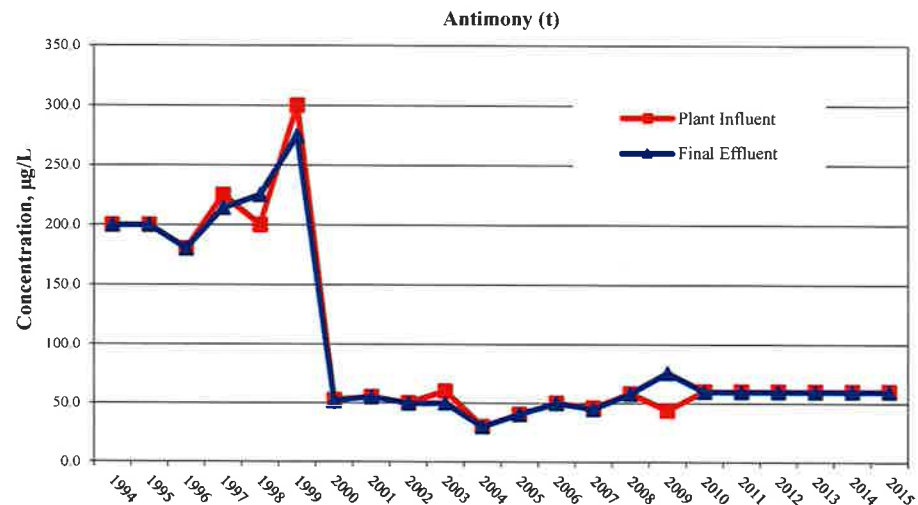
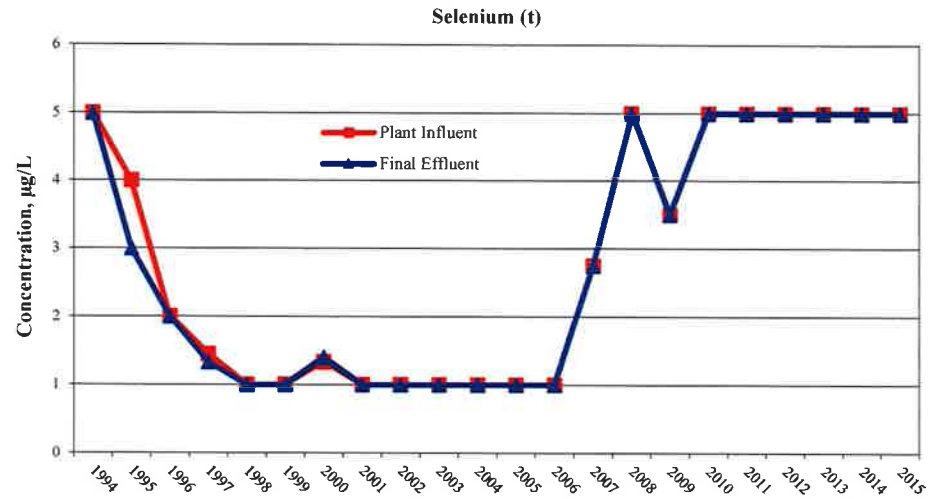
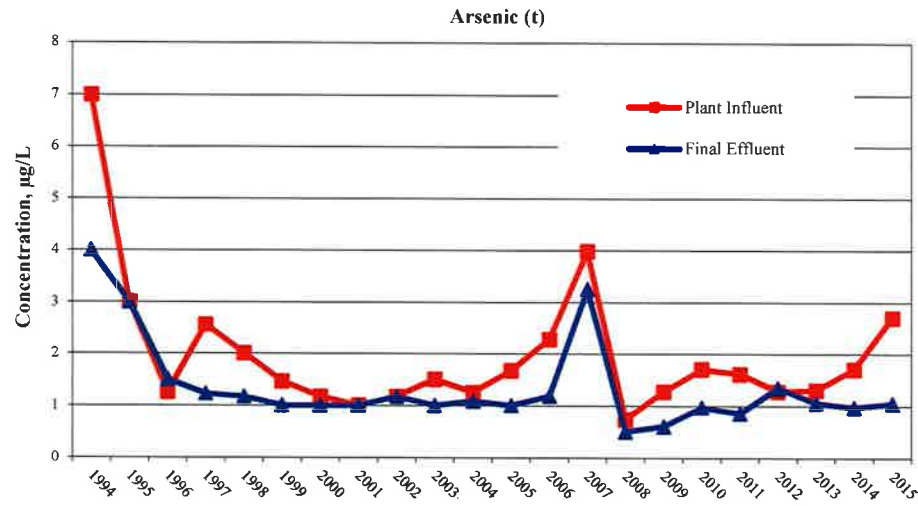
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	Lead (t)	Zinc(t)	Silver(t)	Mercury(t)
Influent Headworks Limit	50 ug/L	0.36 mg/L	180 ug/L	0.2 ug/L
Effluent Water Quality Criteria	197 ug/L	2.46 mg/L	56 ug/L	0.14 ug/L

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
FOURCHE CREEK TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2014**

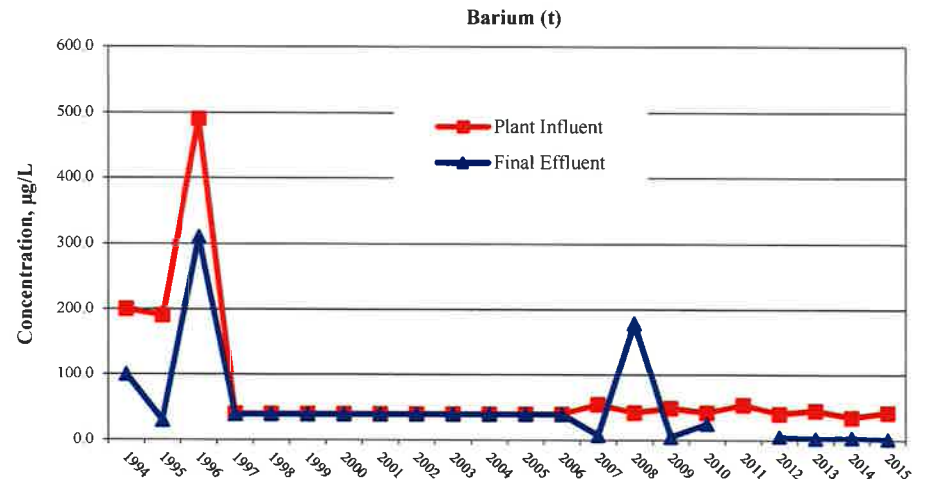
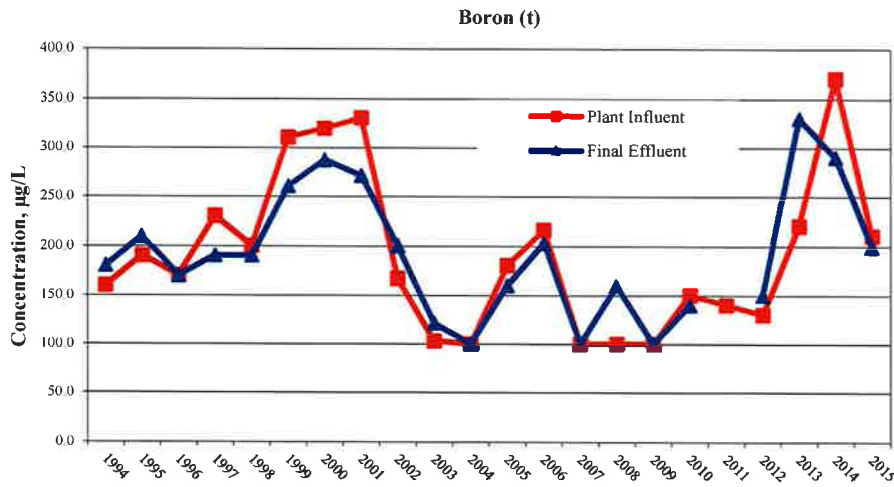
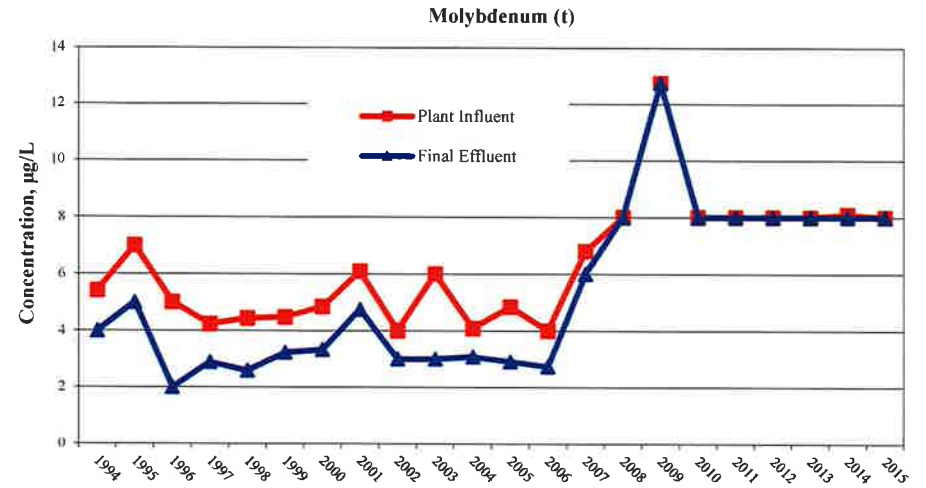
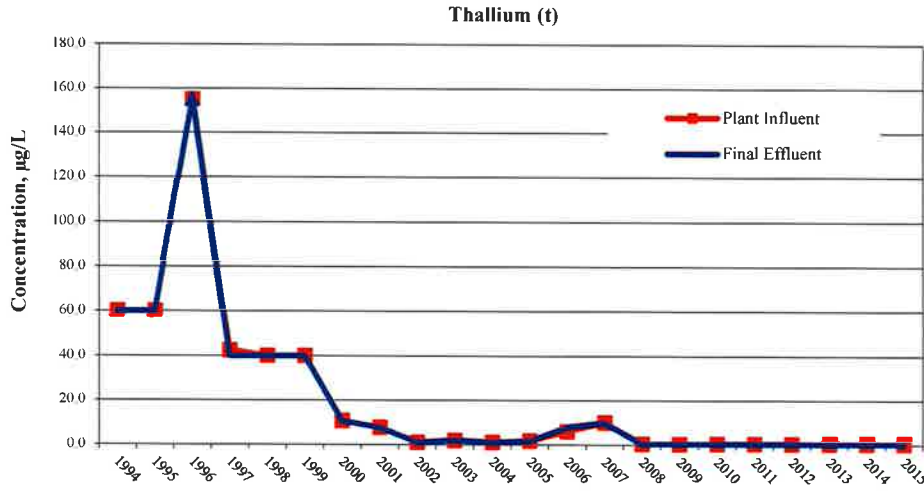
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	Arsenic(t)	Antimony (t)	Selenium (t)	Beryllium (t)
<b>Influent Headworks Limit</b>	14 ug/L	None	10 ug/L	None
<b>Effluent Water Quality Criteria</b>	3,440 ug/L	None	56 ug/L	None

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
FOURCHE CREEK TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2014**

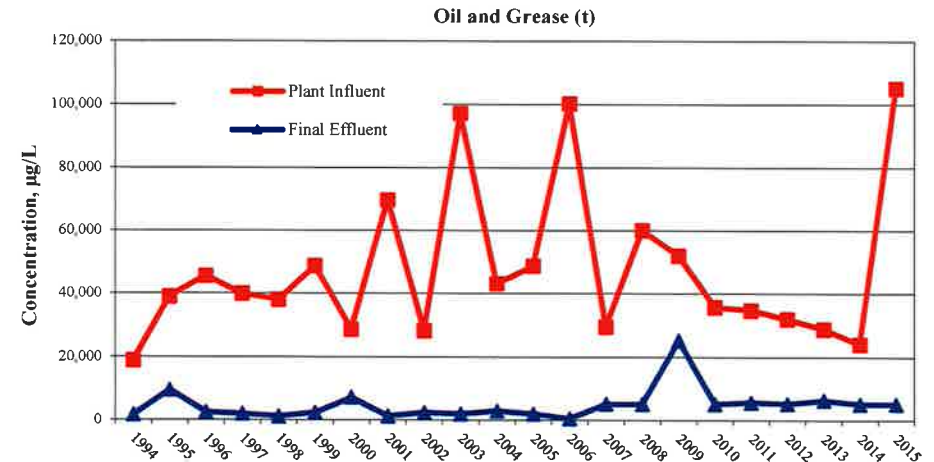
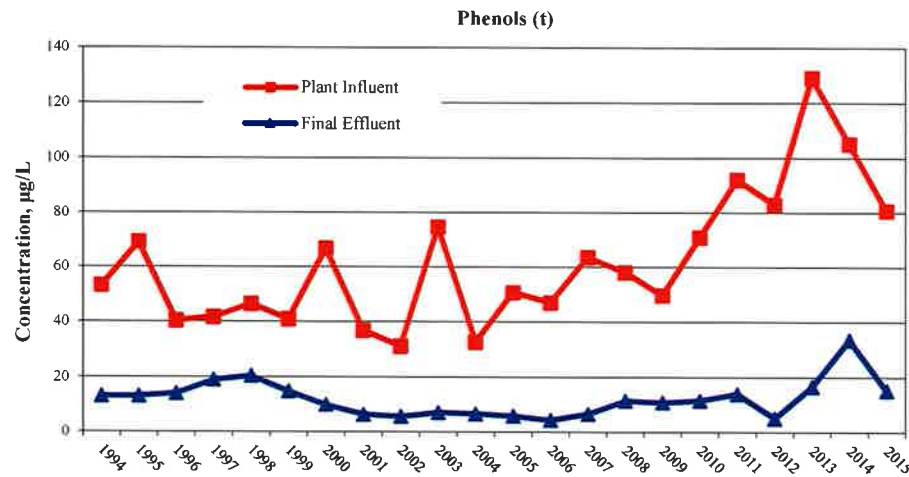
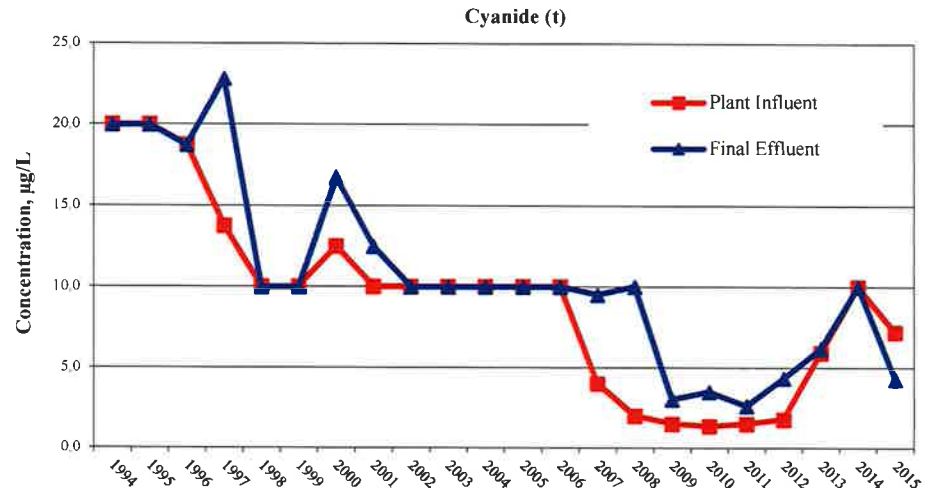
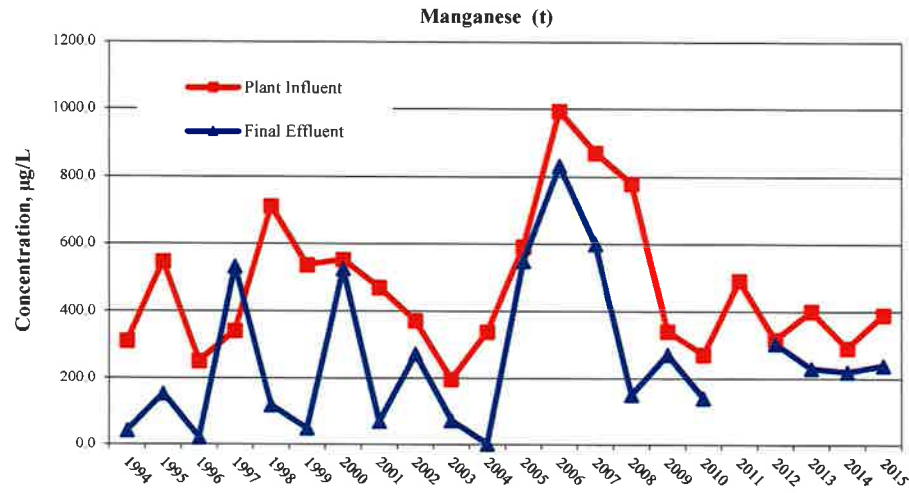
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	Thallium (t)	Boron (t)	Molybdenum(t)	Barium(t)
Influent Headworks Limit	None	None	None	None
Effluent Water Quality Criteria	None	None	None	None

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
FOURCHE CREEK TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2014**

**March 31, 2015  
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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 2015 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 2015 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 2015. Item II: Influent/Effluent organic fraction detections trend chart for 2011 through 2015. Item III is the long term summary of positive results. 40 CFR Part 122, Appendix D, Table II monitoring frequency for 2015 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 2011-2015. Some peaks may be due to changes in test methods and detection limits.

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT**  
**REPORTING YEAR: JANUARY 1, 2015 TO DECEMBER 31, 2015**  
**CITY OF LITTLE ROCK - LITTLE MAUMELLE WASTEWATER TREATMENT PLANT**  
**NPDES PERMIT NO.: AR0050849**

**AVERAGE POTW FLOW: 2.61 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)
				7/6/2015	10/19/2015				7/7/2015	10/20/2015			
Antimony				< 60				< 60		60	200.8	60	
Cadmium	9			< 0.5	N/A			< 0.5		0.5	200.8	0.5	
Copper	270			22.0	N/A			6.2		0.5	200.8	0.5	
Lead	50			0.67	N/A			< 0.5		0.5	200.8	0.5	
Mercury	0.20			0.1620	N/A			0.0016		0.0002	1631E	0.0002	
Nickel	160			4.0	N/A			2.8		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			99	N/A			55		20	200.8	20	
Chromium	260			< 10	N/A			< 10		10	200.8	10	
Cyanide	90			< 0.8	N/A			2.9		0.8	SM20 4500 C&E	10	
Arsenic	14			2.1	N/A			1.0		0.5	200.8	0.5	
Molybdenum				< 8				< 8		8	200.8	8	
Phenols				23.8				3.7		2.2	420.1	5	
Beryllium				< 0.5				< 0.5		0.5	200.8	0.5	
Thallium				< 0.5				< 0.5		0.5	200.8	0.5	
Barium					25				3.6	2	200.7	2	
Boron					200				430	100	200.7	100	
Manganese					480				48	2	200.7	2	
Oil and Grease				31,400				8,800		5000	1664A	5000	
Flow, MGD				2.15	1.58			1.83	1.48				



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

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

NPDES PERMIT NO.: AR0050849

AVERAGE POTW FLOW: 2.61 MGD

PERCENT (%) IU FLOW: 0 %

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 mg/L	
EPA Test Method Used	1664A	SM2000 4500 C&E	200.8	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	4.0	0.67	2.10	5	0.0002	2.2	60	0.5	0.5	2	2	100		
07/06/2015	2.15			99 <	0.5 <	10 <	0.5	22.0 <	8	4.0	0.67	2.10 <	5	0.1620	23.8	<	60 <	0.5 <	0.5			
09/03/2015	1.66	31400 <	0.8																			
10/19/2015	1.58																		480	25	200	
<b>Average</b>	1.80	31400 <	0.8	99	0.5 <	10 <	0.5	22.0 <	8	4.0	0.67	2.10 <	5	0.1620	23.8	<	60 <	0.5 <	0.5	480	25	200
<b>Maximum</b>	2.15	31400 <	0.8	99	0.5 <	10 <	0.5	22.0 <	8	4.0	0.67	2.10 <	5	0.1620	23.8	<	60 <	0.5 <	0.5	480	25	200
<b>Minimum</b>	1.58	31400 <	0.8	99	0.5 <	10 <	0.5	22.0 <	8	4.0	0.67	2.10 <	5	0.1620	23.8	<	60 <	0.5 <	0.5	480	25	200
<b>Headworks limit</b>			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, 2015 TO DECEMBER 31, 2015**

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

NPDES PERMIT NO.: AR0050849

AVERAGE POTW FLOW: 2.61 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	1664A	SM20th 4500 C&E	200.8	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	
07/07/2015	1.83			55 <	0.5 <	10 <	0.5	6.2 <	8	2.8 <	0.50	1.00 <	5		< 60	< 0.5	< 0.5				
09/03/2015	1.61	8800	2.9											0.0016	3.7						
10/20/2015	1.48																		48	3.6	430
<b>Average</b>	1.64	8800	2.9	55 <	0.5 <	10 <	0.5	6.2 <	8	2.8	0.50	1.00 <	5	0.0016	3.7 <	60 <	0.5 <	0.5	48	3.6	430
<b>Maximum</b>	1.83	8800	2.9	55 <	0.5 <	10 <	0.5	6.2 <	8	2.8	0.50	1.00 <	5	0.0016	3.7 <	60 <	0.5 <	0.5	48	3.6	430
<b>Minimum</b>	1.48	8800	2.9	55 <	0.5 <	10 <	0.5	6.2 <	8	2.8 <	0.50	1.00 <	5	0.0016	3.7 <	60 <	0.5 <	0.5	48	3.6	430
<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, 2015 TO DECEMBER 31, 2015**

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

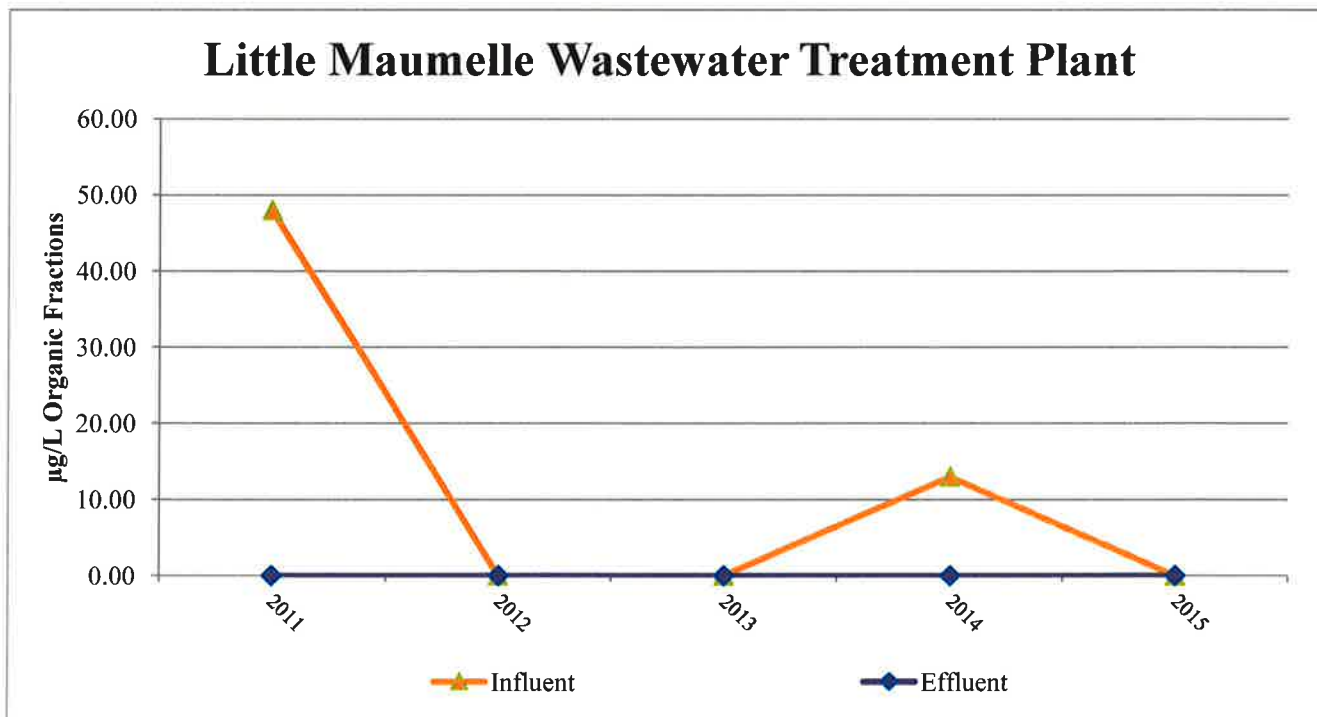
	O&G	CN-	Zn	Cd	Cr	Ag	Cu	Mo	Ni	Pb	As	Se	Hg	Phenol	Sb	Be	Tl	Mn	Ba	B
07/06/2015			44.4%	0.0%	0.0%	0.0%	71.8%	0.0%	30.0%	25.4%	52.4%	0.0%			0.0%	0.0%	0.0%			
09/03/2015	72.0%	-262.5%											99.0%	84.5%						
10/19/2015																		90.0%	85.6%	-115.0%
Average	72.0%	-262.5%	44.4%	0.0%	0.0%	0.0%	71.8%	0.0%	30.0%	25.4%	52.4%	0.0%	99.0%	84.5%	0.0%	0.0%	0.0%	90.0%	85.6%	-115.0%

**I. 2015 POSITIVE RESULTS, µg/L**

LITTLE MAUMELLE WASTEWATER TREATMENT PLANT		
Sample Date	Compound	Influent
9/22/2015	Volatiles	ND
9/22/2015	Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND
Sample Date	Compound	Effluent
9/22/2015	Volatiles	ND
9/22/2015	Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND

Comments: ND - No Detection

**II. TREND OF POSITIVE RESULTS - REPORTING PERIOD 2011 THROUGH 2015**



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

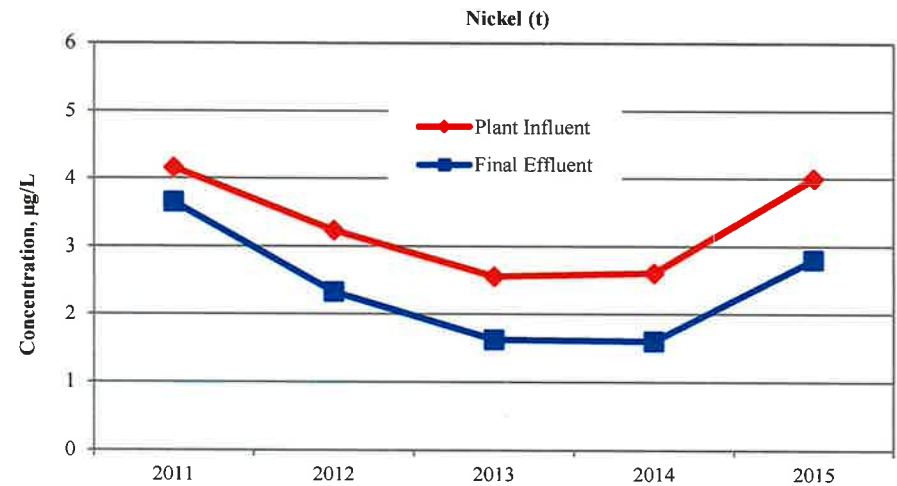
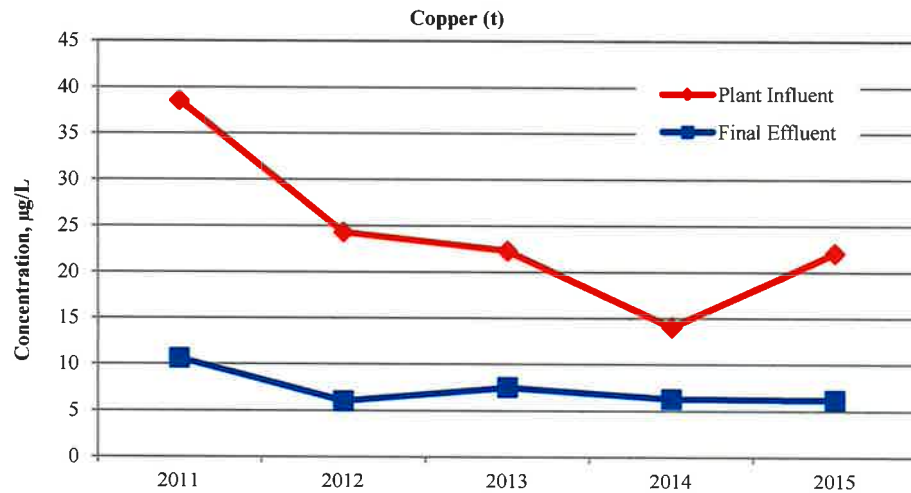
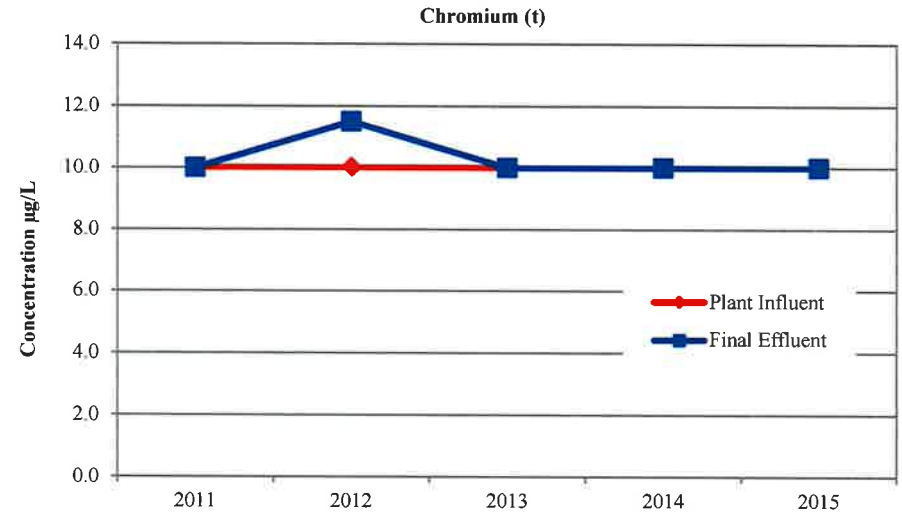
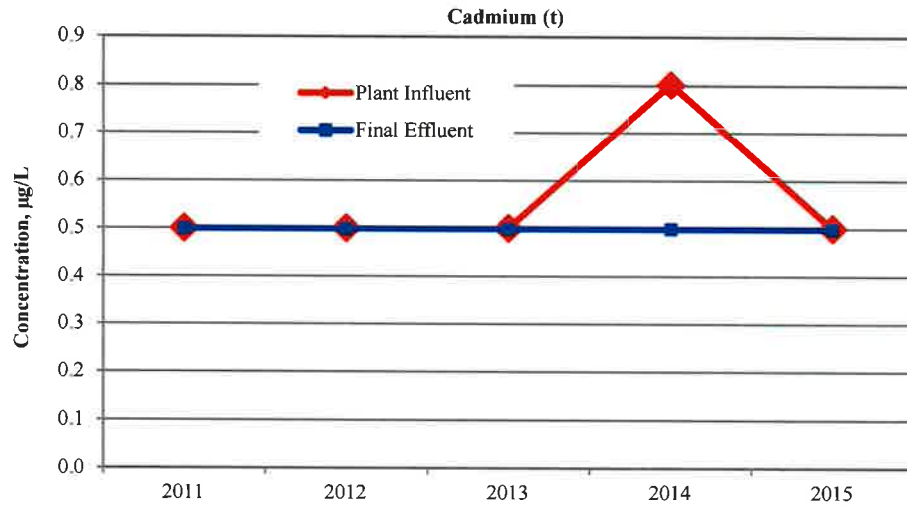
March 31, 2016  
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III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 2015

Little Maumelle Wastewater Treatment Plant

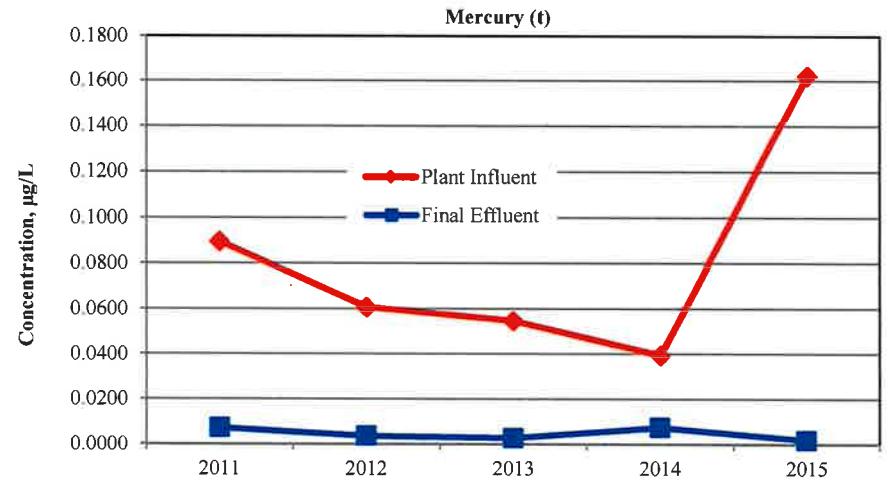
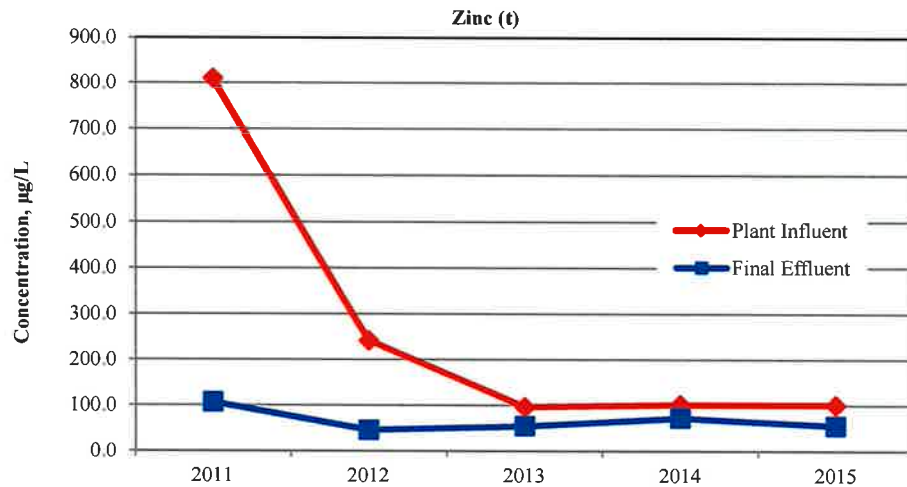
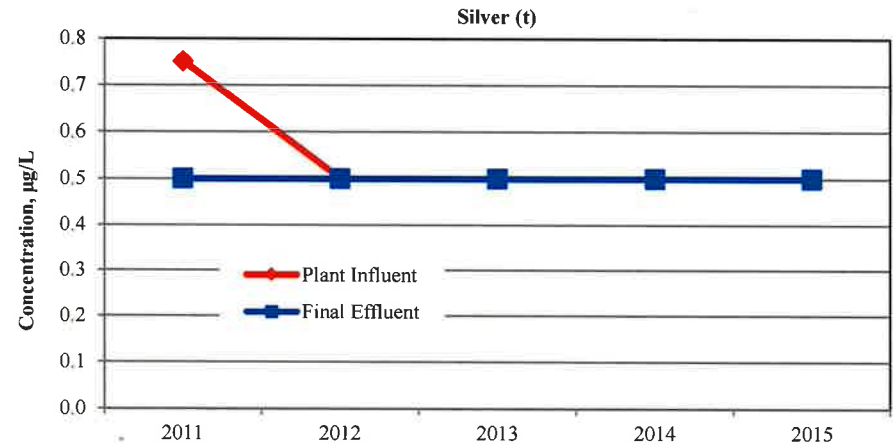
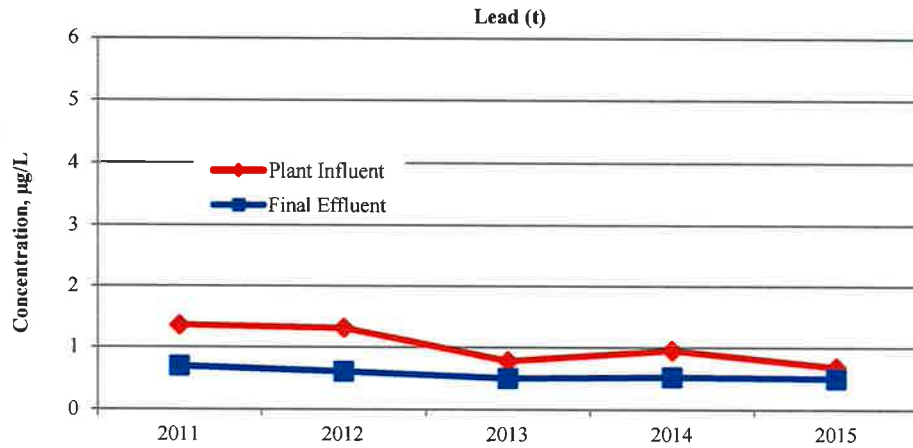
PPS, µg/L Parameter	2011		2012		2013		2014		2015	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF
Toluene	37	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)Phthalate	ND	ND	ND	ND	ND	ND	13	ND	ND	ND
Diethylphthalate	11	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Total</b>	<b>48.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00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

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
2011 THROUGH 2015**



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

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
2011 THROUGH 2015**



**Influent Headworks Limit  
Effluent Water Quality Criteria (Acute)**

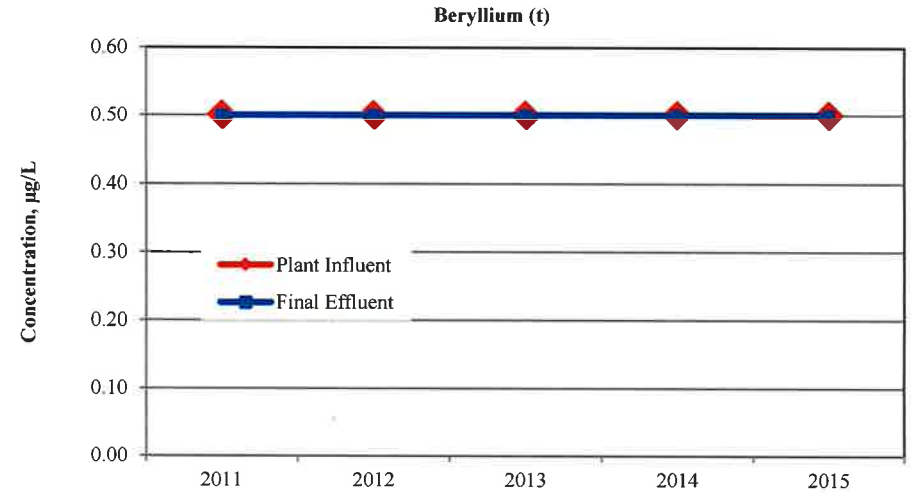
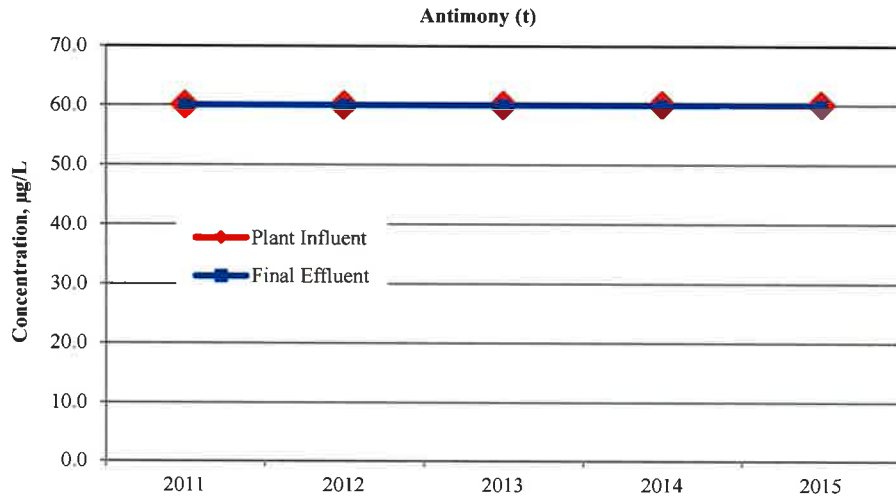
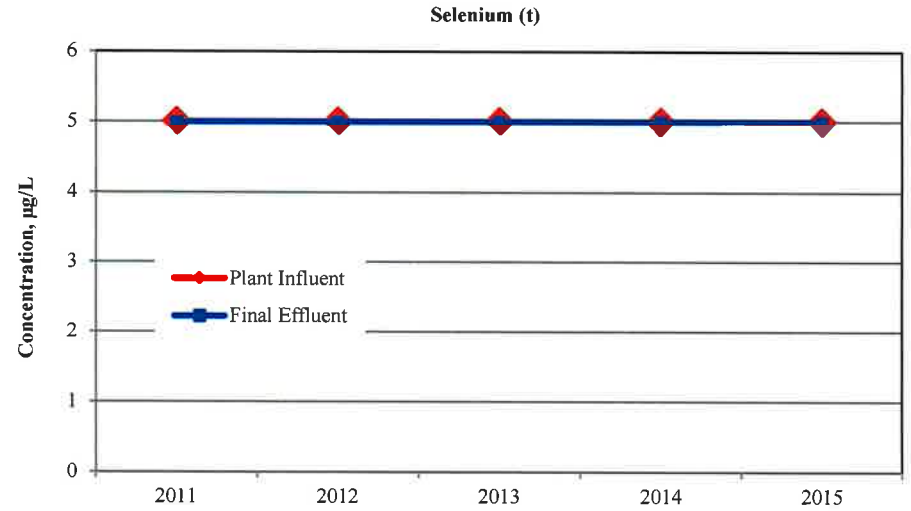
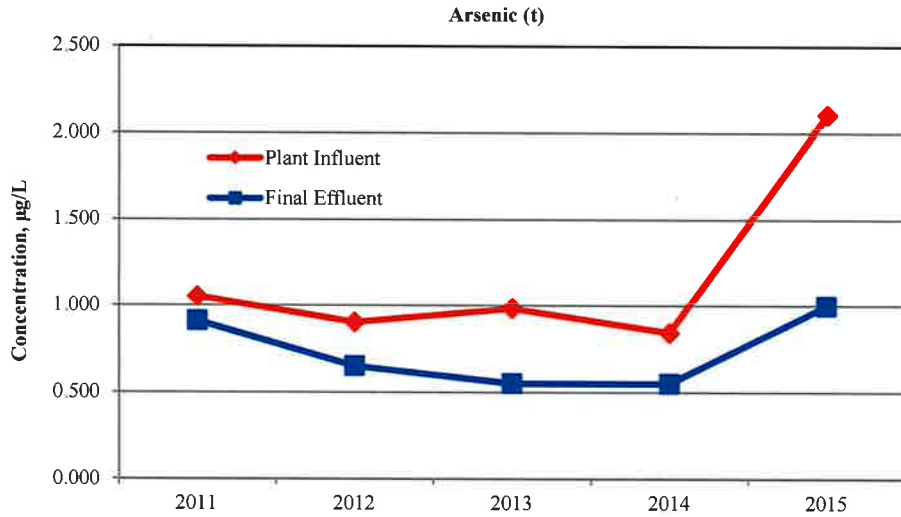
**Lead (t)  
50 µg/L  
N/A**

**Zinc(t)  
0.36 mg/L  
N/A**

**Silver(t)  
180 µg/L  
N/A**

**Mercury(t)  
0.2 µg/L  
N/A**

**LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
 2011 THROUGH 2015**



**Influent Headworks Limit  
 Effluent Water Quality Criteria (Acute)**

**Arsenic(t)  
 14 µg/L  
 N/A**

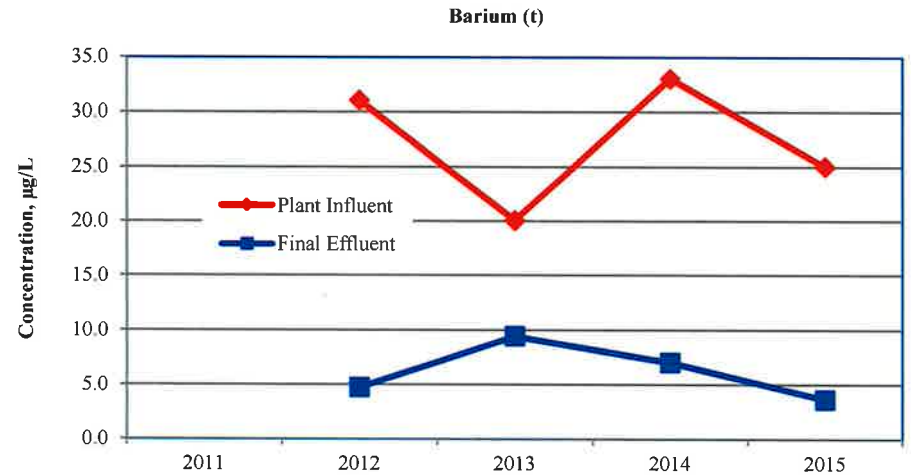
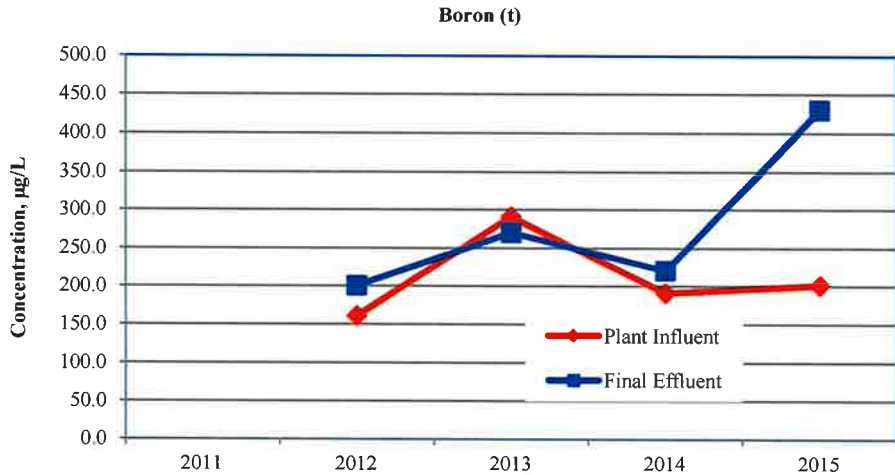
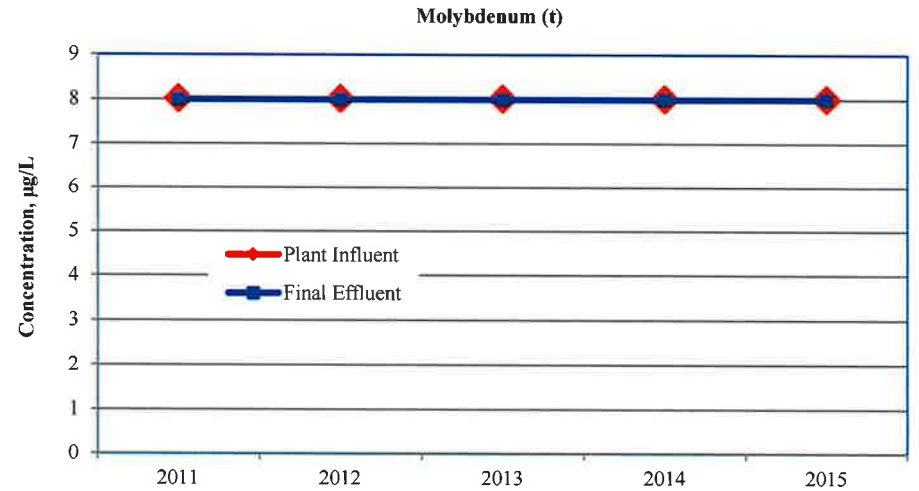
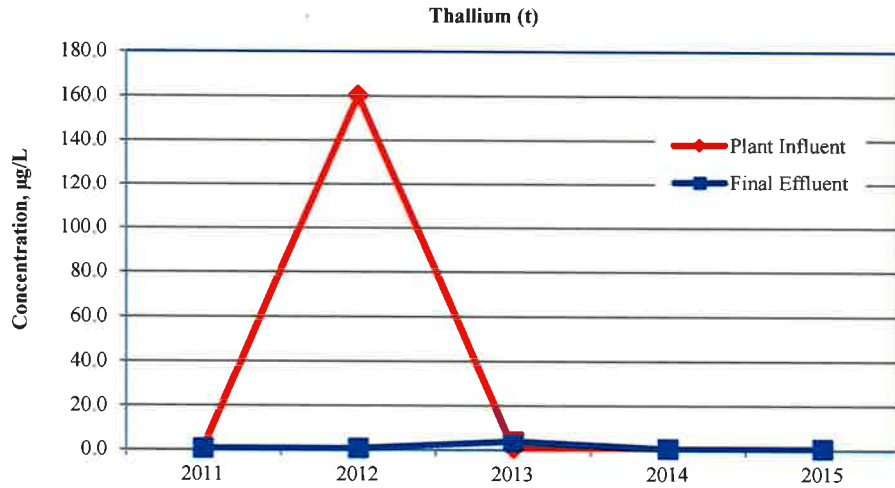
**Antimony (t)  
 None  
 N/A**

**Selenium (t)  
 10 µg/L  
 N/A**

**Beryllium (t)  
 None  
 N/A**



**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
2011 THROUGH 2015**



**Influent Headworks Limit  
Effluent Water Quality Criteria (Acute)**

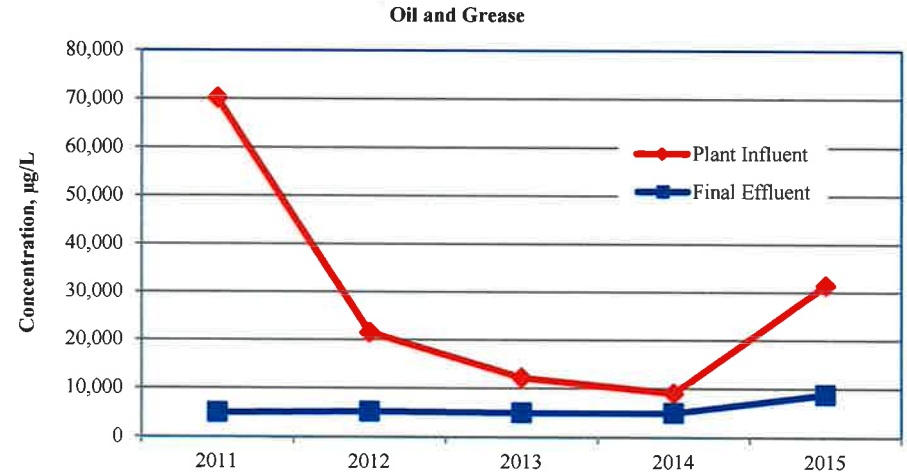
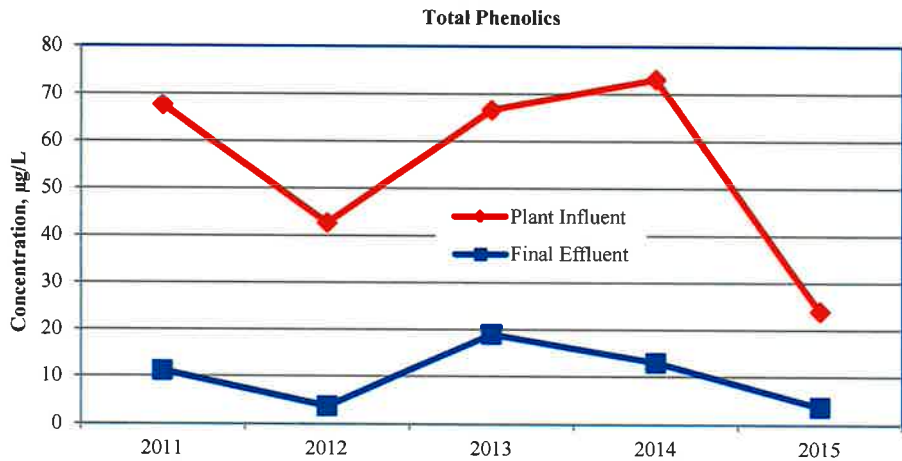
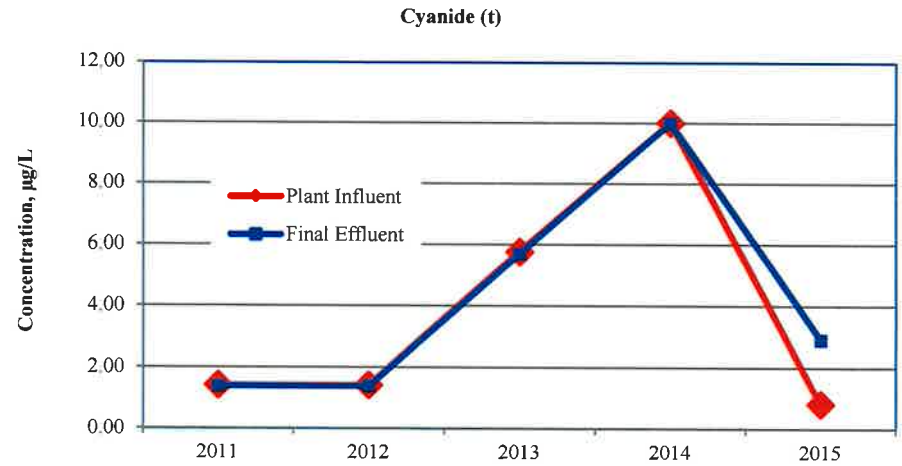
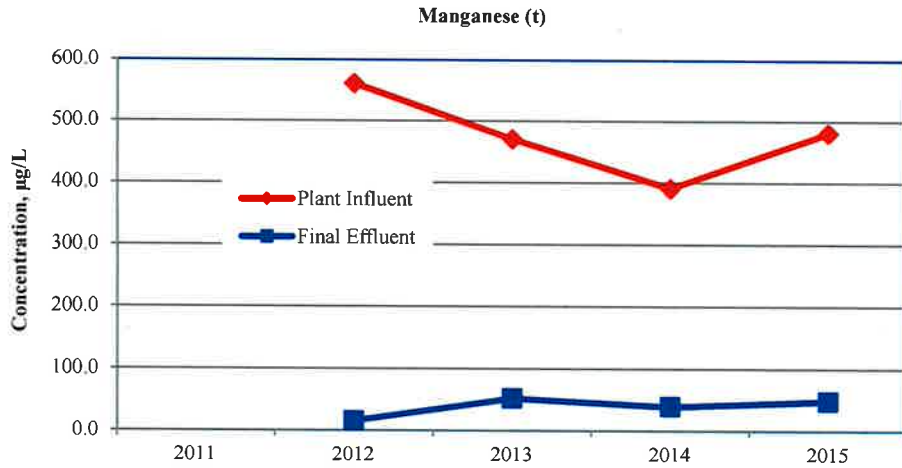
**Thallium (t)  
None  
N/A**

**Boron (t)  
None  
N/A**

**Molybdenum(t)  
None  
N/A**

**Barium(t)  
None  
N/A**

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
2011 THROUGH 2015**



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

# **SECTION VII**

## SUMMARY OF WASTEWATER TREATMENT PLANT LOADING TRENDS

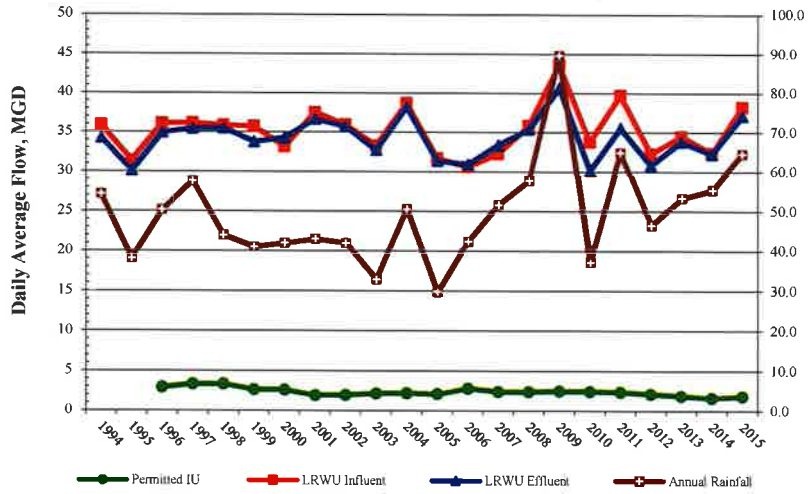
Trend charts are used to evaluate pollutant loading for the Little Rock Wastewater (LRW) system, for each wastewater treatment plant and to evaluate Industrial User (IU) contributions. Little Maumelle Treatment Plant came on line in 2011 and is included on the charts beginning 2011. The charts are organized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

- Total System Loading Trends - These charts show 1994 - 2015 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.

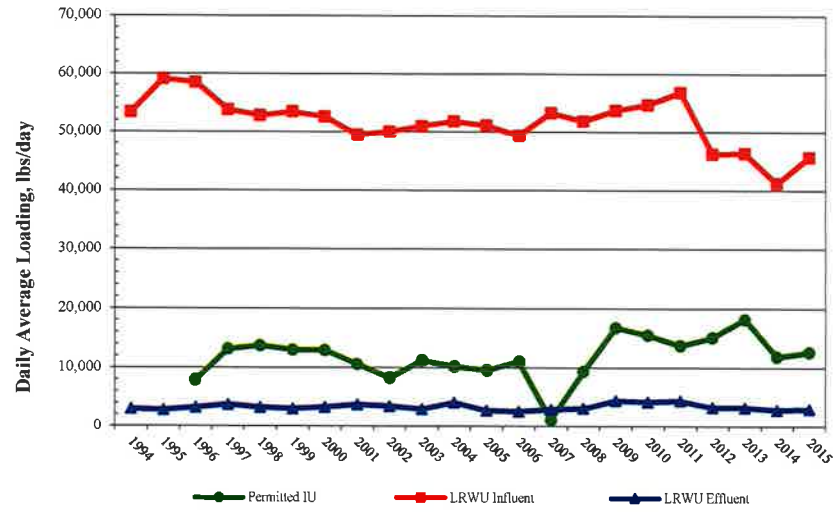
For each individual analytical point the lbs/day is calculated using the flow for each sample date. In cases where the concentration is reported as less than the detection limit the detection limit number was used to calculate the lbs/day. This causes the loading (lbs/day) to be higher than what it would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

- IU Percent Contributions 1996 - 2015 - 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 - 2015. LM-WWTP loading data (lbs/day) for 2011 - 2015 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.)

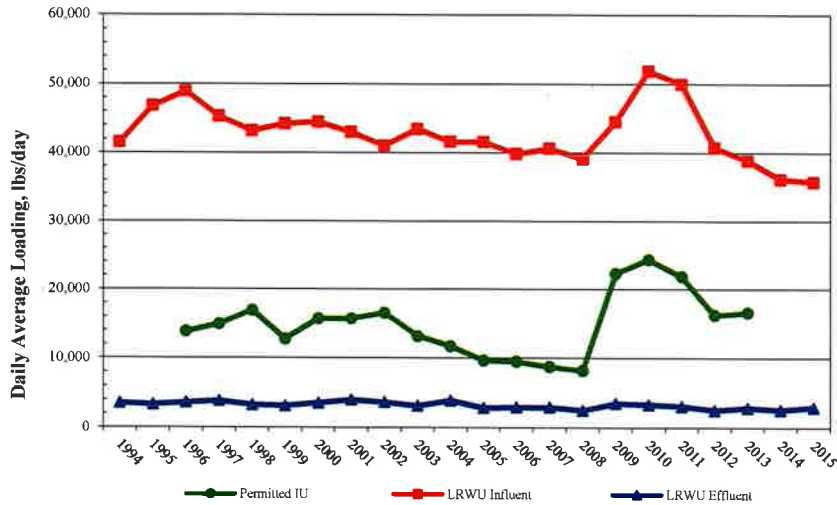
Hydraulic



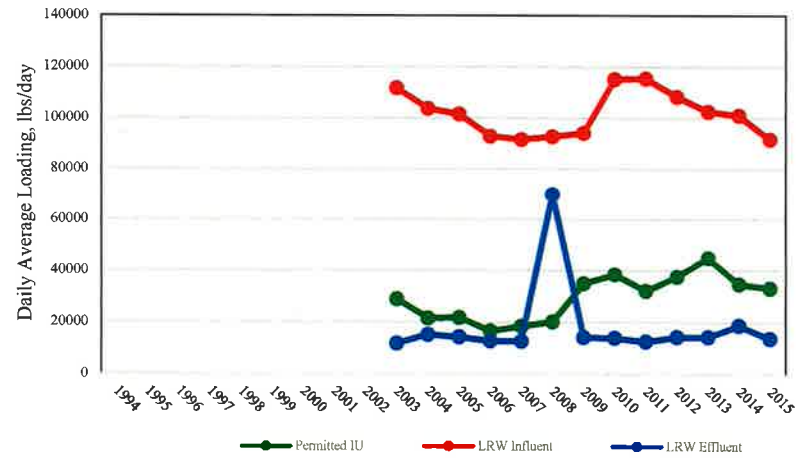
TSS



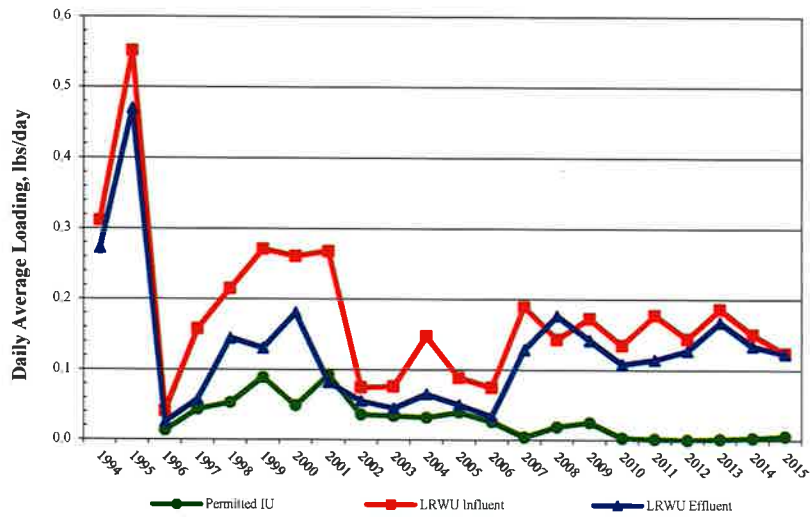
BOD<sub>5</sub>



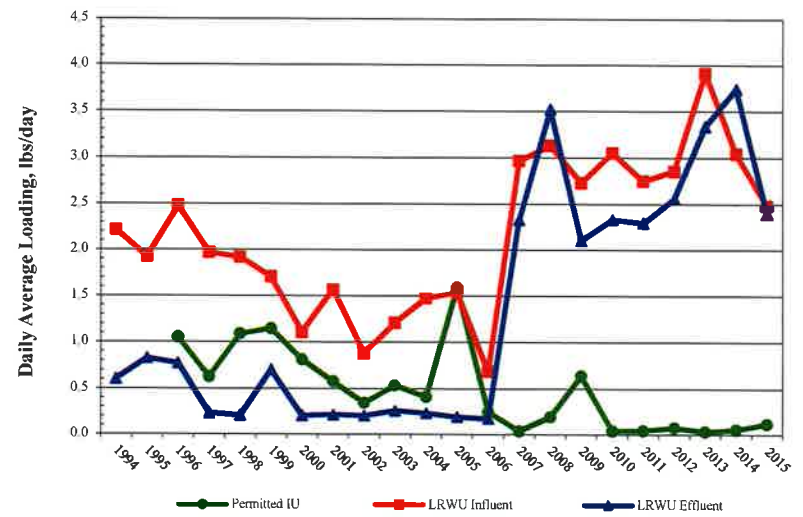
COD



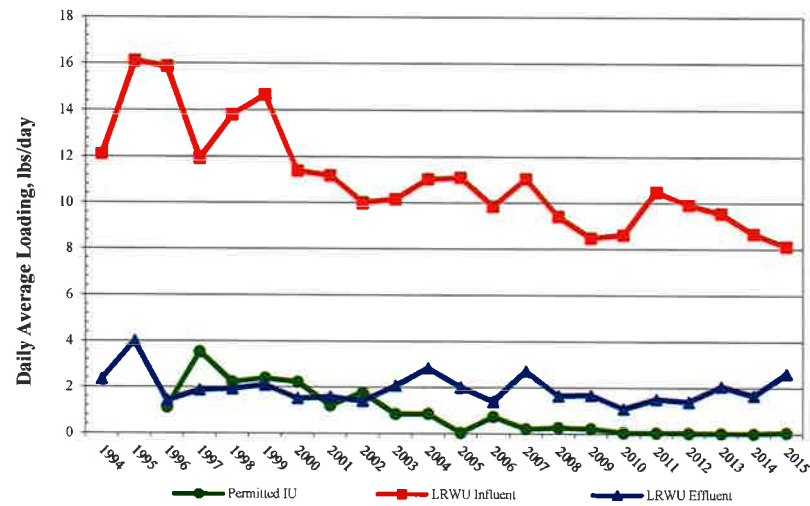
Cadmium (t)



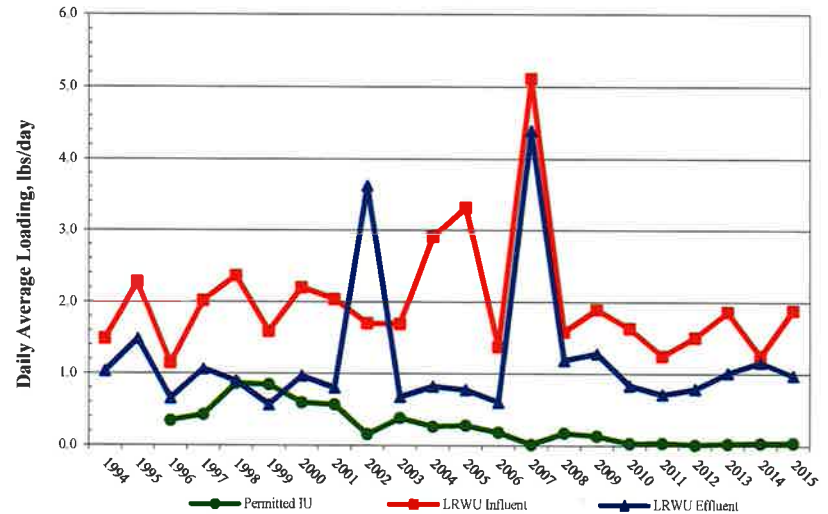
Chromium (t)

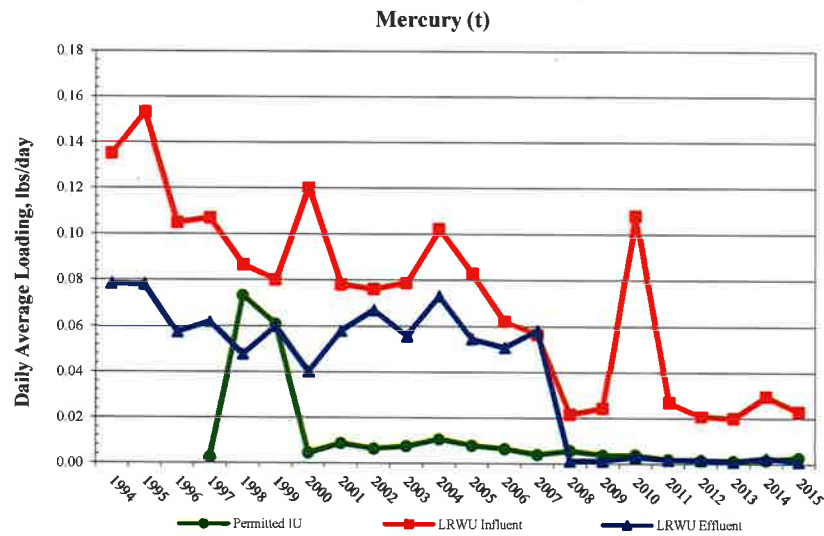
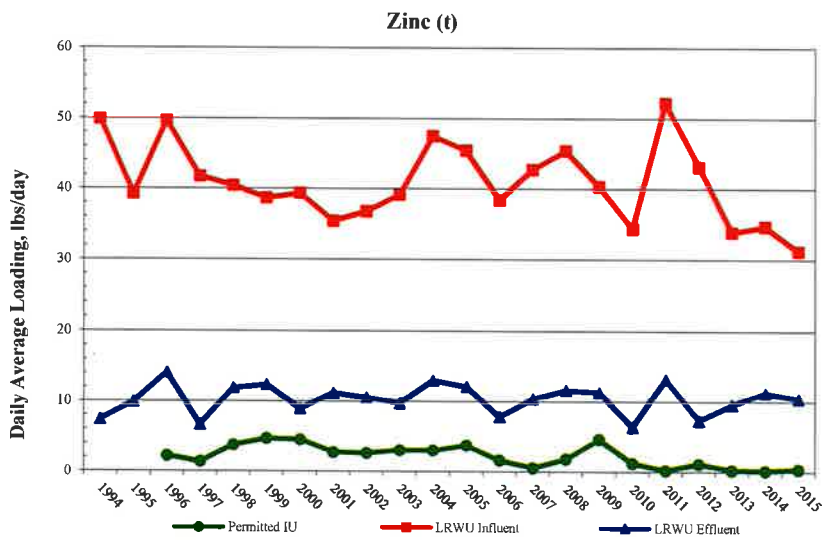
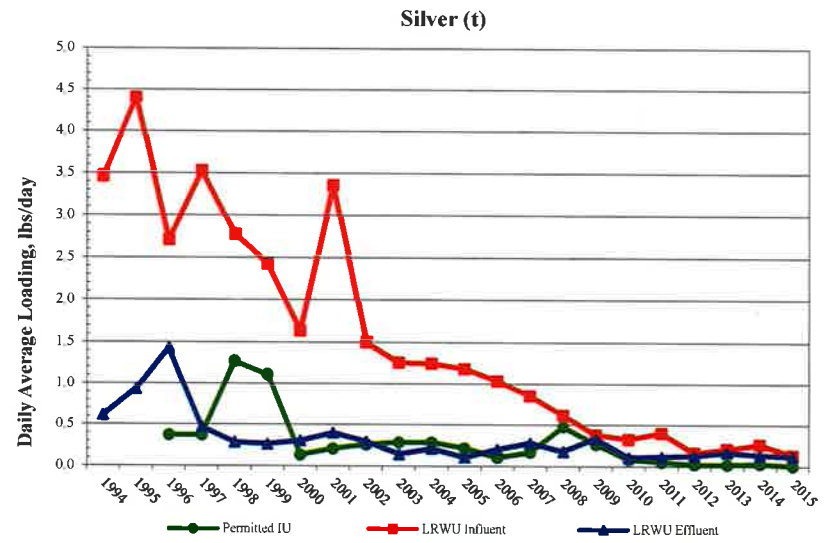
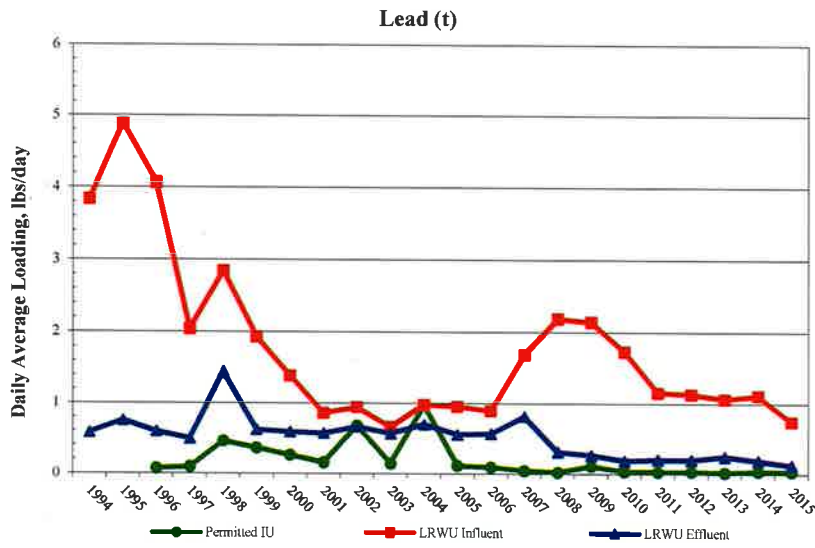


Copper (t)

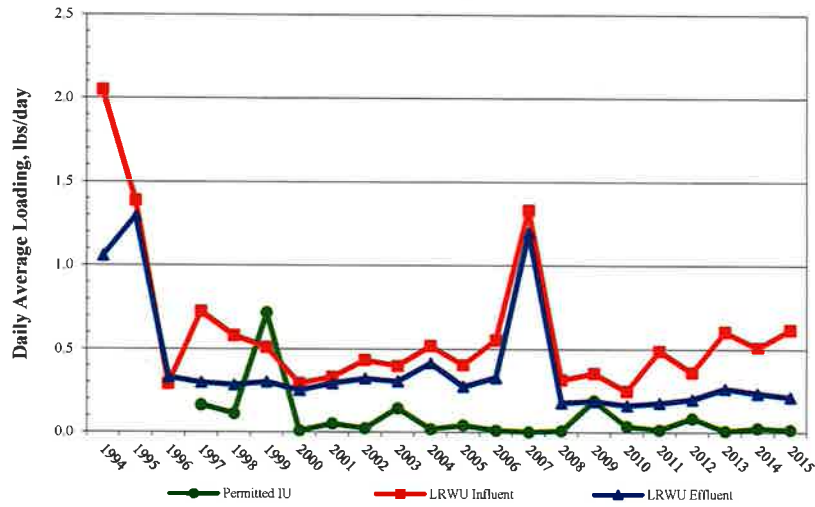


Nickel (t)

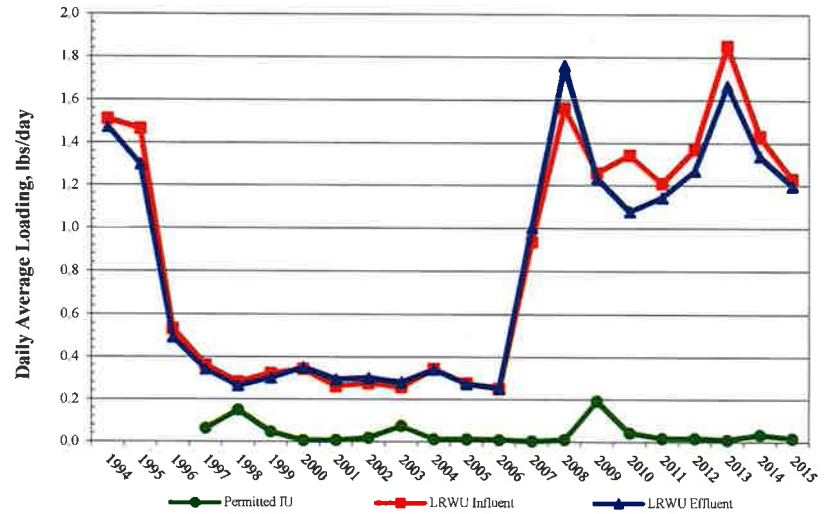




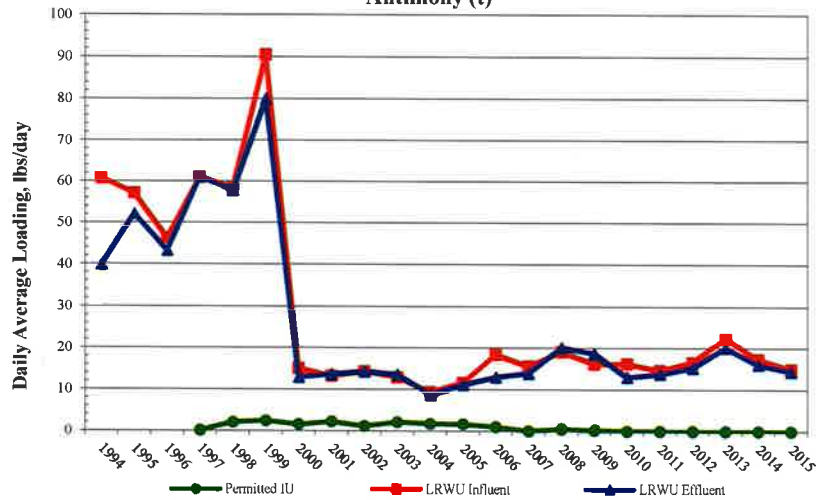
Arsenic (t)



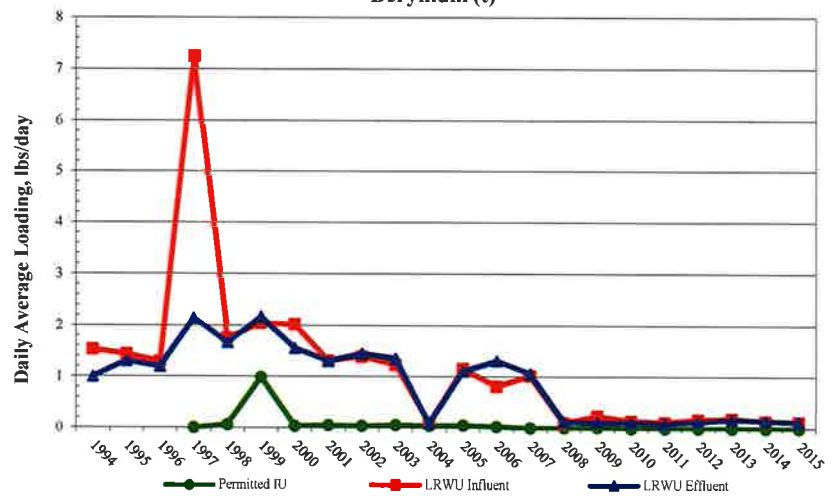
Selenium (t)



Antimony (t)

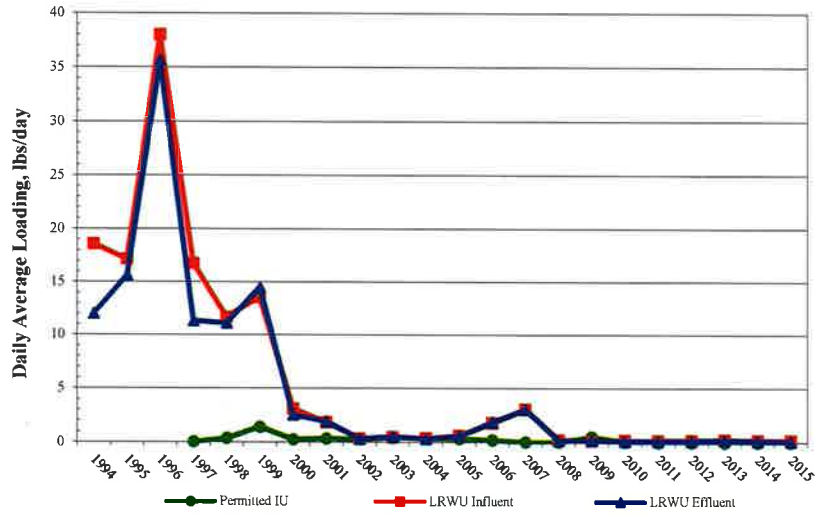


Beryllium (t)

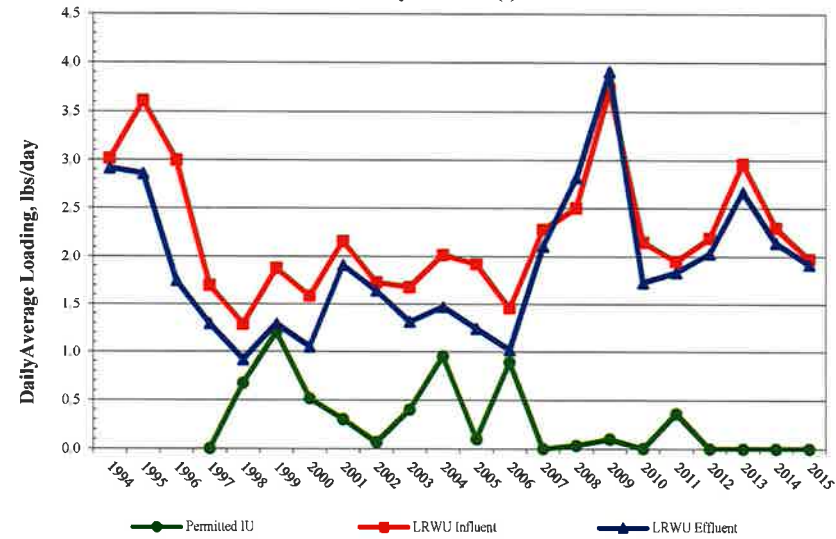




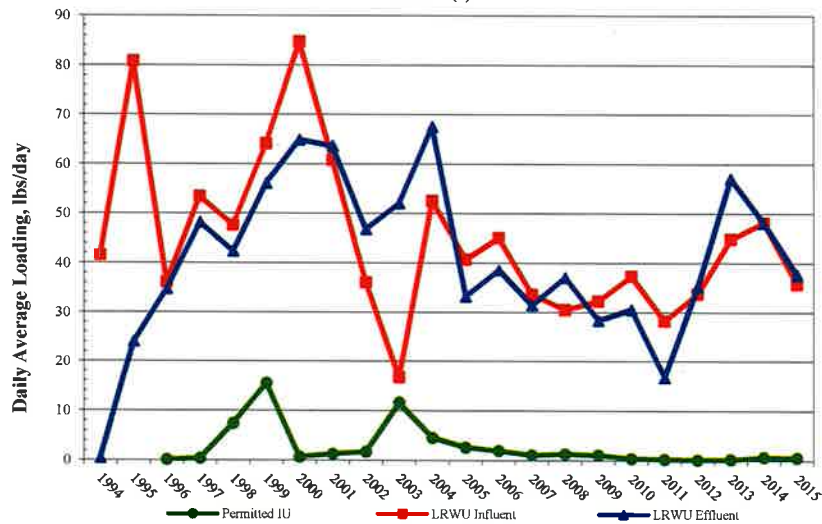
**Thallium (t)**



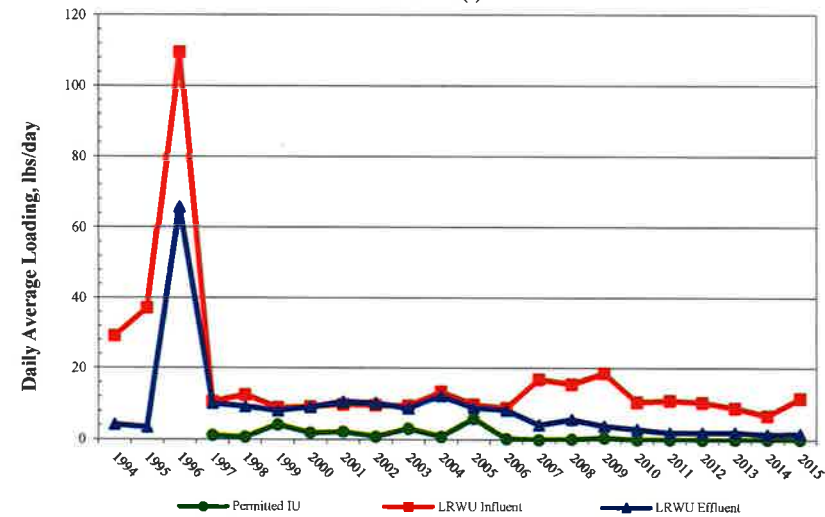
**Molybdenum (t)**



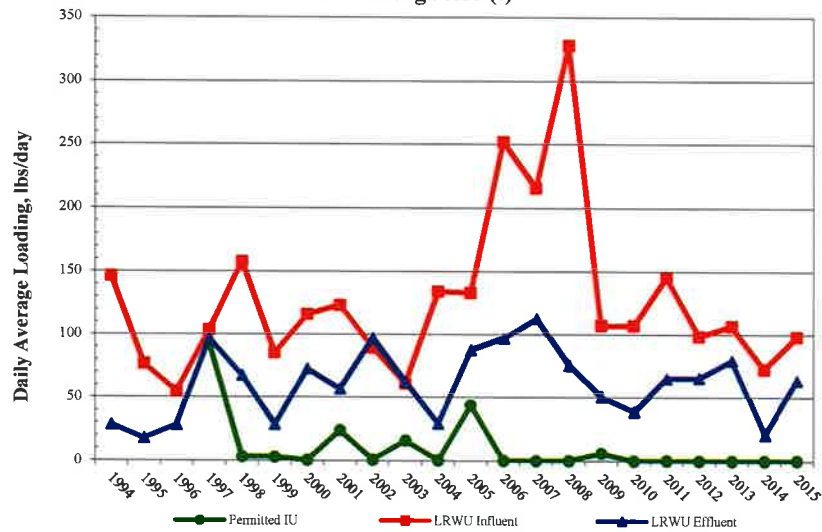
**Boron (t)**



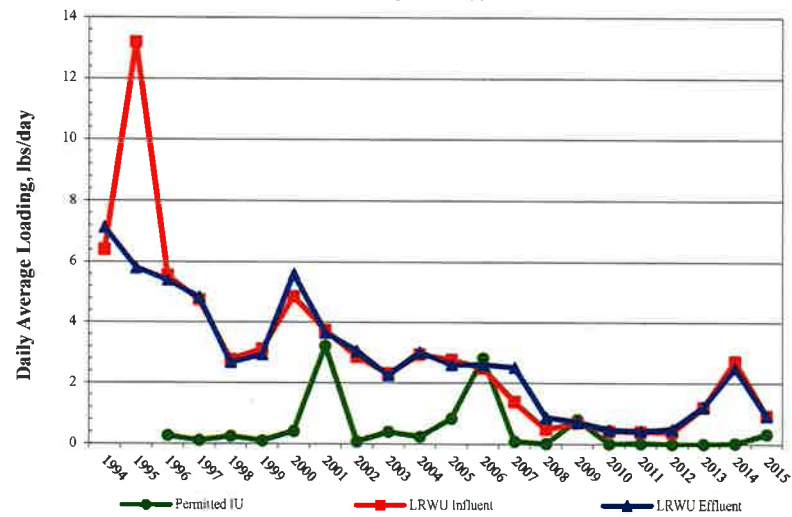
**Barium (t)**



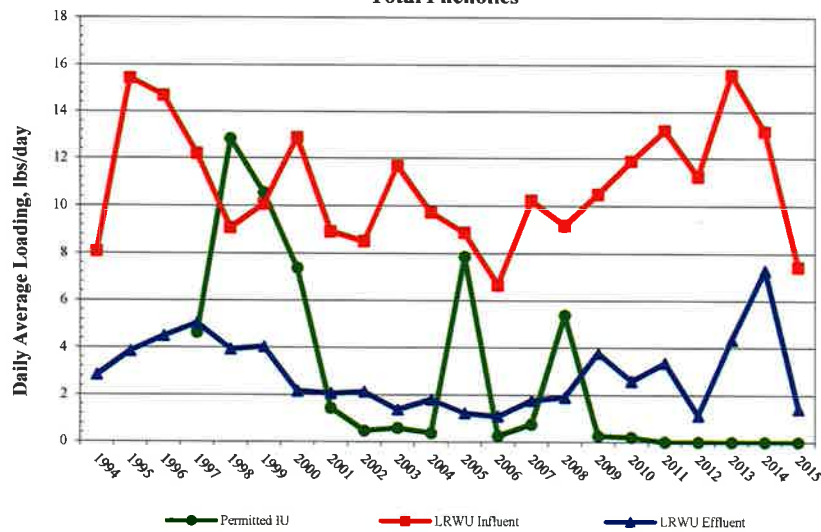
Manganese (t)



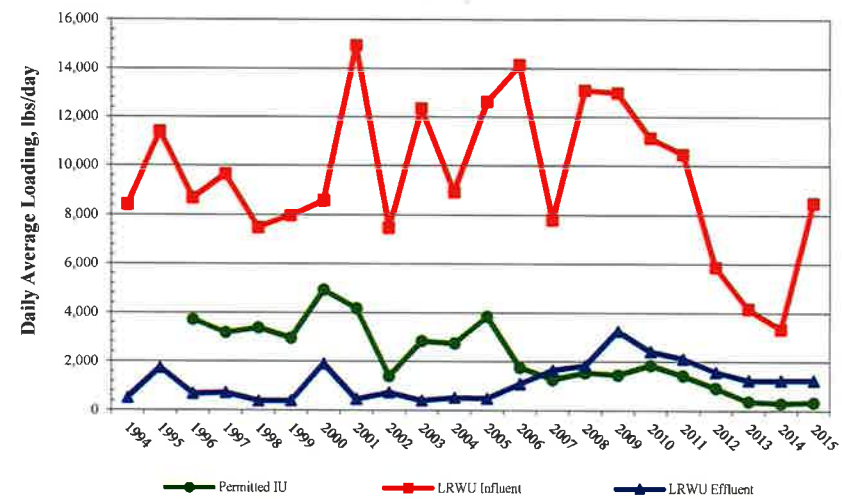
Cyanide (t)



Total Phenolics



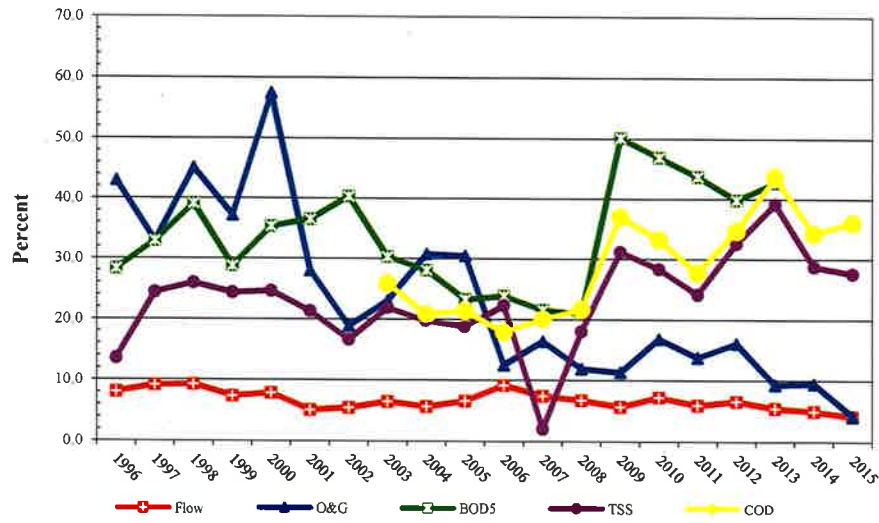
Oil & Grease



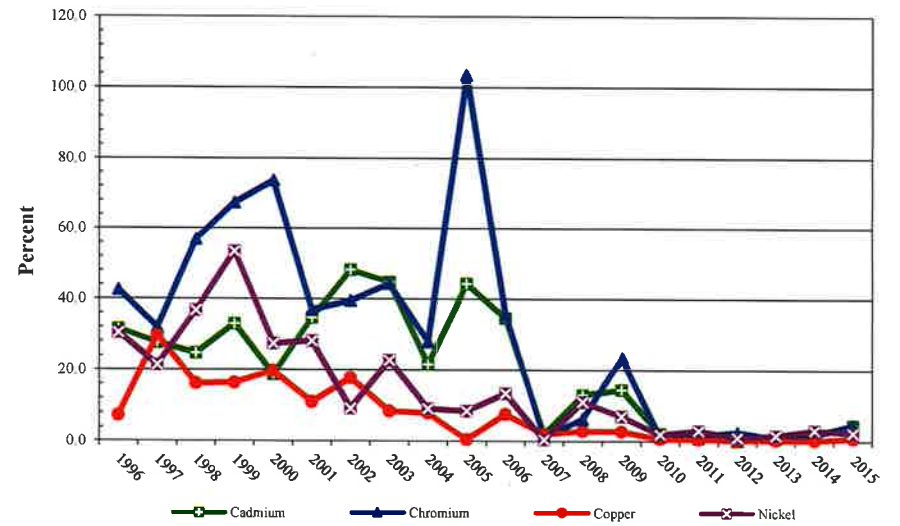
**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
IU PERCENT CONTRIBUTIONS**

March 31, 2016  
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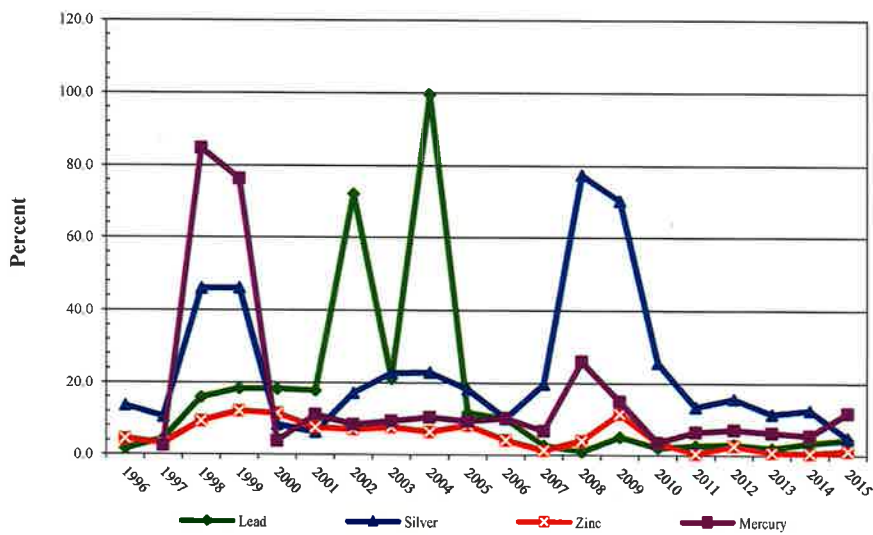
**IU % Contributions**



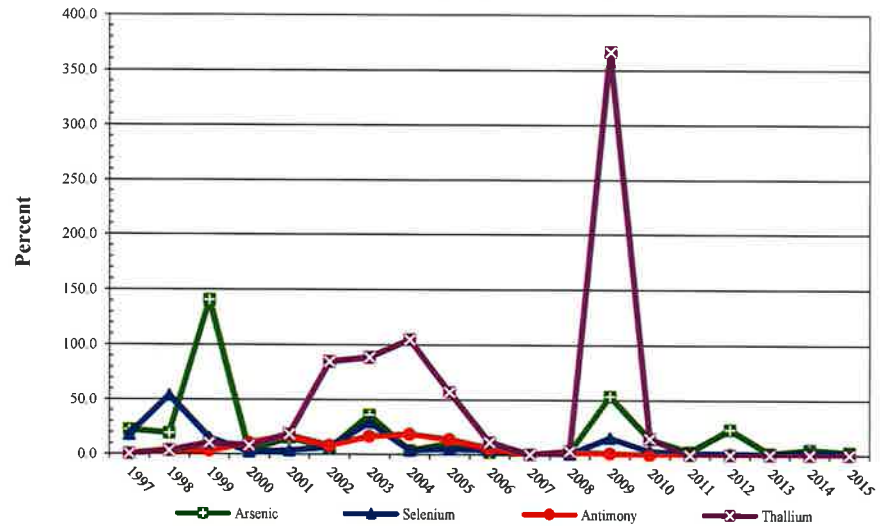
**IU % Contributions**



**IU % Contributions**



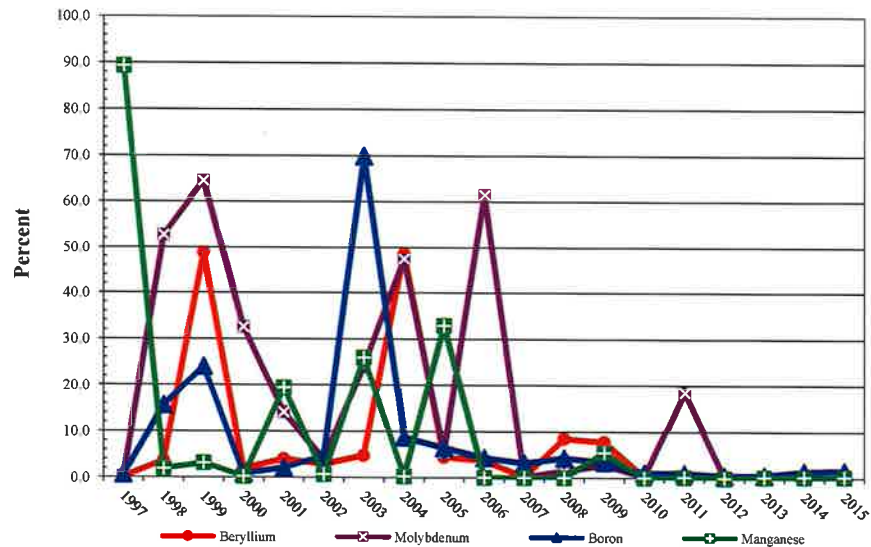
**IU % Contributions**



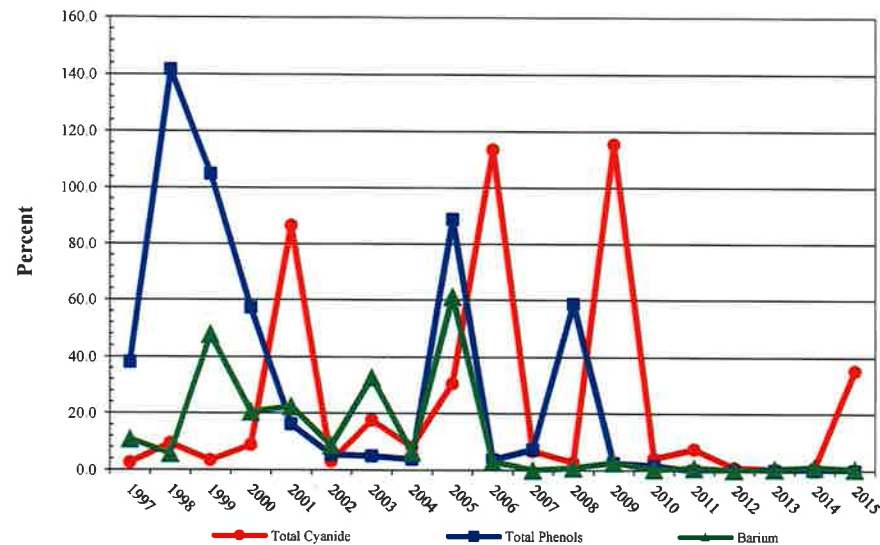
**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
IU PERCENT CONTRIBUTIONS**

**March 31, 2016  
Page 2 of 2**

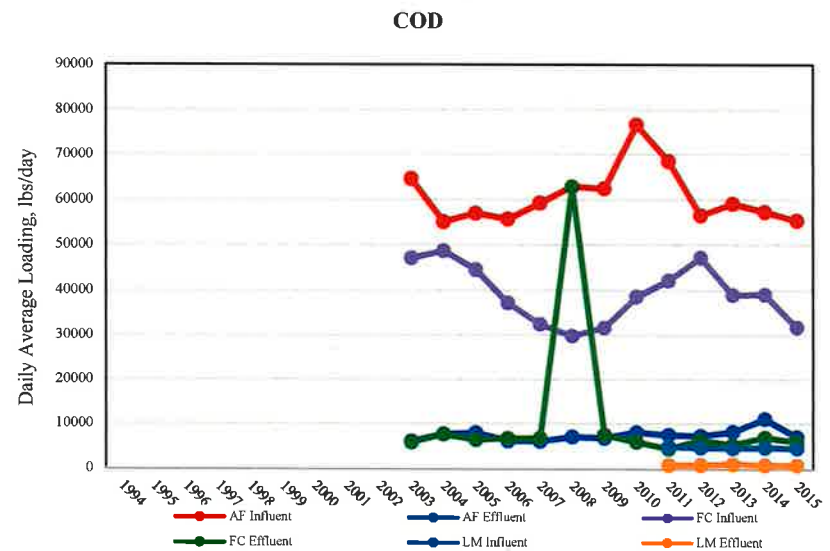
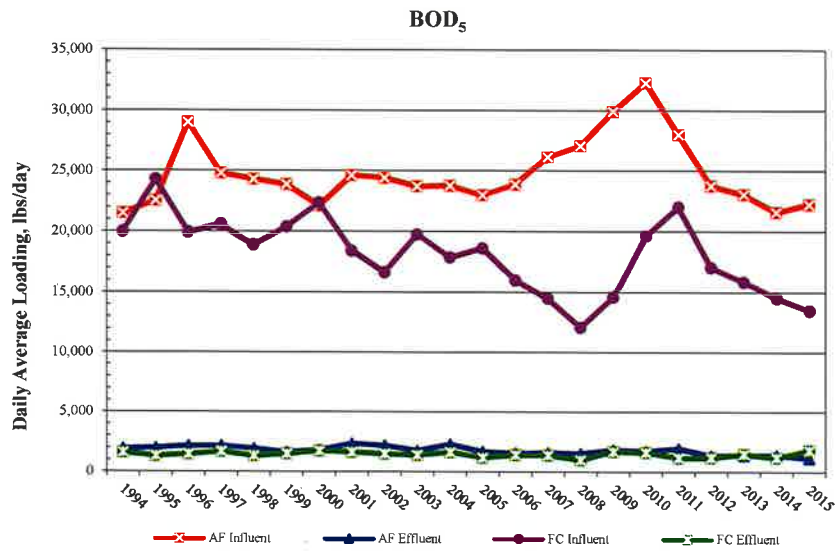
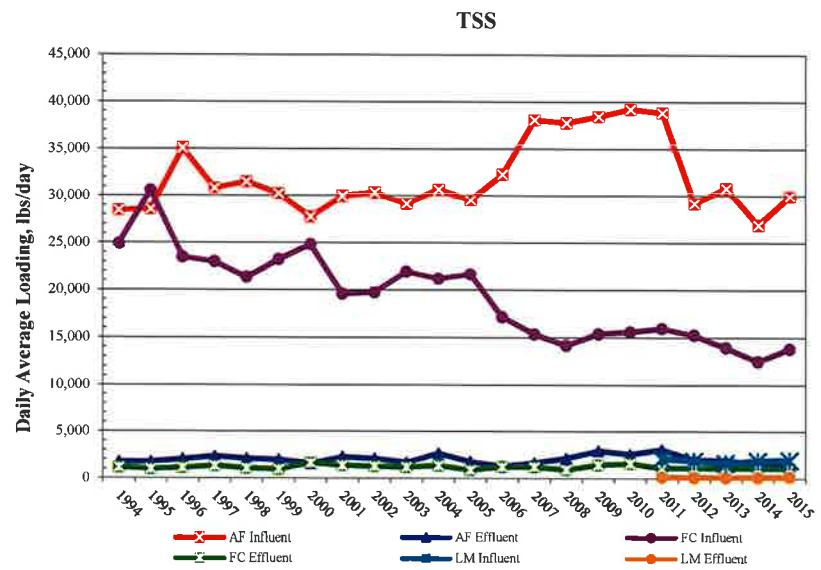
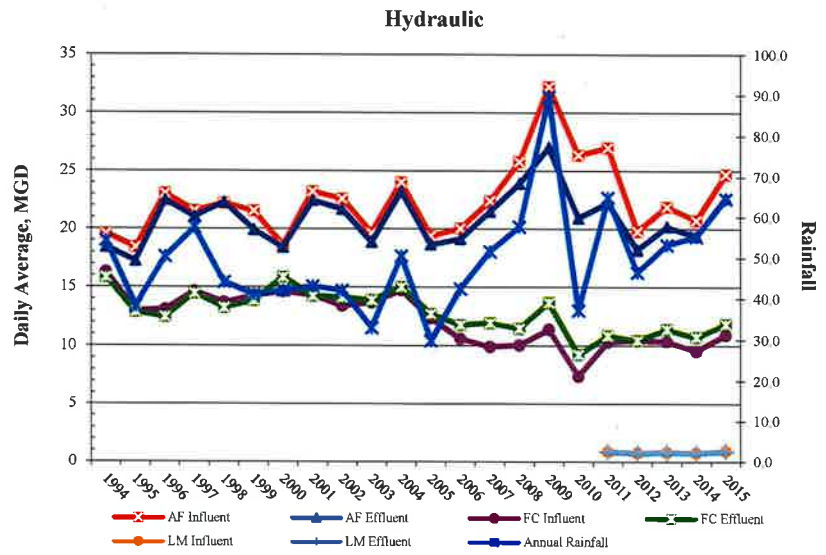
**IU % Contributions**



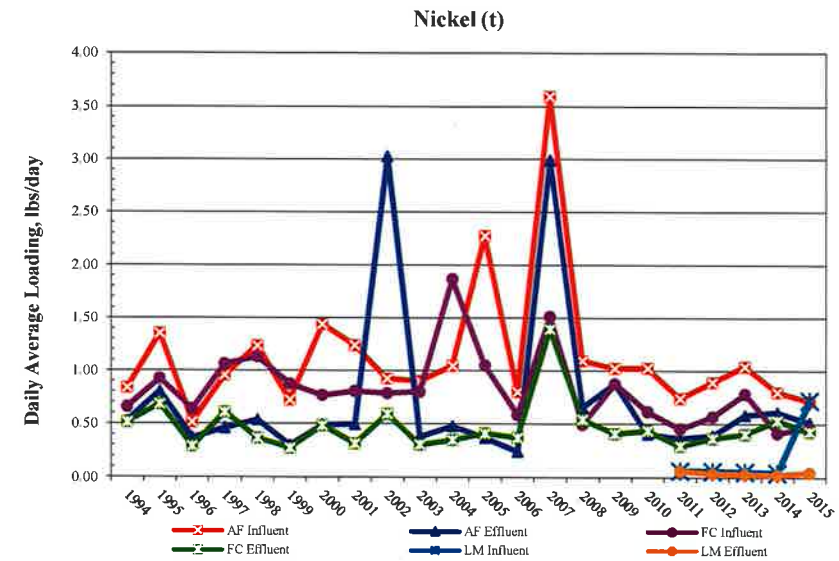
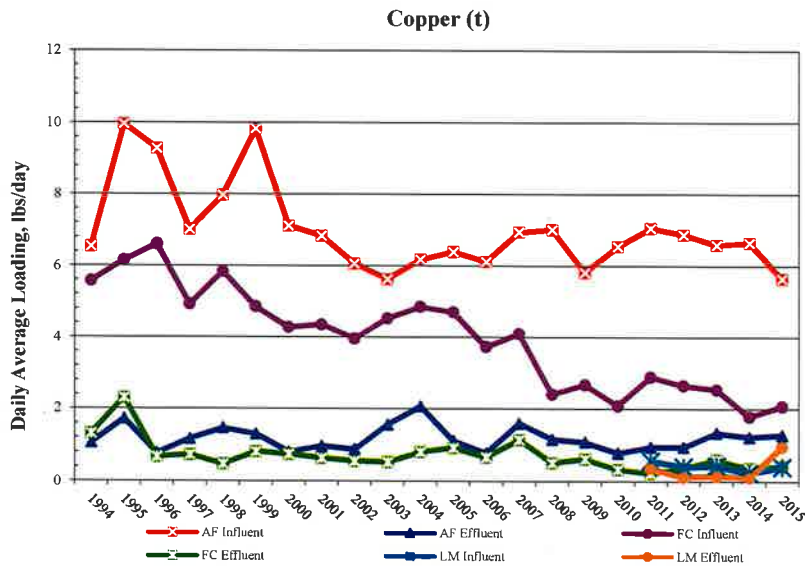
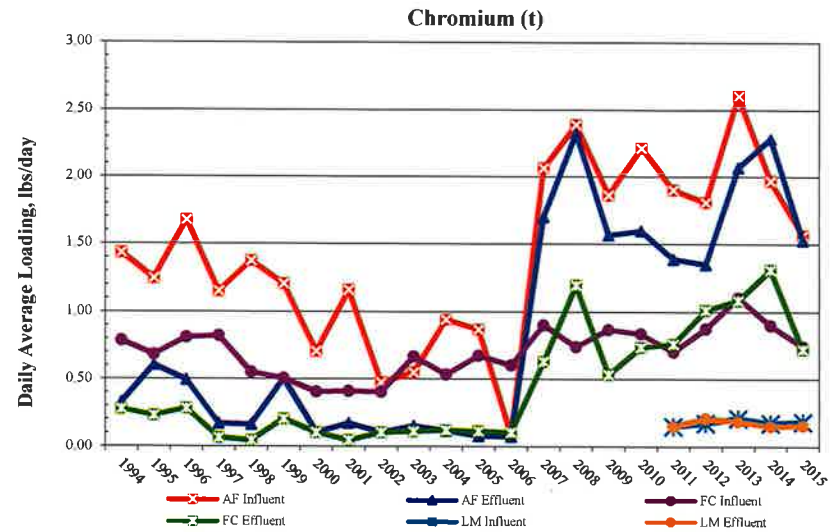
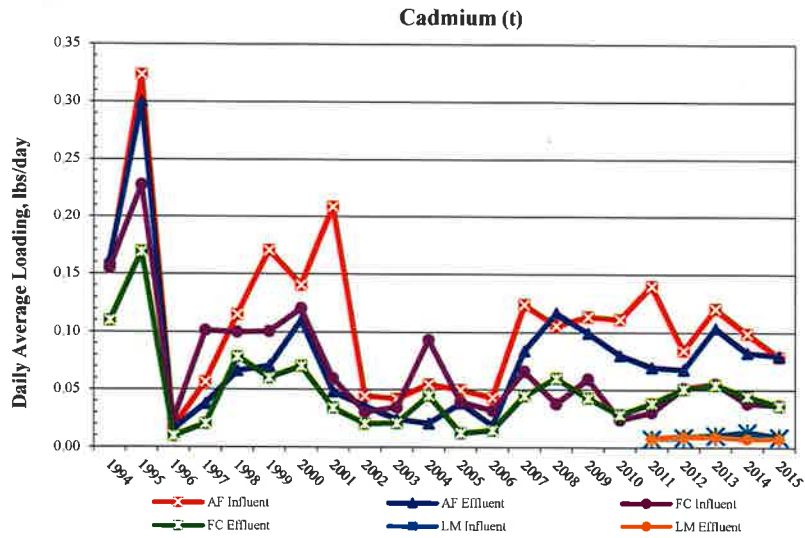
**IU % Contributions**



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

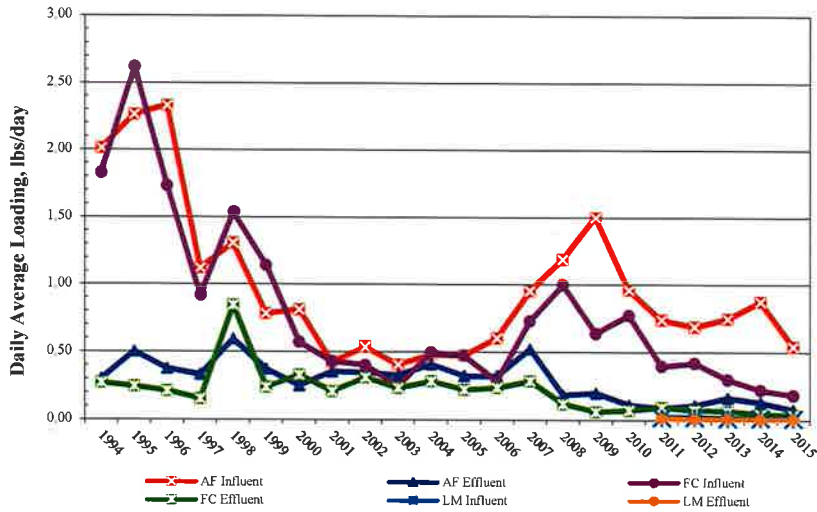


**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
POTW PLANT INFLUENT/FINAL EFFLUENT LOADING TRENDS**

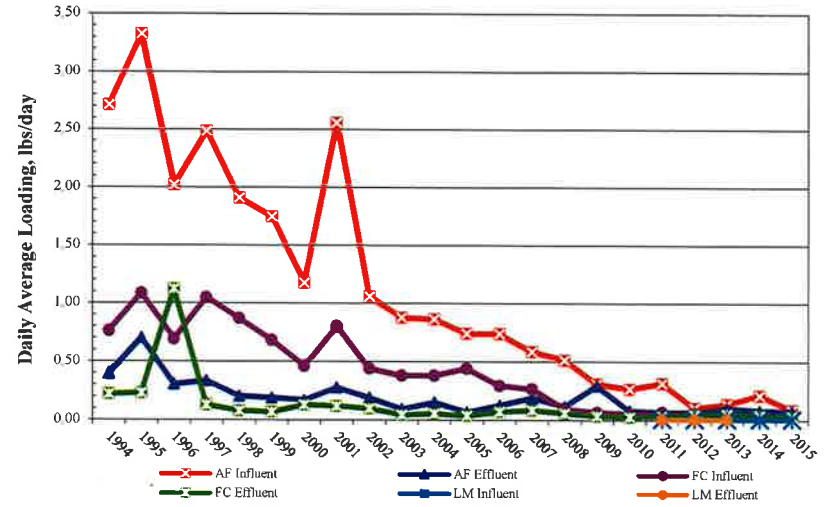


**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
POTW PLANT INFLUENT/FINAL EFFLUENT LOADING TRENDS**

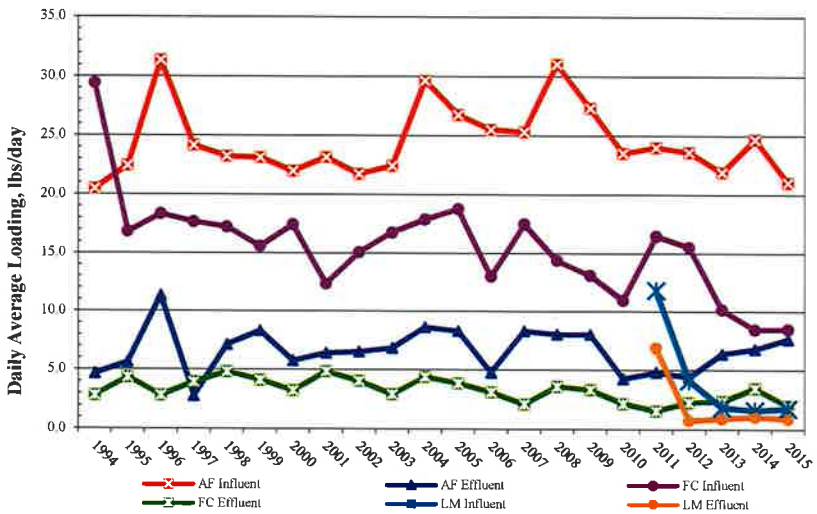
**Lead (t)**



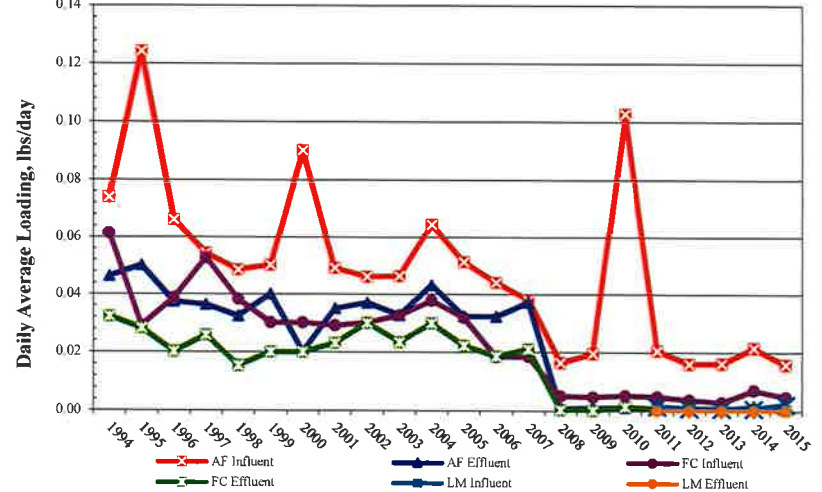
**Silver (t)**



**Zinc (t)**

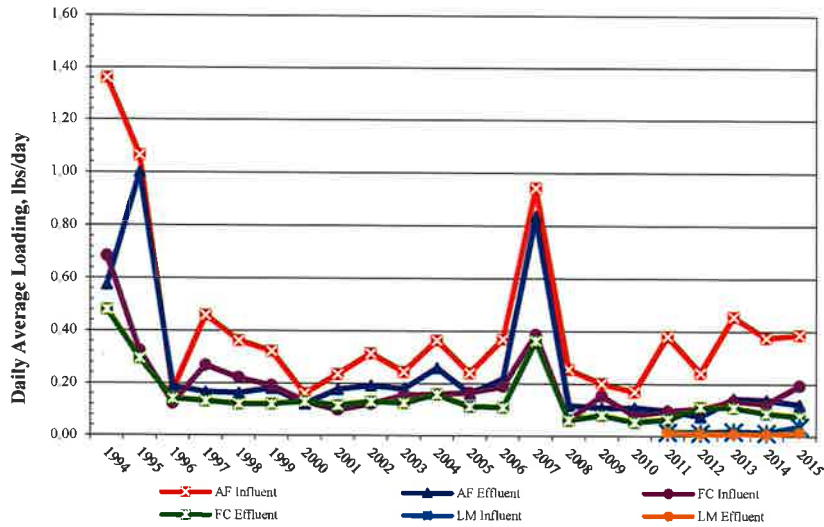


**Mercury (t)**

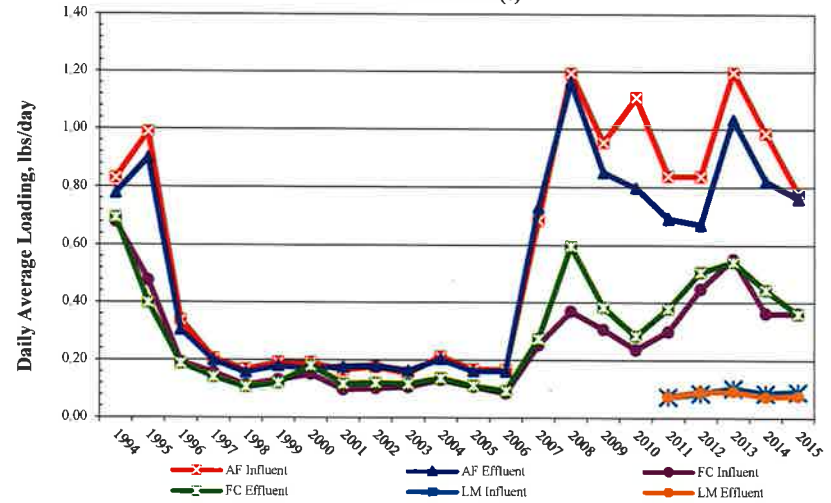


**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
POTW PLANT INFLUENT/FINAL EFFLUENT LOADING TRENDS**

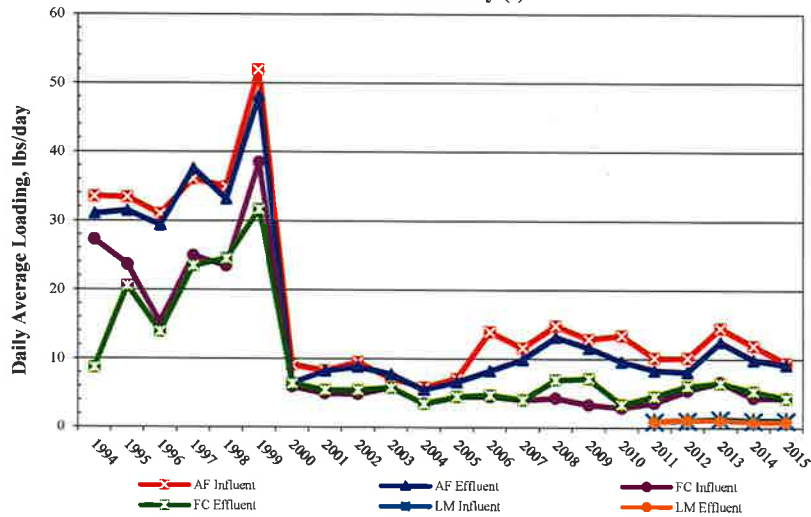
**Arsenic (t)**



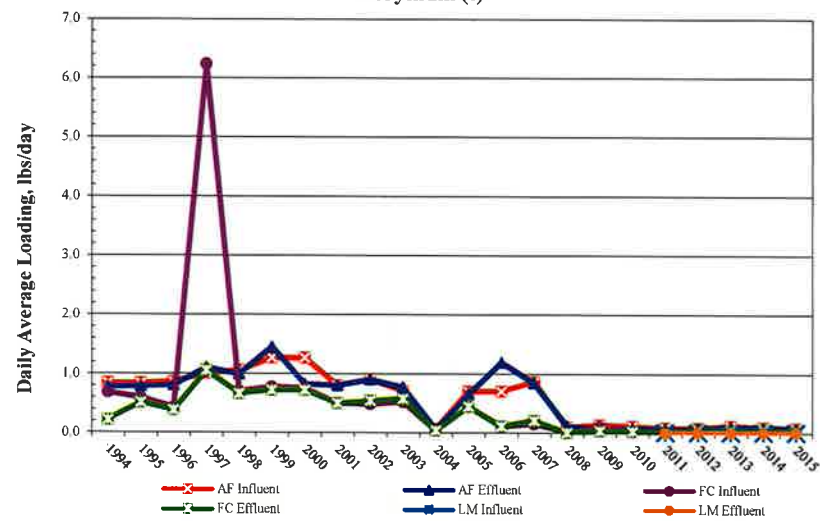
**Selenium (t)**



**Antimony (t)**



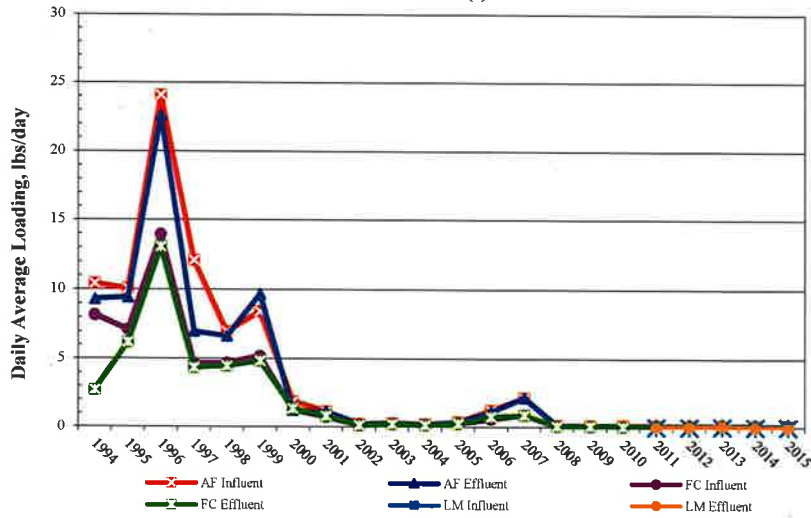
**Beryllium (t)**



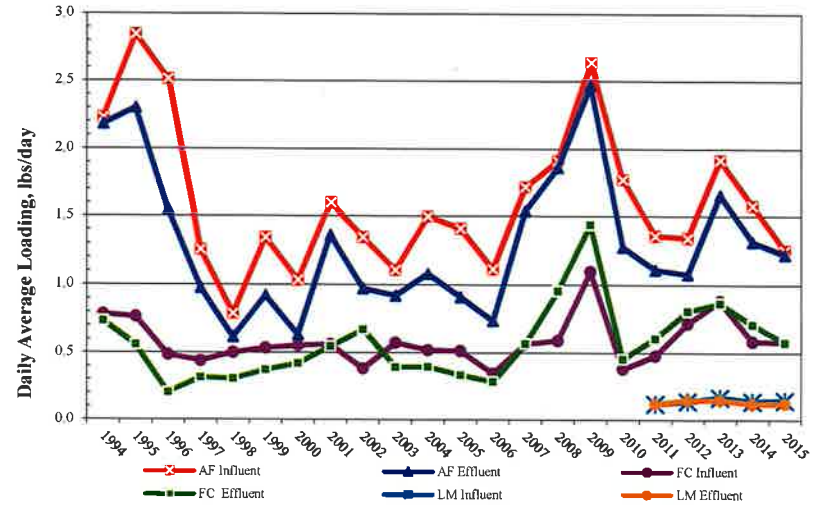


LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 POTW PLANT INFLUENT/FINAL EFFLUENT LOADING TRENDS

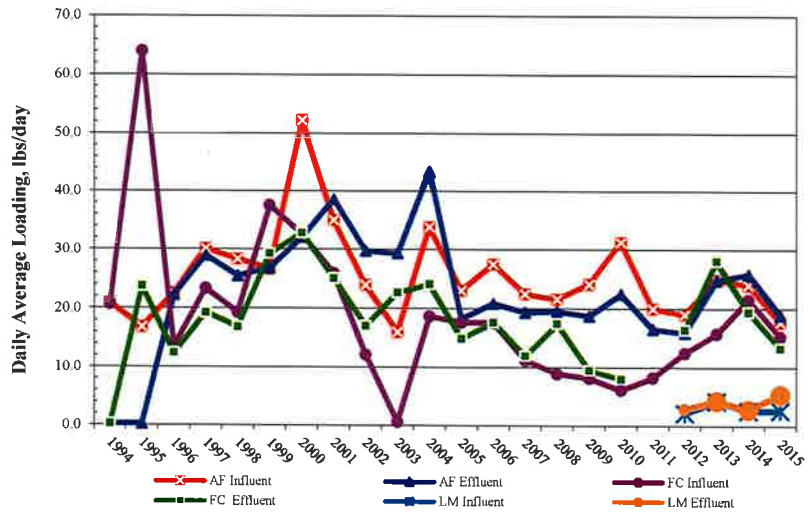
Thallium (t)



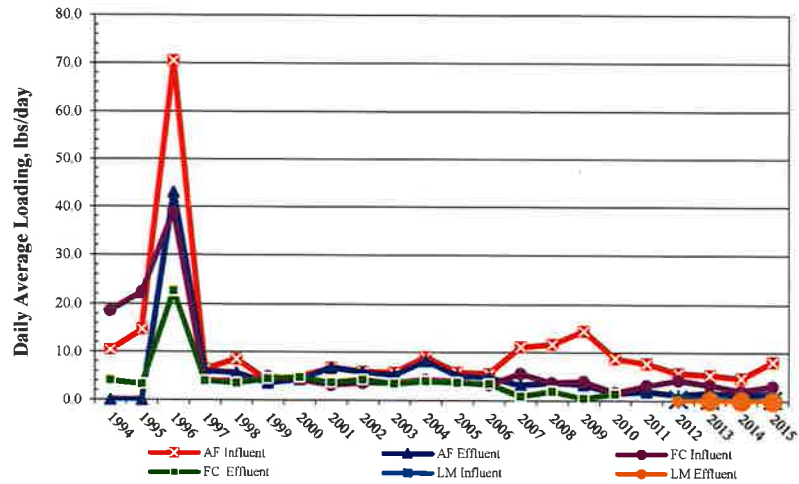
Molybdenum (t)



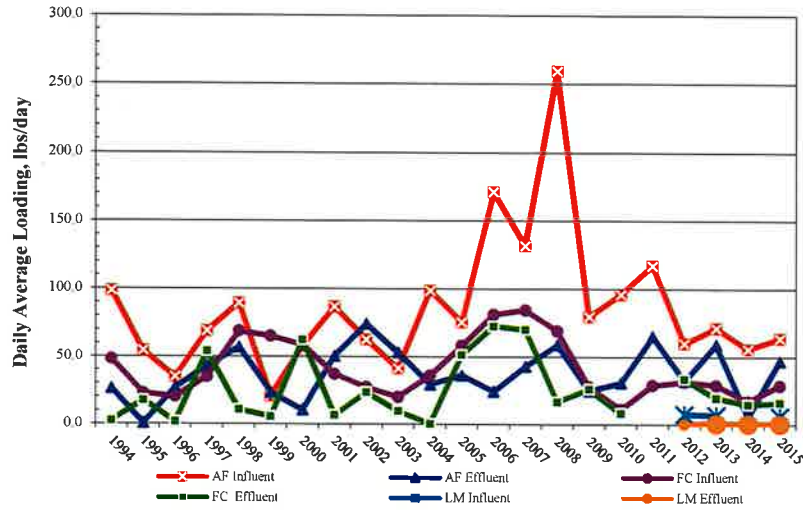
Boron (t)



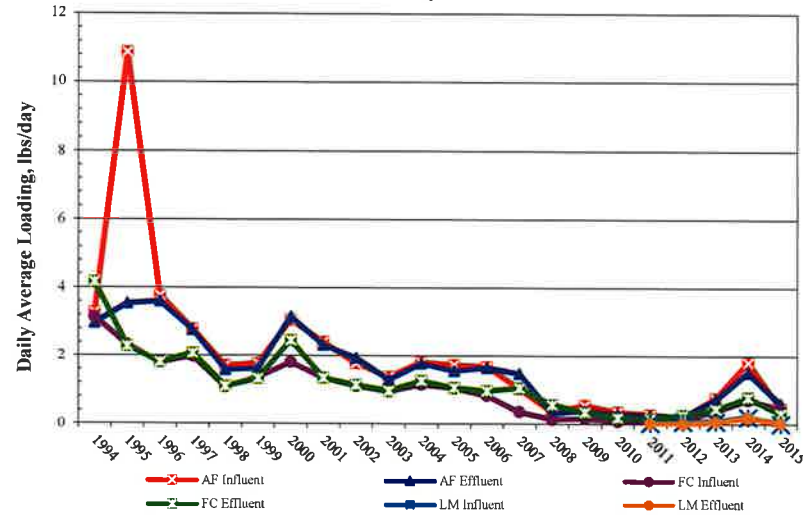
Barium (t)



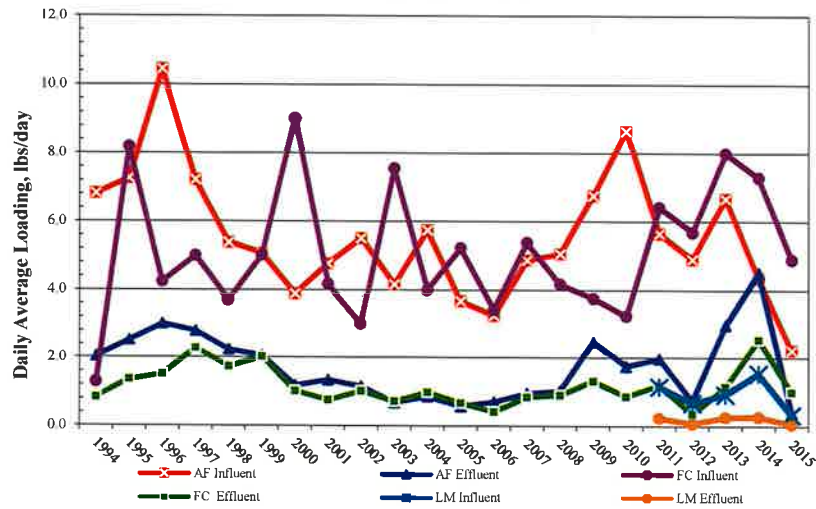
Manganese (t)



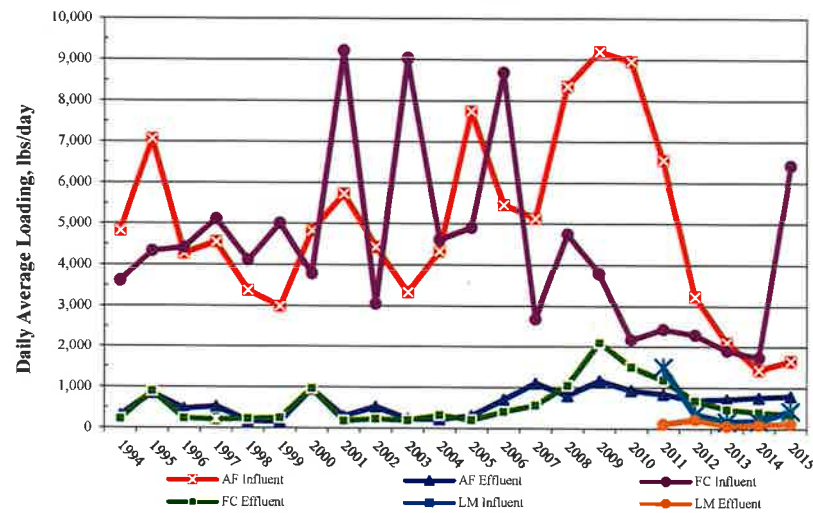
Total Cyanide



Total Phenolics



Oil & Grease



# **SECTION VIII**

**BIOSOLIDS 2015**  
**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 4,862 dry tons of biosolids were land applied during 2015.

Biosolids from Lagoon 3 and 4 were below the ceiling and pollutant concentrations listed in 40 CFR 503. Biosolids from lagoon 3 was land applied (2,188 dry tons) under Class A pathogen requirements stated in 40 CFR 503.32(a)(6). Lagoon 4 was land applied (2,674 dry tons) as Class B pathogen reduction anaerobic process 40 CFR 503.32(b)(3). The data collected prior to land application is organized in the following tables:

- Metal Analyses Summary for FC-WWTP Biosolids Lagoon 3 and 4 - 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 3 and 4 - 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.

**FOURCHE CREEK WASTEWATER TREATMENT PLANT  
BIOSOLIDS 2015-LAGOONS 3 AND 4  
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)	CN-(t)	% solids	solids	pH	
4/13/2015	046-3-001	grab	15	< 0.4	42	360	46	< 2.0	16	20.0	< 7	9	1100	< 13.5	5.93	54.90	7.76	
	046-3-002	grab	13	< 0.4		370	45	< 2.0	16	19.0	< 7		1100		6.04	54.87	7.92	
	046-3-003	grab	13	< 0.4		360	48	< 2.0	17	19.0	< 7		1000		6.18	54.00	7.70	
	046-3-004	grab	14	< 0.4		360	46	< 2.0	16	21.0	< 7		1100		6.22	55.31	7.38	
	046-3-005	grab	14	< 0.4		370	46	< 2.0	16	21.0	< 7		1100		7.5	54.92	7.50	
	046-3-006	grab	14	< 0.4		340	46	< 2.0	15	20.0	< 7		1100		6.29	54.05	7.54	
	<b>Lagoon 3</b>	<b>AVG</b>	<b>14</b>	<b>&lt; 0.4</b>	<b>42</b>	<b>360</b>	<b>46</b>	<b>&lt; 2.0</b>	<b>16</b>	<b>20.0</b>	<b>&lt; 7</b>	<b>9</b>	<b>1083</b>	<b>&lt; 13.5</b>	<b>6.36</b>	<b>54.68</b>	<b>7.63</b>	
4/13/2015	046-4-001	grab	15	< 0.4	46	380	41	< 2.0	9	21.0	< 7	8	1000	< 13.5	5.74	54.29	7.75	
	046-4-002	grab	17	< 0.4		380	44	< 2.0	18	21.0	< 7		1100		5.80	54.89	7.45	
	046-4-003	grab	18	< 0.4		370	54	< 2.0	18	22.0	< 7		1100		5.80	54.99	7.89	
	046-4-004	grab	16	< 0.4		370	40	< 2.0	18	21.0	< 7		1000		5.70	54.41	7.41	
	046-4-005	grab	18	< 0.4		350	42	< 2.0	18	22.0	< 7		1100		5.50	54.35	7.79	
	046-4-006	grab	17	< 0.4		380	41	< 2.0	18	21.0	< 7		1000		5.76	54.37	7.5	
	<b>Lagoon 4</b>	<b>AVG</b>	<b>17</b>	<b>&lt; 0.4</b>	<b>46</b>	<b>372</b>	<b>44</b>	<b>&lt; 2.0</b>	<b>16</b>	<b>21.3</b>	<b>&lt; 7</b>	<b>8</b>	<b>1050</b>	<b>&lt; 13.5</b>	<b>5.72</b>	<b>54.55</b>	<b>7.63</b>	

<b>Average</b>	<b>15</b>	<b>&lt; 0.4</b>	<b>44</b>	<b>366</b>	<b>&lt; 45</b>	<b>&lt; 2.0</b>	<b>16</b>	<b>20.7</b>	<b>&lt; 7</b>	<b>&lt; 8</b>	<b>1067</b>	<b>13.5</b>	<b>6.04</b>	<b>54.61</b>	<b>7.65</b>
<b>Maximum</b>	<b>18</b>	<b>&lt; 0.4</b>	<b>46</b>	<b>380</b>	<b>&lt; 54</b>	<b>&lt; 2.0</b>	<b>&lt; 18</b>	<b>22.0</b>	<b>&lt; 7</b>	<b>&lt; 9</b>	<b>1100</b>	<b>&lt; 13.5</b>	<b>7.5</b>	<b>55.31</b>	<b>7.92</b>
<b>Minimum</b>	<b>13</b>	<b>&lt; 0.4</b>	<b>42</b>	<b>340</b>	<b>&lt; 40</b>	<b>&lt; 2.0</b>	<b>&lt; 9</b>	<b>19.0</b>	<b>&lt; 7</b>	<b>&lt; 8</b>	<b>1000</b>	<b>13.5</b>	<b>5.50</b>	<b>54</b>	<b>7.38</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 2015-LAGOONS 3 AND 4  
NUTRIENTS ANALYSIS SUMMARY**

Sample Date	Sample Location	Sample Type	Test Parameters - Reported in mg/kg dry							
			Nitrate(NO3)	Nitrite(NO2)	Phosphorus	Potassium	Ammonia as N	Total Kjeldahl Nitrogen	PCB*	TCLP*
4/13/2015	046-3-001	Grab	< 9	< 9	39000	3000	14000	42000		
	046-3-002	Grab	< 8	< 8	39000	2800	15000	36000		
	046-3-003	Grab	< 8	< 8	39000	2800	15000	44000		
	046-3-004	Grab	< 7	< 7	39000	3600	11000	41000		
	046-3-005	Grab	< 9	< 9	38000	3200	14000	24000		
	046-3-006	Grab	< 8	< 8	39000	3100	15000	61000		
	<b>Lagoon 3</b>	<b>AVG</b>	<b>&lt; 8</b>	<b>&lt; 8</b>	<b>38833</b>	<b>3083</b>	<b>14000</b>	<b>41333</b>	<b>&lt; 0.2</b>	<b>Pass</b>
4/13/2015	046-4-001	Grab	< 8	< 8	44000	3000	15000	68000		
	046-4-002	Grab	< 9	< 9	43000	3100	14000	38000		
	046-4-003	Grab	< 9	< 9	44000	3100	15000	31000		
	046-4-004	Grab	< 9	< 9	43000	3000	14000	29000		
	046-4-005	Grab	< 9	< 9	42000	3300	15000	40000		
	046-4-006	Grab	< 9	< 9	43000	3000	14000	35000		
	<b>Lagoon 4</b>	<b>AVG</b>	<b>&lt; 9</b>	<b>&lt; 9</b>	<b>43167</b>	<b>3083</b>	<b>14500</b>	<b>40167</b>	<b>&lt; 0.2</b>	<b>Pass</b>

<b>Average</b>	<b>&lt; 9</b>	<b>&lt; 9</b>	<b>41000</b>	<b>3083</b>	<b>14250</b>	<b>40750</b>	<b>&lt; 0.2</b>	<b>Pass</b>
<b>Maximum</b>	<b>&lt; 9</b>	<b>&lt; 9</b>	<b>44000</b>	<b>3600</b>	<b>15000</b>	<b>68000</b>	<b>&lt; 0.2</b>	
<b>Minimum</b>	<b>&lt; 7</b>	<b>&lt; 7</b>	<b>38000</b>	<b>2800</b>	<b>11000</b>	<b>24000</b>	<b>&lt; 0.2</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.

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

