



March 31, 2015

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

RECEIVED

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Ln 9.51

RE: 2014 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 2014 LRW continued activities pursuant to maintaining compliance with the General Pretreatment Regulations (40 CFR 403). Enclosed with this letter is the 2014 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 2014, 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.

Also included in this report is an Updated Industrial User List and LRW's Pretreatment Program Status Report outlining compliance, sampling, and inspection information. The following abbreviations are used in the Pretreatment Program Status Report: C = compliance, NC = noncompliance, SNC = significant noncompliance, RD = received, and NR = not required. LRW is also enclosing information on sampling results for the three (3) Wastewater Treatment Plants influent and effluent and biosolids 2014 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

Stanley Suel  
Signature

3/31/15  
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**

**2014 ANNUAL  
PRETREATMENT  
PROGRAM REPORT**

**Submitted March 31, 2015**

**LITTLE ROCK WASTEWATER  
2014 ANNUAL PRETREATMENT PROGRAM REPORT**

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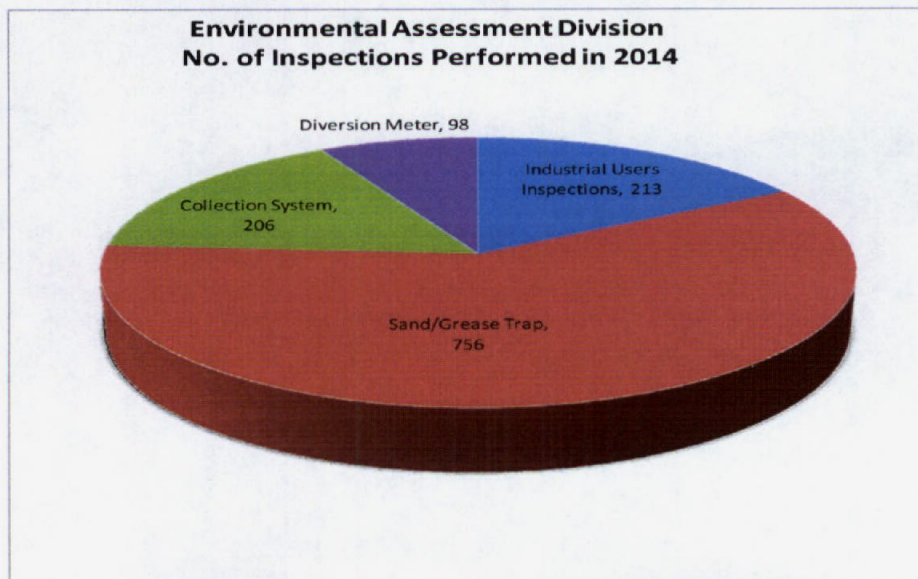
# LITTLE ROCK WASTEWATER ENVIRONMENTAL ASSESSMENT DIVISION

## Approved Pretreatment Program 2014 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 2014. Thirteen (14) of the thirty-four (34) are categorical, subject to federal pretreatment standards. There are an additional seventeen (17) 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 1,273 inspections and investigations were conducted at industrial and commercial facilities. For industries subject to permit requirements, 213 inspections were conducted to evaluate wastewater sources and compliance. EAD also performed 756 Trap/Interceptor Program inspections at commercial facilities as measures to control discharge of prohibited solids and O&G. Trap/Interceptor inspections identified 102 items requiring corrective action. EAD conducted 98 inspections of diversion meters, used for non-sewered flow where users are allowed credit on sewer charges. EAD also conducted 206 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 2014, twelve (12) Violation Reports were completed to track industry 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 \$899,298. The City of Little Rock Sanitary Sewer Committee's adoption of the Consolidated Fee Schedule allowed EAD to administer fees totaling \$116,451 (permits/inspection fees, special discharge fees, Trap Control Program). Additionally, Landfill Leachate billing revenue was \$223,806. (Revenues are itemized in the Funding/Expenditure Report located at the end of this Section.)

During 2014, LRW implemented and accomplished the following pretreatment program activities:

### **Program Development**

- Arkansas Department of Environmental Quality (ADEQ) conducted a Pretreatment Compliance Inspection (PCI) on September 10-11, 2014. LRW Pretreatment Program Supervisor provided program procedures and data to the ADEQ Inspectors. Permitted industrial user (IU) files and sampling/testing records were reviewed. The PCI included site visits to Sage V Foods, Welspun HFW and Interstate Highway Sign. The ADEQ PCI final report stated there were no deficiencies for the LRW Pretreatment Program.
- The 2013 Pretreatment Program Annual Report was submitted to ADEQ in March 2014 by the LRW Pretreatment Program Supervisor. ADEQ responded that the report was reviewed, deemed complete and compliant with Federal Pretreatment reporting requirements in 40 CFR 403.12(i). This report includes the 2013 inspection and sampling activities conducted at permitted industrial users. To track specified pollutant levels/reductions, the report also includes the AF-WWTP, FC-WWTP, and LM-WWTP 2013 influent and effluent sampling data and long term trend charts.
- Pretreatment Program Staff Training:
  1. EAD provided a presentation to the American Society of Plumbing Engineers. The presentation provided a review of regulations and specifications for commercial and industrial construction plan submittals and plan reviews.
  2. Arkansas Children's, Central Arkansas Veterans, and UAMS hospitals requested approval requirements for discharge of wastewater generated from Ebola virus

- patient care in the event such patient is treated on site. LRW responded with approvals and recommendations to operate under the guidance of the Center for Disease Control (CDC) along with notifications to LRW. Pretreatment staff attended a training session provide by the Arkansas State Health Department on the Ebola Virus and Personal Protection Equipment.
3. The Pretreatment Inspectors attended the *Plumbing Inspector Training Course* that was held August 4, 2014, at Arkansas Rural Water Association. Inspectors received their annual training for the Arkansas Department of Health Plumbing Inspectors License.
  4. The Pretreatment Program staff attended the 84<sup>th</sup> Annual AWW & WEA Conference in Hot Springs; April 28-30, 2014.
  5. Pretreatment Program staff worked with LRW Information Services to host an exhibit booth at the Arkansas Hospitality Association trade show on September 17 - 18, 2014. Staff developed and provided handouts listing kitchen best management practices and most common inspection deficiencies.
- EAD staff completed the National Association of Clean Water Agencies (NACWA) Mercury & Dental Amalgam Separator Survey for POTW's. The Federal government has proposed a rule that would put all dentists under the city pretreatment program as subject to wastewater pretreatment standards or specific best management practices. NACWA hosted the survey for POTW's to provide mercury data and oversight efforts to determine if the rule would be over burdensome or efficient for the control of mercury to POTW's.
  - 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.
  - The Pretreatment Program staff provided assistance with coordination of duties for the annual biosolids lagoon sample collection, delivery, and custody records. Biosolids were certified as Class A Exceptional Quality. (see Section VIII).

### **Industrial Relations**

- In 2014 LRW mailed out thirty-five (35) Pretreatment Excellence Certificates Awards to those industries with perfect compliance for 2013.
- Special permitting activities in 2014 (new, modifications/extensions, and closures):
  1. Diamond Bear Brewery: Site visits confirmed the removal of processing equipment. The IU shut down production in May 2014 at the Little Rock location and began production in North Little Rock. LRW inspection showed all equipment has been removed and the Little Rock facility is now vacant. Industrial Wastewater Discharge Permit No. N-19 is now closed.



2. Griffin Industries: The Industrial Wastewater Permit for the South Woodrow Street location was closed in 2014. The IU ceased production (hog hide curing) and the facility is for sale. A closure inspection confirmed there was no potential to reopen and commence discharge of process wastewater.
3. Little Rock Medical Associates (Doctor's Hospital) facility demolition was completed. A new facility named LRMA Midtowne Clinic remains on site. Industrial Wastewater Discharge Permit No. S-26 for Doctors Hospital was closed effective May 31, 2014.
4. Michels Pipeline Construction requested to discharge water from pressure testing of a 12" steel natural gas pipe installed under the Arkansas River. This construction was part of the CenterPoint Energy Broadway Bridge project. LRW issued a Restricted Short Term Authorization (RSTA) for the one time discharge. Inspection at Markham and Arch Street construction was conducted to evaluate discharge control, filters, time line and to identify an approved discharge point. The source of the water was a Little Rock fire hydrant. LRW calculated a volume of 22,324 gallons based on diameter and length of the pipe. The discharge into the collection system was completed and RSTA closed.
5. Ozark Ridge Landfill (Waste Management) submitted an Industrial Wastewater Discharge Permit Application for the landfill located near Danville, Arkansas. Ozark Ridge Landfill was permitted from 2008 to 2012 to utilize LRW as an alternate disposal location of leachate should their primary disposal site discontinue service. No loads of leachate were delivered during that period and the permit was closed; however, Waste Management requested the permit to be reopened for leachate disposal on an as needed basis. An inspection was conducted and leachate test data provided by Ozark Ridge Landfill showed compliance with LRW limits. A Special Landfill Leachate Wastewater Discharge Permit No. SP-L6 was issued to Ozark Ridge Landfill. The permit restricts 6,000 gallon leachate tanker loads to 3/day to Adams Field-WWTP. Leachate charge rate is \$0.10 per gallon based on the LRW Consolidated Fee Schedule.
6. Shooting Star Beverages formerly known as Mountain Pure Holdings, LLC, requested the permit be renewed under new ownership. A new signatory authority was provided. A permit renewal inspection was conducted. No changes were noted in the production areas. New management is in the process of establishing products and making slight renovations to the equipment currently in place. The primary business will be fruit juices with some bottled water and tea production. Permit was issued to Shooting Star Beverage.
7. In February 2014, Welspun Tubular HFW commenced discharge from the phosphoric acid coating operation. This is the core metal finishing operation. The IU is classified and permitted under the 40 CFR 433 Metal Finishing category. The IU sampled for all parameters regulated by the 40 CFR 433 Metal Finishing Pretreatment Standards and submitted a compliance report within 90 days of commencement of discharge. The pretreatment standards are listed in the Industrial Wastewater Discharge Permit. The 90 day compliance report demonstrated compliance with the Metal Finishing Pretreatment Standards.

- For 2014, no industry was in Significant Non Compliance (SNC) as defined by 40 CFR 403. 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(s)	Violation of Max. Limit	
		LRW	Self			Daily (S.U.)	Monthly
Hiland Dairy	1/13/2014	X		pH	4.42	5.0-12.0	n/a
Hiland Dairy	2/12/2014	X		pH	12.25	5.0-12.0	n/a
Mountain Pure Holdings	4/9/2014	X		pH	4.62	5.0-12.0	n/a
Welspun Tubular HFW	4/16/2014	X		pH	2.65	5.0-12.0	n/a
Baptist Medical Center	7/15/2014	X		pH	3.15	5.0-12.0	n/a
Hiland Dairy	7/21/2014	X		pH	1.88, 1.89, 1.89, 1.90	5.0-12.0	n/a
Welspun Tubular HFW	9/29/2014	X		pH	4.03	5.0-12.0	n/a
Hiland Dairy	10/15/2014	X		pH	12.02	5.0-12.0	n/a
Hiland Dairy	10/16/2014	X		pH	2.53	5.0-12.0	n/a
Hiland Dairy	10/20/2014	X		pH	2.58	5.0-12.0	n/a
Hiland Dairy	10/23/2014	X		pH	2.29	5.0-12.0	n/a
Hiland Dairy	10/27/2014	X		pH	2.41, 2.43	5.0-12.0	n/a

- During 2014, Hiland Dairy experienced eight (8) days where 12 pH measurements were in violation. For the year, a total of 46 measurements were performed for a yearly in compliance rating of 74%. A Notice of Violation (NOV) letter was issued to the IU after the July excursions. These pH values were collected to allow the IU to confirm mixing problems with the equalization system. The Plant Supervisor's response indicated that most of the violations occurred by problems with neutralization of sanitizing chemicals due to improper mixing in the equalization tank or when adjusting clean line chemical feeds. For each excursion, follow-up sampling showed return to compliance.
- Sampling on April 9, 2014, at Mountain Pure Holdings resulted in a pH violation (reported value 4.62 S.U.). A demand inspection was conducted to discuss the pH violation. The pH violation occurred when a clog or air pocket formed in the discharge line of the pasteurizer after the fruit juice mixing tanks were cleaned. This caused a backup of the wastewater that was intended for the neutralization silo to discharge to a floor drain in the fruit juice mixing room that discharges directly to the outfall. The IU has returned to compliance.
- Welspun Tubular HFW - A pH violation (2.65 S.U.) was revealed on April 16, 2014. A site visit conducted by LRW revealed that the coating line operator failed to maintain the components of the automatic pH neutralization system. A

second violation in September was due to a faulty pH probe. The IU returned to compliance.

4. Baptist Health Medical Center – Little Rock (BHMC-LR): LRW sampling revealed a pH violation with a value of 3.15 S.U. The IU was notified and the pH. LRW re-sample provided two return to compliance values. Subsequent inspection by LRW revealed an ONCORE Medical Waste Management System was installed earlier this year without proper notification to LRW. This system was installed to treat red bag waste in place of autoclave sterilization; but, BHMC-LR does not believe it caused the low pH. The cause of the pH violation remains undetermined.

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

- Permitted IU investigations and actions implemented:
  1. Arkansas Children's Hospital (ACH) requested authorization to discharge from their patient decontamination tank. This tank collects wastewater from patient wash down when patients arrive and need to be cleaned of substances. ACH submitted a decontamination tank event log listing all the washings conducted. LRW sampled and tested the tank water for fuel components (BTEX) and pH analysis. Receipt of the lab data showed no detections for pollutants of concern and an approval to discharge was granted. An invoice was mailed to ACH for laboratory fees associated with the testing.
  2. Arkansas Children's Hospital (ACH) requested information on LRW policies should a radioactive event occur that results in collected wastewater from patient decontamination. Hospitals operate decontamination systems with wastewater going to holding tanks to batch discharge with LRW approval. ACH written policy/procedures cover certain decon scenarios including joint operations with local hospitals to insure the policy/procedure covers concerns by all entities involved, including LRW and Arkansas Department of Health. A letter was provided to ACH pointing out regulation by the United States Nuclear Regulatory Commission (NRC), Environmental Protection Agency, and LRW Pretreatment Ordinance to incorporate into the development of the policy/procedure. The Pretreatment Ordinance prohibits radioactive waste or isotopes except in compliance with State and Federal regulations.
  3. Baptist Health Medical Center – Little Rock (BHMC-LR): An inspection at BHMC-LR revealed the installation of the Oncore Waste Management System (chlorine dioxide treatment) to replace the autoclave steam sterilizer for red bag waste (biohazard). The sterilization solutions are neutralized to 7-9 S.U. prior to being discharged to the sanitary sewer. A NOV was sent to BMHC-LR for failure to notify LRW prior to the introduction of new wastewater or pollutants being discharged to the sanitary sewer. The letter listed items needed that will allow LRW proper evaluation of the new system. Pretreatment Inspectors evaluated other local hospitals in the city and BMHC-LR appears to be the only hospital using this new disposal method. LRW received written response to the

- NOV. BHMC-LR agreed to change its review methods for projects involving wastewater by ensuring plans are submitted to LRW for approval.
4. Dassault Falcon Jet submitted construction plans for a new fourteen bay hangar for the production of larger aircraft. The hangar will house processes for installation of cabinetry, wiring, avionics, carpet, and other accessories to finish out to customer specifications. Review of the plans showed no new sources of regulated wastewater. All existing regulated wastewater applicable to Code of Federal Regulations Title 40, Part 433 for Metal Finishing is treated through an industrial evaporator. This project is currently under construction.
  5. Interstate 30 Tank Wash and Scale was issued two NOV letters in October. The first NOV was delivered after LRW inspection revealed permit required best management practices (BMPs) for tanker heel removal prior to a tanker wash out were not followed. The second NOV was delivered after a pH violation (2.10 S.U) occurred during routine LRW sampling. Review of wash records showed the IU washed out an Oakley hopper truck containing residual PLT litter acidifier (Sodium Bisulfate), a material that is not on the Permit Approved Wash List (BMP). Material Safety Data Sheets from Oakley states this material is considered a hazardous waste by the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is restricted from discharging into the sanitary sewer. The IU returned to compliance for the pH violation. LRW Operations and Maintenance Divisions were notified of the low pH. Review of Adams Field - WWTP influent pH trends showed no effect. The IU submitted a written response to the NOV and site visits now confirm the facility is following permit required BMPs for heel removal prior to tanker wash outs.
  6. Jack Wilson Water Treatment Plant (CAW) requested to discharge a diluted solution of fluorosilicic acid that leaked into spill containment. A site inspection confirmed a pressure gauge broke off the PVC pipe connection allowing concentrated fluorosilicic acid (100 gallons with pH 1.0 S.U.) to leak and mix with 400 gallons of water within the spill containment area. The fluorosilicic acid solution was neutralized to a pH of 10.74 S.U. LRW approved the solution to be discharged into the collection system at Manhole -2C093 at a rate of 10 gallons/hour as a precautionary measure. This discharge was completed as directed by LRW.
  7. City of Little Rock Public Works (Public Works) requested assistance with an unknown flow of water through a storm pipe located at the corner of Baseline and Scott Hamilton. Public Works asked LRW to verify whether or not the unknown flow was wastewater from the adjacent Fun Wash laundry. EAD conducted dye testing and collected samples for a fecal coliform analysis which confirmed the water entering the storm drain was not commercial/domestic sewage. Further LRW investigation found that an unknown storm water source in an adjacent wooded area flowed under a building and into the storm pipe.
  8. Sage V Foods - A NOV letter dated January 2014 was mailed to the IU for the following items:
    - a. December 2013 violation of the "Agreement" day maximum loading for BOD.

- b. Failure to notify of accidental spill/slug discharge during loss of rice grains from production problems.

The FC-WWTP influent grit chamber dumpster was found full of rice grains. This initiated an inspection at Sage V Foods. The IU agreed that they failed to notify LRW of the production problems and subsequent loading to the pretreatment system. The IU stated one of the blanchers over-cooked a production batch; therefore, a large amount of rice was dumped to the pretreatment pit. The pretreatment shaker screens were in operation but it is unknown how much of the rice passed through for discharge to FC-WWTP. The December BOD was a separate occurrence that was revealed after LRW received the December 2013 IU flow report and calculated the average day BOD loading. The IU provided a written response with corrective actions to a recent slug discharge and violation of the maximum BOD loading.

9. Welspun Tubular HFW - The IU was in violation of the Industrial Wastewater Discharge Permit requirement to notify LRW prior to batch discharges from the mill recirculation pits. A NOV letter was mailed to the IU. LRW received a request for discharge but upon arrival to inspect the pits, found the hydro test pit already near empty. Plant management was informed onsite of the permit violation. LRW inspection of the pits is required prior to discharge due to heavy use of hydraulic oils on the adjacent pipe mill. Oil spills were noticed near the pit area but it is unknown if the pit was contaminated since discharge occurred before the inspection. Subsequent inspection of the LRW Port Pump Station and FC-WWTP primary clarifiers showed no surface residuals of hydraulic oils.
- EAD mailed forty-seven (47) Wastewater Survey Forms to those industries identified as having a component that may cause it to be subject to pretreatment program requirements. The 2014 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 Water list of users who bought over 730 hundred cubic feet of water in 2013,
  2. The Arkansas Directory of Manufacturers for the Little Rock area published by the Arkansas Economic Development Commission,
  3. Central Arkansas Membership Directory published by the Little Rock Chamber of Commerce,
  4. The ADEQ Hazardous Waste Generators List,
  5. Telephone Directory,
  6. New construction plans as routed by City Planning,
  7. Pretreatment inspectors surveyed the LM-WWTP sub-basin in search of IUs that may discharge to the LM-WWTP. A map was provided by Engineering GIS to show sewer line contributions with preexisting commercial sources as logged in the EAD database. The survey concluded to confirm there are no known facilities found that are subject to Code of Federal Regulations pretreatment standards, or

with wastewater quantities or impacts at Significant Industrial User or extra strength surcharge levels. With no IUs the LM-WWTP Pretreatment Program influent and effluent monitoring requirements (NPDES AR0050849 Part II 9.C.) monitoring frequencies were reduced from quarterly to yearly.

8. Addition IU surveys mailed to the small brewery group:
  - a. Lost Forty Brewery 510 Mclean Street,
  - b. Refine Ale Brewery 2221 Cedar Street,
  - c. Blue Canoe Brewing Company 425 East 3<sup>rd</sup> Street,
  - d. Flyway Brewing 700 East 9<sup>th</sup> Street.
  
- Inspections/evaluations for the 2014 Survey Screening Processes:
  1. Advanced Bath & Kitchen, LLC 1010 Jessie Road – The facility has a stone cutting operation. There are two cutting tables that use recycled water to cut countertops. The recycling unit removes what solids settle out from the flow. Floor drains located in the warehouse (trench drains) all drain to the recycling unit. There are no chemicals used in the process and no discharge of process wastewater to the sanitary sewer.
  2. Antique Brick Inc. 1609 East 9<sup>th</sup> Street - Inspection showed domestic wastewater only.
  3. Arkansas Sheet Metal Company 2706 West 11<sup>th</sup> Street – This facility supplies HVAC equipment to customers. Sheet metal is cut or broke to create customer specifications and standard duct work for HVAC. No chemicals are used in the process and there is no access to the sanitary sewer in the work area.
  4. Berg and Son Machine Shop 1201 East 8<sup>th</sup> Street – The primary business is creating plastic molds and specialized plastic forms for customers by grinding or drilling plastic blocks purchased or supplied. Plastic shavings from the process are swept up and recycled. No floor drains were evident in the process area and the facility appears to be domestic discharge only.
  5. Carter Radiator Shop 2505 Wright Avenue – A survey inspection was performed at Carter Radiator Shop to observe the pretreatment system that the shop uses to dispose of the wastewater that is generated from radiator repair. Process water is pumped to a tank where flocculants are added. Sludge is removed, dried and disposed of offsite by Crystal Clean. The water that is retained from the sludge is evaporated off in another heated holding tank. There was one floor drain located in a trench drain in the center of the shop that was sealed on November 1, 2000.
  6. CARTI Cancer Center 8901 Riley Drive - Construction plans were reviewed. Plans show an acceptable total flow monitoring manhole. Due to identification of a PETNET laboratory, it was noted on the City Plan Approval Form that operations applicable to 40 CFR 439 Pharmaceutical Manufacturing Subpart C Chemical Synthesis must submit a baseline monitoring report (40CFR403.12) and provide an end of process monitoring location unless the operation is zero discharge.
  7. Casa Blanca Granite Marble & Tile, LLC 8124 Stagecoach Road – This facility cuts and grinds stone for cabinetry, counter tops, flooring, and other uses. Saws and cutting equipment utilize water as a medium to reduce damage to the product

- and lubrication of the blade to prevent overheating. No chemicals are used in the water and it is allowed to flow onto the floor and out to the storm drain. Pictures were provided to Public Works.
8. Creative Engineering Consults 1823 East 17<sup>th</sup> Street – The facility once utilized different types of ore (stone) to produce aggregate for grinding wheels. The facility is now a provider of micro-grinding machines. There are no floor drains in the process area. The facility appears to be domestic discharge only to the sanitary sewer.
  9. Entergy 5001 Thibault Road – Processes performed are transformer repair, testing, and distribution. Entergy operates a paint booth where transformers are painted before going back into service. In the paint booth is a water curtain to control fumes and mist. Underneath the curtain is a holding tank where the water is contained.
  10. Entergy's Transmission Operations Center 13019 Vimy Ridge Road - Construction plans were reviewed. LRW is requiring the private manhole to be installed in accordance to LRW sampling/inspection manhole specifications. An Industrial User Survey Form indicates wastewater is domestic only at this time.
  11. G&K Services, an industrial laundry is locating in Little Rock. An Industrial Wastewater Discharge Permit Application has been provided to G&K representatives. G&K provided construction plans for the building renovation project at 5510 West 65<sup>th</sup> Street. This building will house a new industrial laundry with pretreatment of wastewater (EQ, solids screening and DAF) prior to discharging to the sanitary sewer. With the pretreatment system, the IU estimates conventional pollutants will be below extra strength surcharge levels. Start up is planned for May 2015. Based on process average flow, > 25, 000 gpd, the IU will be classified as an Significant Industrial User as defined by EPA Pretreatment Regulations (40CFR403).
  12. J&M Foods 9100 Frazier Pike – This facility manufactures cheese straws, cookie straws and cookies for the market. Best management practices are followed to minimize the solids going into the grease interceptor. J&M Foods is on a cleaning schedule with Brooks Grease Services to maintain their interceptor. Water usage is 785 gallons per day.
  13. Kent Walker Artisan Cheese 1515 East 4<sup>th</sup> Street - A site visit was conducted in response to a report of whey being disposed of to the sewer. The inspection revealed the whey had been discharged to the storm drain. Mr. Walker was re-informed of the requirements not to discharge production waste (whey) to the sanitary sewer or storm drains. This requirement was stated in the LRW letter to Mr. Walker dated March 7, 2014, that addressed LRW requirements for a proposed location at 6<sup>th</sup> and Main Street. The business owner contacted LRW about relocating to 322 Cross Street, with plans to connect to the 2000 gallon interceptor owned by Dempsey Bakery (building tenant). This was not approved by LRW.
  14. Lost Forty Brewery - W.E.R. Architects/Planners proposed a new craft brewing facility to be located at 510 McClean Street. LRW provided requirements before renovation began. After becoming aware of construction, a site visit was conducted and several fermenter tanks were installed along with the brew kettle

- and mash hopper. The facility has started production. Further evaluation pending.
15. Magna IV Color Imaging 2401 Commercial Lane – This facility is a commercial printer of brochures, postcards, sales flyers, etc. Wastewater discharge sources are the paper coating and fountain solution from the presses and the finisher/developer from the plate developer. The MSDS were reviewed for all of the products used in these processes. During press cleanup the facility discharges spent fountain solutions and paper coating solutions from the press trays. The LRW inspection revealed a cloudy white wastewater coming from a double cleanout near the production building and discharging to a nearby storm drain. A build up of crystalline solids was around the cleanout. TV video of downstream sewer lines looked good. COD concentration values are below surcharge. Contact was made with the company requiring corrective actions to cease illicit discharge (overflow) of process wastewater to the storm drain. Pictures of the overflow were forwarded to Public Works. Magna IV corrected the overflow and cleaned the private sewer lines.
  16. Performance Radiator Shop 3901 Asher Avenue – All of the testing tanks and repair equipment have been removed. The principle operation of the facility is sales of new radiators only, no installation. In the case of a used radiator left at the facility, it is placed in a metal recycling bin and sent to Sol Alman.
  17. Ring Container Technologies 9000 Frazier Pike – This facility makes blow molded containers for Skippy Foods LLC. The only discharge is domestic. Non-contact cooling water for the blow molding machines is in a closed circuit through a chiller system. Currently, Ring Container Technologies is expanding their warehouse capacity to accommodate new orders to make containers for a peanut butter manufacture in Louisville, Kentucky.
  18. River City Radiator, Inc 1801 East 23<sup>rd</sup> Street – Domestic discharge only to the sanitary sewer. There are no floor drains or connections in the main shop area where leak testing or radiator cleaning occurs. One test pit, used to test radiator forms for the fracking industry, does connect to the storm drain. Public Works was notified.
  19. Southwest Radiator Shop 4201 Baseline Road – The facility provided information on the radiator repair process and indicated their process wastewater is pretreated by pH neutralization and flocculants are added to settle out the heavy metals. The owner advised that he has the sludge hauled off as hazardous waste and that the treated wastewater is discharged to the sewer via a cleanout cap located on his property. Past practices of process wastewater evaporation has been discontinued and Southwest Radiator solely relies on pretreatment to minimize pollutants of concern prior to discharging to the sanitary sewer. A follow-up inspection was conducted to clarify the pretreatment process and obtain samples from the pretreatment tank and the storm ditch located behind the shop where the test tank water is discharged. The pretreatment tank test results showed high levels of heavy metals. On June 25, 2014, LRW hand delivered a NOV letter for unpermitted discharge and all drains were sealed by the shop and wastewater is now closed looped. With zero discharge the facility does not meet current LRW



permitting criteria. Public Works was notified of the test tank discharges to storm water ditch.

20. Survey inspections were conducted at nine (9) local pest control business. Various pesticide chemicals are stored in work areas. All chemicals are made up as needed with no discharge of wastewater. A rinsate process (triple rinse) is conducted to ensure all containers are free of pesticides and safe for disposal into the trash. The solutions from the rinsate process are poured into containers and mixed in with the next job batches.

- Grease related Sanitary Sewer Overflows (SSO) Collection System Investigations

1. A sewer main break near 6201 Colonel Glenn Road showed a discoloration of the effluent (green color). EAD provided assistance in determining the automated car wash nearby to be the cause of the discoloration. Contact was made with the owner of the car wash to obtain a MSDS for the chemicals used in the wash cycles. The owner advised the wax turns the liquid green when it comes in contact with water. Review of the MSDS shows the chemical at full concentration is a pH of 1 to 4. A pH sample was obtained and no violation was noted.
2. Brookside Health and Rehabilitation 800 Brookside Drive – LRW received a call from the facility stating that the sewer was backing up into their building. The grease interceptor was inspected and the chambers were full. LRW Maintenance crew verified that LRW lines were clear and the blockage was in the private lines. Public Works was notified and corrective actions were completed.
3. Cupcakes on Kavanaugh/Red Mango 5625 and 5621 Kavanaugh Boulevard – LRW Dispatch notified EAD of the water leaking to the curb and flowing down the street at this location. Cupcakes on Kavanaugh and Red Mango share the responsibility of a grease interceptor. Connections to the grease interceptor were dye tested to verify or eliminate the grease interceptor as the source of the leak. The following day the dye was present in the water discharging onto Fillmore Street curb verifying the grease interceptor or related piping was the source. The discharge onto Fillmore Street was also tested by LRW for the presence of fecal coliform bacteria and came back positive, too numerous to count. Cupcakes on Kavanaugh and Red Mango were both notified by letter of the presence of domestic waste in the discharge to Fillmore Street and corrective actions were required. The businesses hired plumbers that identified the source of the leaking system, and have reported piping under the building will need repair. Public Works was notified.
4. McDonalds 8820 Baseline Road – An active overflow investigation was conducted due to wastewater flowing from the service line cleanout. The grease interceptor was in need of cleaning and a verbal requirement was made to clean the interceptor. A Notice of Violation letter for an active overflow was mailed to McDonalds. The grease interceptor was cleaned and overflow corrected.
5. Raceway Convenience Store 6425 South University Avenue – A grease interceptor overflow occurred. The owner advised that a plumber was scheduled

to come and re-clean the grease interceptor. The grease interceptor and the sample inspection manhole was pressure washed and the cleanout cap replaced.

6. The Catch 1407 John Barrow Road – The Arkansas Department of Health contacted LRW and reported sewer overflowing from the building and out into the back alley. LRW arrived and conducted an investigation to determine the cause. Sewer was seen overflowing from the cleanout caps of the building's sewer caused by a blockage in the private line. The management company hired a plumber to provide corrective action to fix the problem. Public Works was notified.

### **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.

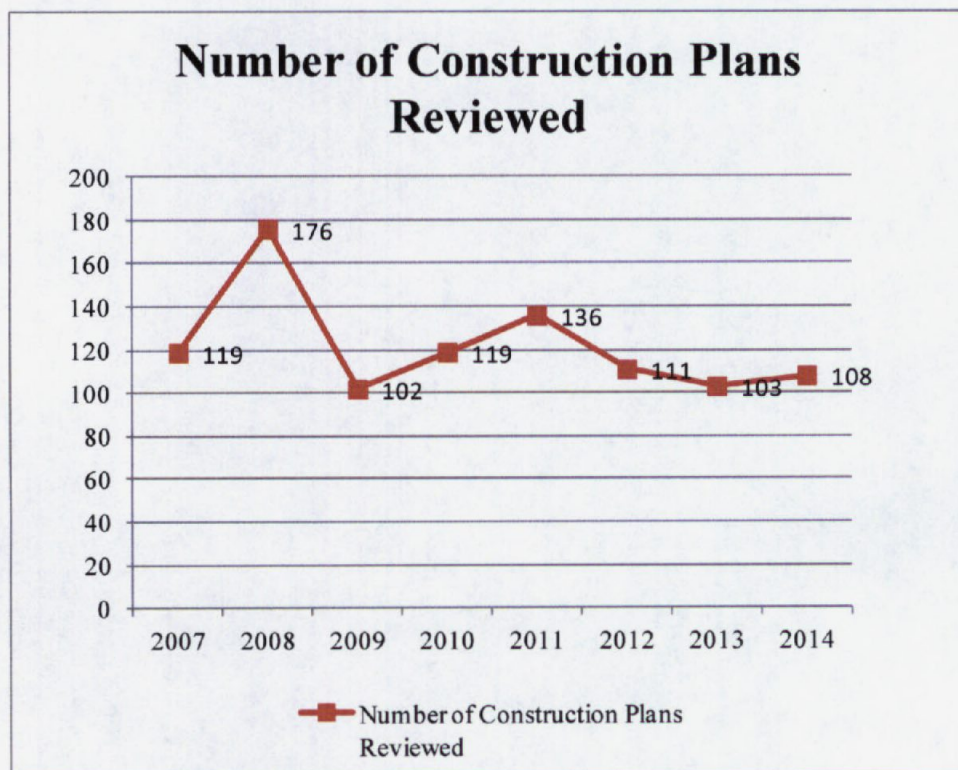
A total of 108 Construction Plans were reviewed with fifty-one (51) Grease or Sand Interceptor Sizing Approvals Forms issued in 2014. EAD reviews all commercial construction plans for new facilities which may require a sand, grease, or lint interceptor.

### **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, 2014 through December 31, 2014

<b>II. Trap Control Compliance Monitoring</b>		
1.	Number of Trap Inspections Performed	756
2.	Number of Traps Requiring Cleaning	57
3.	Number of Traps Requiring Cleanout Replacement or Repair	45
4.	Number of Traps Requiring Repair	0
5.	Number of Facilities Requiring Trap Installation	0

<b>III. Enforcement Actions</b>		
1.	Number of Notice of Violations (NOV) Issued	0
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)	\$900



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

	<u>2014 Actual</u>	<u>2015 Estimated</u>
<b>Funding</b>		
Surcharge Program	\$899,298	\$917,284
Landfill Leachate Program	\$223,806	\$228,282
Permitted Industrial Wastewater Discharge Fees	\$70,897	\$72,315
Trap/Interceptor Control Program Fees	\$900	\$918
Domestic Septage Waste Hauler Fees	\$24,645	\$25,138
Landfill Permit Fees	\$2,130	\$2,173
Diversion / Sewer Meter Fees	\$15,384	\$15,692
HLW/Special Discharge-Restricted Short Term Fees	\$2,496	\$2,546
<b>Total Funding</b>	<b>\$1,239,556</b>	<b>\$1,264,347</b>
<b>O&amp;M Expenditures</b>		
Salary		
Employee Salaries	\$553,866	\$597,665
Employee Benefits	\$226,622	\$245,388
Supplies/Maintenance		
Supplies/Equipment Maintenance	\$31,631	\$40,071
Vehicle Maintenance	\$14,970	\$16,151
Other		
Auto Liability	\$1,593	\$1,719
Training and Development	\$1,848	\$2,680
Contract Services	\$26,995	\$23,600
Telephone	\$4,550	\$5,206
<b>Total O&amp;M Expenditures</b>	<b>\$862,075</b>	<b>\$932,480</b>
<b>Capital Expenditures</b>		
Replace EAD Inspection Truck	\$22,000	
<b>Total Capital Expenditures</b>	<b>\$22,000</b>	<b>\$0</b>
<b>Total Expenditures</b>	<b>\$884,075</b>	<b>\$932,480</b>



PRETREATMENT PERFORMANCE SUMMARY (PPS)

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

I. General Information			
Control Authority Name	Little Rock Wastewater		
Address	11 Clearwater Drive		
City	Little Rock	State/Zip	AR 72204
Contact Person	Stanley Suel	Position	Director EAD
Contact Telephone Number	_____		
NPDES Permit No's.	AR 0040177, AR 0021806, and AR 0050849		
Reporting Period	<b>January 1, 2014 through December 31, 2014</b>		
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>1 / 1</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 2014	<u>12 / 12</u>	<u>8 / 8</u>
2	No. of Non-sampling Inspections Conducted	<u>20</u>	<u>31</u>
3	No. of Sampling Visits Conducted	<u>84</u>	<u>292</u>
4	No. of Facilities Inspected (non-sampling)	<u>14</u>	<u>20</u>
5	No. of Facilities Sampled	<u>10*</u>	<u>20</u>

## IV. Enforcement Actions

		Significant Industrial Users	
		Categorical	Noncategorical
1	No. of Compliance Schedules Issued/No. of Schedules Required	<u>0 / 0</u>	<u>0 / 0</u>
2	No. of Notices of Violations issued to SIUs	<u>1</u>	<u>3</u>
3	No. of Administrative Orders Issued to SIUs	<u>0</u>	<u>0</u>
4	No. of Civil Suits Filed	<u>0</u>	<u>0</u>
5	No. of Criminal Suits Filed	<u>0</u>	<u>0</u>
6	No. of Significant Violators (attach newspaper publication)	<u>0</u>	<u>0</u>
7	Amount of Penalties Collected (total dollars/IUs assessed) **	<u>\$447 / 1</u>	<u>\$4,005 / 3</u>
8	Other Actions (sewer bans, etc.)	<u>0</u>	<u>0</u>

\* Categorical IU's: Four (4) sampled for regulated wastewater discharges: CertainTeed Corp., Interstate Highway Sign, Welspun Tubular, and Welspun HFW. 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*

3/31/15

Authorized Representative

Date

Stanley B. Suel, Director of Environmental Assessment



**LITTLE ROCK WASTEWATER  
SUMMARY OF INDUSTRIAL USER NONCOMPLIANCE  
1986 THROUGH 2014**

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



# LITTLE ROCK WASTEWATER 2014 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	2	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	6	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	10	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	3	17	RD 03/25/1992	RD	RD	RD	C
Progress Rail Services	3562 3471	332991 332813	40 CFR 433	Fourche Creek	RENEWED 05/01/2013	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 01/01/2014	Y	N	1	2	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	14	RD 11/30/2007	RD	RD	RD	C
Welspun Tubular HFW	3317	331210	40 CFR 433	Fourche Creek	ISSUED 04/01/2013	Y	N	4	17	RD 01/17/2013	RD	RD	RD	NC - pH
Ameripride Linen Apparel Services	7218	812332	N/A	Adams Field	RENEWED 01/01/2014	Y	N	1	15			BY POTW		C
Arkansas Children's Hospital	8062	622110	N/A	Adams Field	RENEWED 01/01/2014	Y	N	2	28			BY POTW		C
Arkansas Heart Hospital	8062	622110	N/A	Adams Field	RENEWED 02/01/2011	Y	N	1	8			BY POTW		C
Arkansas Mental Health Services	8063	622210	N/A	Adams Field	RENEWED 05/01/2013	Y	N	1	8			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 2014 PRETREATMENT PROGRAM STATUS REPORT

Facility Name	SIC	NAICS	Categorical Determination	Treatment Plant	Control Document		New User	Times Inspected	Times Sampled	Compliance Status				
					Last Action	Y/N				Reports			Effluent Limits	
										BMR	90-Day Compliance	Semi-Annual		Self Monitoring
Baptist Health Medical Center	8062	622110	N/A	Adams Field	RENEWED 07/01/2013	Y	N	3	24			BY POTW		NC - pH
Fiber Glass Systems	3089	326122	N/A	Fourche Creek	ISSUED 12/10/2013	Y	N	1	10			BY POTW		C
George Fischer Sloane	3084	326122	N/A	Fourche Creek	RENEWED 11/01/2014	Y	N	1	4			BY POTW		C
Griffin Industries Thibault	2077 4214	311613 4844220	N/A	Fourche Creek	REVISED 05/01/2014	Y	N	1	6			BY POTW		C
Hiland Dairy	2026	311511	N/A	Fourche Creek	RENEWED 10/01/2013	Y	N	6	37			BY POTW		NC - pH
Jack Wilson WTP	4941	221310	N/A	Adams Field	RENEWED 02/01/2014	Y	N	2	12			BY POTW		C
Little Rock Central Laundry	7218	812332	N/A	Fourche Creek	RENEWED 06/01/2013	Y	N	1	4			BY POTW		C
Little Rock City Landfill	4953	562212	N/A	Fourche Creek	RENEWED 04/01/2014	Y	N	1	4			BY POTW		C
Little Rock Medical Association (Doctors)	8062	622110	N/A	Adams Field	CLOSED 05/30/2014	Y	N	1	1			BY POTW		C
McClellan VA Medical Hospital	8062	622110	N/A	Adams Field	RENEWED 06/01/2014	Y	N	1	4			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 12/01/2013	Y	N	1	12			BY POTW		C
Porocel Corporation	2819	331311	N/A	Fourche Creek	RENEWED 07/01/2013	Y	N	1	7			BY POTW		C
Sage V Foods	2038 2044	311412 311212	N/A	Fourche Creek	RENEWED 09/01/2013	Y	N	3	69			BY POTW		C
Skippy Foods LLC	2099	311911	N/A	Fourche Creek	REVISED 03/13/2013	Y	N	1	12			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  
2014 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>13</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>51</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	1,400	22	No 433 Discharge in 2014
Cameron Valve	Categorical	433	Steel Oil Field Valves	25,979	22	Zn, Pb, pH, Ni, Permit to discharge nonregulated wastewater
Central Flying Service - Little Rock	Categorical	433	Aircraft Refurbishing	4,421	30	pH, Permit to discharge nonregulated wastewater
CertainTeed Corporation	Categorical	443	Asphalt Rolled Roofing Production	17,285	30	TSS, O&G, pH
Dassault Falcon Jet Corporation	Categorical	433	Custom Jet Aircraft	21,247	22	COD, pH, Permit to discharge domestic wastewater only
Hillcrest Camshaft Service, Inc.	Categorical	433	Electroplating New Source	897	22	Permit to discharge domestic wastewater only
Interstate Highway Sign	Categorical	433	Highway Signs	4,349	22	Cr, pH, Cu, Zn, Pb, Cd, Ni, Ag, CN, TTO
ITW Accessories Marketing	Categorical	414	Tire Sealant	3,049	22	Permit to discharge domestic wastewater only
PPG	Categorical	446	Paint and Coating	5,057	22	COD, pH, Permit to discharge domestic wastewater only
Progress Rail Services	Categorical	433	Chrome Plating	1,944	22	Permit to discharge domestic wastewater only
Rhein Chemie Little Rock	Categorical	428	Rubber Tire Curing Bladders	8,506	30	pH, Zn, Ni, Cu, O&G, Permit to discharge nonregulated wastewater
St. Vincent Hospital	Categorical	439	Hospital / PETNET	115,213	30	COD, pH, Hg, Zero discharge for 40 CFR 439.
Welspun Tubular	Categorical	433	Spiral Pipe and Coating	53,037	30	Zn, Cr, Pb, pH, Cd, CN, Ni, Cu, Ag, COD, TSS, O&G
Welspun Tubular HFW	Categorical	433	High Frequency Welding, Steel Pipe	17,301	30	Zn, Cr, Pb, pH, Cd, CN, Ni, Cu, Ag, TTO

LITTLE ROCK WASTEWATER  
2014 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	50,819	22	COD, TSS, O&G, pH
Arkansas Children's Hospital	Significant		Hospital	74,987	30	East: COD, TSS, pH West: COD, TSS, O&G, pH South: COD, TSS, O&G, pH
Arkansas Heart Hospital	Significant		Hospital	29,347	30	COD, TSS, O&G, pH, Hg
Arkansas Mental Health Services	Significant		Hospital	24,821	30	COD, TSS, O&G, pH
Baptist Health Medical Center	Significant		Hospital	246,705	30	COD, TSS, O&G, pH, Hg
Hiland Dairy	Significant		Dairy Products, Juice, Tea	83,547	30	COD, TSS, O&G, pH
Fiber Glass Systems	Significant		Fiberglass reinforced epoxy and vinylester resin piping systems	14,915	22	As, Cd, Cu, Cr, Pb, Ni, Hg, Ag, Se, Zn, B, Mn, pH, CN, TTO
George Fischer Sloane, Inc.	Significant		Plastic Molding	13,065	30	COD, TSS, O&G, pH
Griffin Industries - Thibault Road	Significant		Grease Recycling	828	22	COD, TSS, O&G, pH
Jack Wilson WTP	Significant		Water Treatment Plant	112,318	30	COD, TSS, pH
Little Rock Central Laundry	Significant		Industrial Laundry	50,054	22	COD, TSS, O&G, pH
Little Rock Landfill	Significant		Municipal Landfill	26,861	26	COD, TSS, O&G, pH, NH3-N, As, Cd, Cu, Cr, Pb, Ni, Hg, Ag, Se, Zn, B, Mn, CN, volatiles, pesticides
Little Rock Medical Associates (Doctors)	Significant		Hospital	19,282	30	COD, TSS, O&G, pH, Hg, Ag
McClellan VA Hospital	Significant		Hospital	149,153	30	COD, pH, Hg, Ag
Shooting Star Beverages	Significant		Fruit Juice and Water Bottling	6,826	22	COD, TSS, O&G, pH
Ozark Point WTP	Significant		Water Treatment Plant	45,906	30	COD, TSS, pH
Porocel Corporation	Significant		Mineral Milling	760	30	COD, TSS, pH, Zn, As, Cu, Cr, Ni, Hg
Sage V Foods	Significant		Rice Cooking	184,717	30	BOD, COD, TSS, O&G, TS, pH, Temperature
Skippy Foods LLC	Significant		Peanut Butter	22,243	22	COD, TSS, O&G, pH
University of Arkansas Medical Center	Significant		Hospital	115,701	30	COD, TSS, O&G, pH, Hg, Ag



## 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 2014 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 2014 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 2014. Item II: Influent/Effluent organic fraction detections trend chart for 1991 through 2014. Item III is the long term summary of positive results. 40 CFR Part 122, Appendix D, Table II monitoring frequency for 2014 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, 1994-2014. Some peaks may be due to changes in test methods and detection limits.



**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT**  
**REPORTING YEAR: JANUARY 1, 2014 TO DECEMBER 31, 2014**  
**CITY OF LITTLE ROCK - ADAMS FIELD WASTEWATER TREATMENT PLANT**  
**NPDES PERMIT NO.: AR0021806**

**AVERAGE POTW FLOW: 20.70 MGD**

**PERCENT (%) IU FLOW: 5.0 %**

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									
		1/14/2014	5/12/2014	9/4/2014	11/6/2014		1/14/2014	5/12/2014	9/4/2014	11/6/2014												
Antimony		<	60	<	60	<	60	<	60	<	60	<	60	60	200.8	60						
Cadmium	9	<	0.5	<	0.5	<	0.5	<	0.5	<	0.5	<	0.5	0.5	200.8	0.5						
Copper	270		26.0		47.0		33.0		27.0		214		3.6		9.6		8.3		9.4	0.5	200.8	0.5
Lead	50		2.5		7.6		3.7		3.9		198	<	0.50		0.91		1.20		0.57	0.5	200.8	0.5
Mercury	0.20		0.0458		0.1100		0.1550		0.1840		0.1		0.0117		0.0043		0.0101		0.0116	0.005	1631E	0.0002
Nickel	160		3.8		4.0		4.0		4.6		4,990		2.3		1.6		3.0		10.0	0.5	200.8	0.5
Selenium	10	<	5	<	5	<	5	<	5		56	<	5	<	5	<	5	<	5	5	200.8	5
Silver	180		1.8		1.0	<	0.5		0.9		57	<	0.5	<	0.5	<	0.5	<	0.5	0.5	200.8	0.5
Zinc	360		95		150		130		130		1,700		34		32		51		51	20	200.8	20
Chromium	260	<	10	<	10	<	10	<	10		11,200	<	10	<	10	<	10		32	10	200.8	10
Cyanide	90	<	10.0	<	10.0	<	10.0	<	10.0		50	<	10.0	<	10.0	<	10.0	<	10.0	10	SM20 4500 C&E	10
Arsenic	14		1.6		2.2		1.9		1.9		2,380		0.78		0.86		0.97		0.75	0.5	200.8	0.5
Molybdenum		<	8	<	8	<	8	<	8			<	8	<	8	<	8	<	8		200.8	8
Phenols			7.7		25.0		53.0		22.3				62.0		18.0	<	22.0		6.1	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									37										10		200.8	2
Boron									190										220		200.8	100
Manganese									440										46		200.8	2
Oil and Grease		<	5,000	<	5,000		18,000		7,000			<	5,000	<	5,000	<	5,000	<	5,000		1664A	5,000
Flow, MGD			28.01		25.24		14.92		15.12				23.99		19.64		13.07		17.96			

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
REPORTING YEAR: JANUARY 1, 2014 TO DECEMBER 31, 2014**

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

**NPDES PERMIT NO.: AR0021806**

**AVERAGE POTW FLOW: 20.70 MGD**

**PERCENT (%) IU FLOW: 5 %**

PLANT INFLUENT	Flow MGD	O&G mg/L	CN- mg/L	Zn mg/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 mg/L	Be mg/L	Tl mg/L	Mn mg/L	Ba mg/L	B mg/l
<b>EPA Test Method Used</b>	1664A	SM200b 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
<b>Detection Level Achieved</b>	5	0.01	0.02	0.5	10	0.5	0.5	8	0.5	0.5	0.5	5	0.0002	2.2 / 5	0.06	0.0005	0.0005	0.002	0.002	0.1	
01/14/2014	28.01			0.095	< 0.5	< 10	1.8	26.0	< 8	3.8	2.50	1.60	< 5			< 0.06	< 0.0005	< 0.0005			
03/10/2014	26.08	< 5	< 0.0100											0.0458	7.7						
05/12/2014	25.24			0.150	< 0.5	< 10	1.0	47.0	< 8	4.0	7.60	2.20	< 5			< 0.06	< 0.0005	< 0.0005			
06/05/2014	22.09	< 5	< 0.0100											0.1100	25.0						
09/04/2014	14.92	18	< 0.0100											0.1550	53.0						
*10/14/2014	26.14			0.130	< 0.5	< 10	< 0.5	33.0	< 8	4.0	3.70	1.90	< 5			< 0.06	< 0.0005	< 0.0005			
11/06/2014	23.87	7	< 0.0100											0.1840	22.3						
11/10/2014	15.12			0.130	< 0.5	< 10	0.9	27.0	< 8	4.6	3.90	1.90	< 5			< 0.06	< 0.0005	< 0.0005	0.440	0.037	0.19
<b>Average</b>	22.68	9	< 0.0100	0.126	< 0.5	< 10	1.1	33.3	< 8	4.1	4.43	1.90	< 5	0.1237	27.0	< 0.06	< 0.0005	< 0.0005	0.440	0.037	0.19
<b>Maximum</b>	28.01	18	< 0.0100	0.150	< 0.5	< 10	1.8	47.0	< 8	4.6	7.60	2.20	< 5	0.1840	53.0	< 0.06	< 0.0005	< 0.0005	0.440	0.037	0.19
<b>Minimum</b>	14.92	< 5	< 0.0100	0.095	< 0.5	< 10	< 0.5	26.0	< 8	3.8	2.50	1.60	< 5	0.0458	7.7	< 0.06	< 0.0005	< 0.0005	0.440	0.037	0.19
<b>Headworks limit</b>			0.09	0.36	9.0	260.0	180.0	270		160	50	14	10	0.2							

**Comments:** \*After becoming aware of a scheduling error for the 3rd quarter, samples for metals were immediately collected.

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
REPORTING YEAR: JANUARY 1, 2014 TO DECEMBER 31, 2014**

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

**NPDES PERMIT NO.: AR0021806**

**AVERAGE POTW FLOW: 20.70 MGD**

**PERCENT (%) IU FLOW: 5 %**

FINAL EFFLUENT	Flow MGD	O&G mg/L	CN- mg/L	Zn mg/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 mg/L	Be mg/L	Tl mg/L	Mn mg/L	Ba mg/L	B mg/l
<b>EPA Test Method Used</b>	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	200.8	200.8	200.8
<b>Detection Level Achieved</b>	5	0.01	0.02	0.5	10	0.5	0.5	8	0.5	0.5	0.5	0.5	5	0.0002	2.2 / 5	0.06	0.0005	0.0005	0.002	0.002	0.1
01/14/2014	23.99			0.034 < 0.5	< 10	< 0.5	< 0.5	3.6 < 8	< 2.3	< 0.50	0.78 < 5				< 0.06	< 0.0005	< 0.0005				
03/10/2014	22.94	< 5	< 0.0100											0.0117	62.0						
05/12/2014	19.64			0.032 < 0.5	< 10	< 0.5	< 0.5	9.6 < 8	< 1.6	0.91	0.86 < 5				< 0.06	< 0.0005	< 0.0005				
06/05/2014	18.64	< 5	< 0.0100											0.0043	18.0						
09/04/2014	13.07	< 5	< 0.0100											0.0101	< 22.0						
*10/14/2014	20.95			0.051 < 0.5	< 10	< 0.5	< 0.5	8.3 < 8	< 3.0	1.20	0.97 < 5				< 0.06	< 0.0005	< 0.0005				
11/06/2014	17.96	< 5	< 0.0100											0.0116	6.1						
11/10/2014	14.07			0.051 < 0.5	< 32	< 0.5	< 0.5	9.4 < 8	< 10.0	0.57	0.75 < 5				< 0.06	< 0.0005	< 0.0005	0.046	0.010	0.010	0.22
<b>Average</b>	18.91	< 5	< 0.0100	0.042 < 0.5	< 16	< 0.5	< 0.5	7.7 < 8	< 4.2	0.80	0.84 < 5			0.0094	27.0	< 0.06	< 0.0005	< 0.0005	0.046	0.010	0.22
<b>Maximum</b>	23.99	< 5	< 0.0100	0.051 < 0.5	< 32	< 0.5	< 0.5	9.6 < 8	< 10	1.20	0.97 < 5			0.0117	62.0	< 0.06	< 0.0005	< 0.0005	0.046	0.010	0.22
<b>Minimum</b>	13.07	< 5	< 0.0100	0.032 < 0.5	< 10	< 0.5	< 0.5	3.6 < 8	< 1.6	< 0.50	0.75 < 5			0.0043	6.1	< 0.06	< 0.0005	< 0.0005	0.046	0.010	0.22
<b>WQS Effluent Level</b>																					
<b>Day Max.</b>			0.058	1.700	54.0	11200.0	57.0	214		4990	198	2380	56	0.1							
<b>Month Avg.</b>			0.029	0.850	27.0	5590.0	28.0	106		2490	98	1190	28	0.07							

**Comments:** \*After becoming aware of a scheduling error for the 3rd quarter, samples for metals were immediately collected.

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
TREATMENT PLANT PERCENT REMOVAL EFFICIENCIES  
REPORTING YEAR: JANUARY 1, 2014 TO DECEMBER 31, 2014**

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

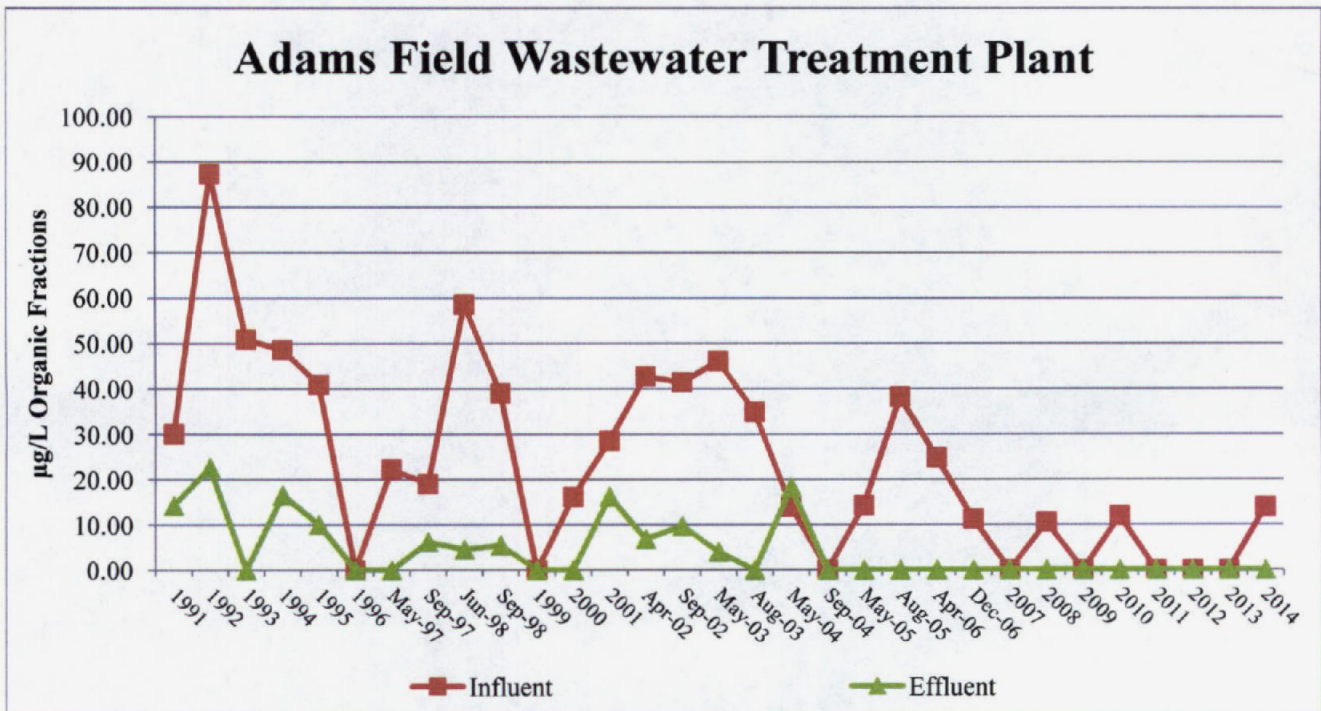
	O&G	CN-	Zn	Cd	Cr	Ag	Cu	Mo	Ni	Pb	As	Se	Hg	Phenol	Sb	Be	Tl	Mn	Ba	B
01/14/2014			64.2%	0.0%	0.0%	72.2%	86.2%	0.0%	39.5%	80.0%	51.3%	0.0%			0.0%	0.0%	0.0%			
03/10/2014	0.0%	0.0%											74.5%	-705.2%						
05/12/2014			78.7%	0.0%	0.0%	50.0%	79.6%	0.0%	60.0%	88.0%	60.9%	0.0%			0.0%	0.0%	0.0%			
06/05/2014	0.0%	0.0%											96.1%	28.0%						
09/04/2014	72.2%	0.0%											93.5%	58.5%						
10/14/2014			60.8%	0.0%	0.0%	0.0%	74.8%	0.0%	25.0%	67.6%	48.9%	0.0%			0.0%	0.0%	0.0%			
11/06/2014	31.5%	0.0%											93.7%	72.6%						
11/10/2014			60.8%	0.0%	-220.0%	45.7%	65.2%	0.0%	-117.4%	85.4%	60.5%	0.0%			0.0%	0.0%	0.0%	89.5%	73.0%	-15.8%
Average	25.9%	0.0%	66.1%	0.0%	-55.0%	42.0%	76.4%	0.0%	1.8%	80.2%	55.4%	0.0%	89.4%	-136.5%	0.0%	0.0%	0.0%	89.5%	73.0%	-15.8%

I. 2014 POSITIVE RESULTS, µg/L

ADAMS FIELD WASTEWATER TREATMENT PLANT		
Sample Date	Compound	Influent
9/9/2014	Volatiles	ND
9/9/2014	bis(2-ethylhexyl)phthalate	14
Sample Date	Compound	Effluent
9/9/2014	Volatiles	ND
9/9/2014	Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND

Comments: ND - No Detection

II. TREND OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 2014



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

III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 2008 THROUGH 2014

Adams Field Wastewater Treatment Plant

PPS, µg/L Parameter	2008		2009		2010		2011		2012		2013		2014	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF	INF	EFF
Bis(2-ethylhexyl)Phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.0	ND
Chloroform	10.6	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
Toulene	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
Dieldrin	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
Ethylbenzene	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
Dibutylphthalate	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
Butylbenzylphthalate	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
Trichlorethene	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
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<b>Total</b>	<b>10.6</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>12.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>14.0</b>	<b>0.0</b>

Comments

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

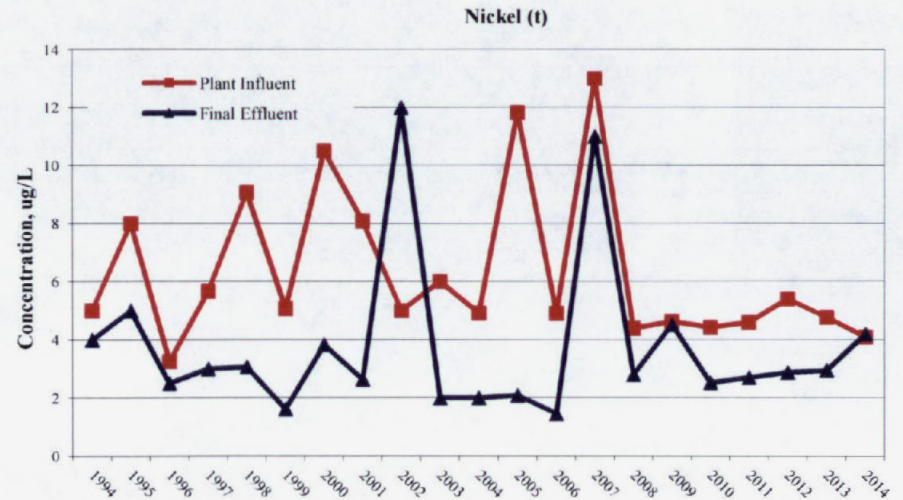
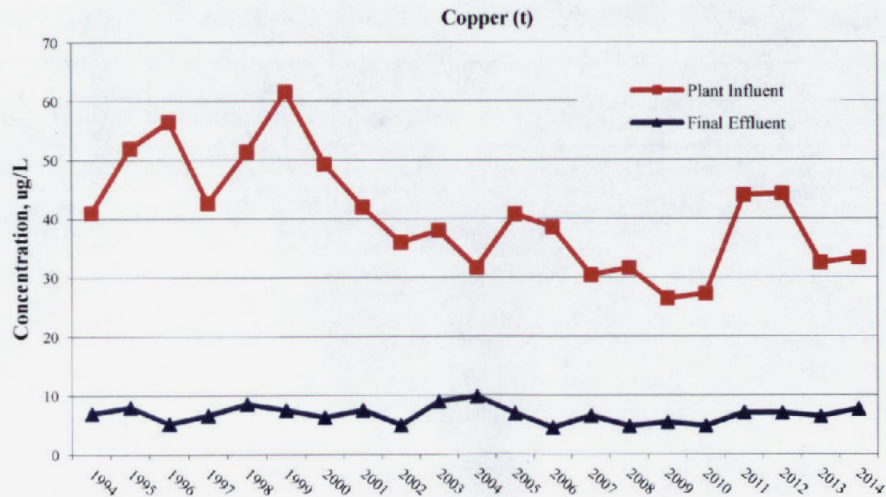
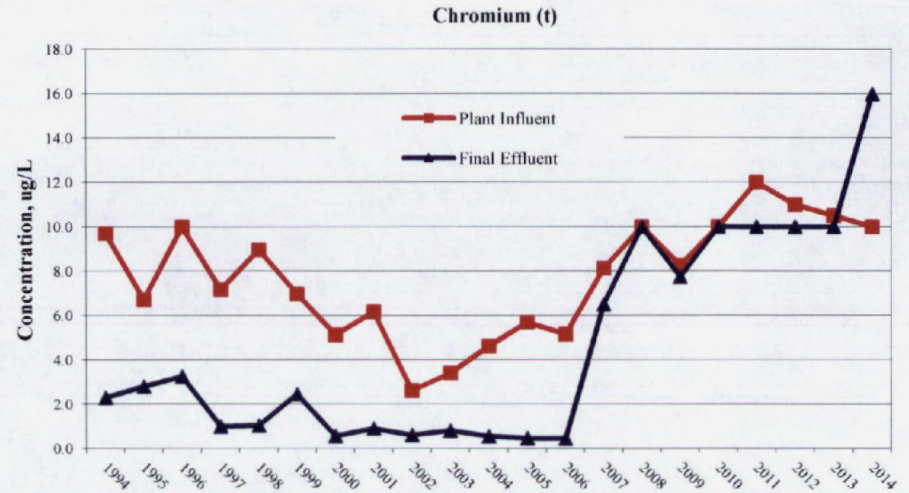
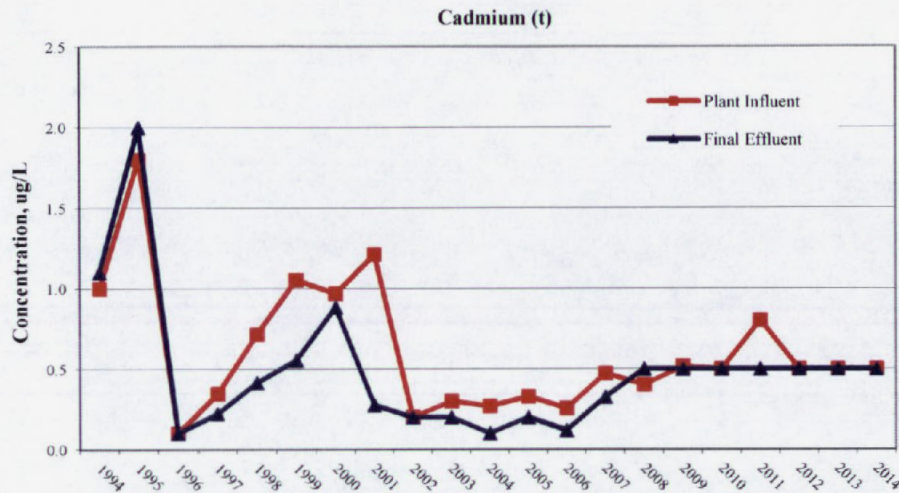
Adams Field Wastewater Treatment Plant

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 2014**

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

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

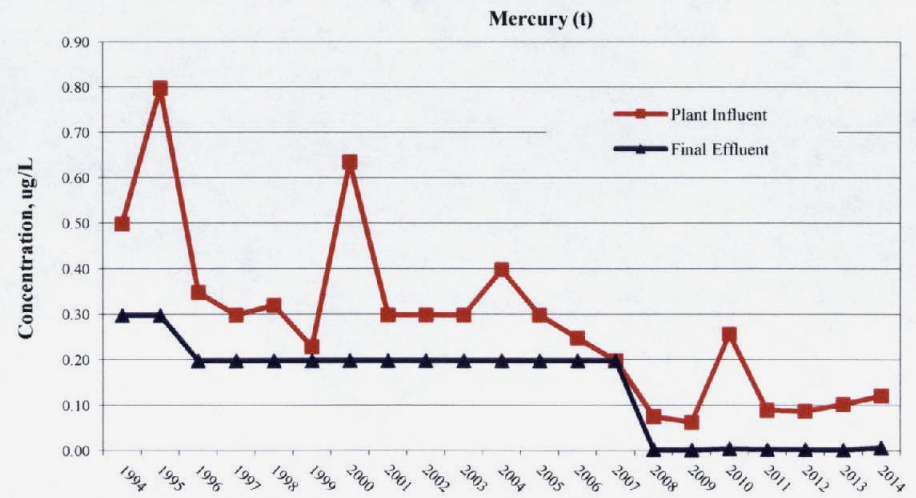
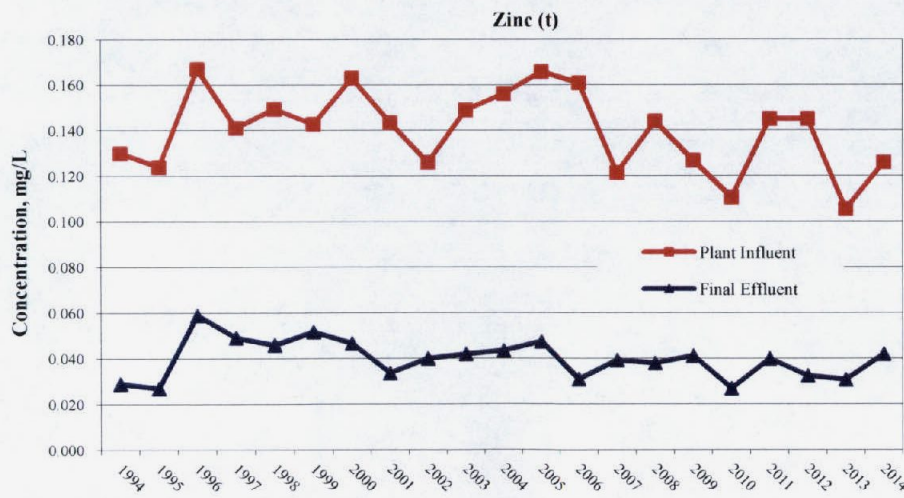
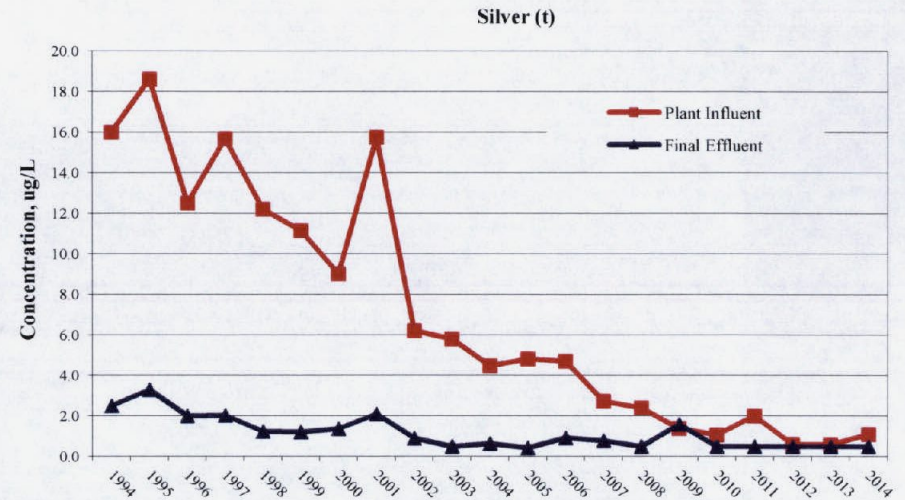
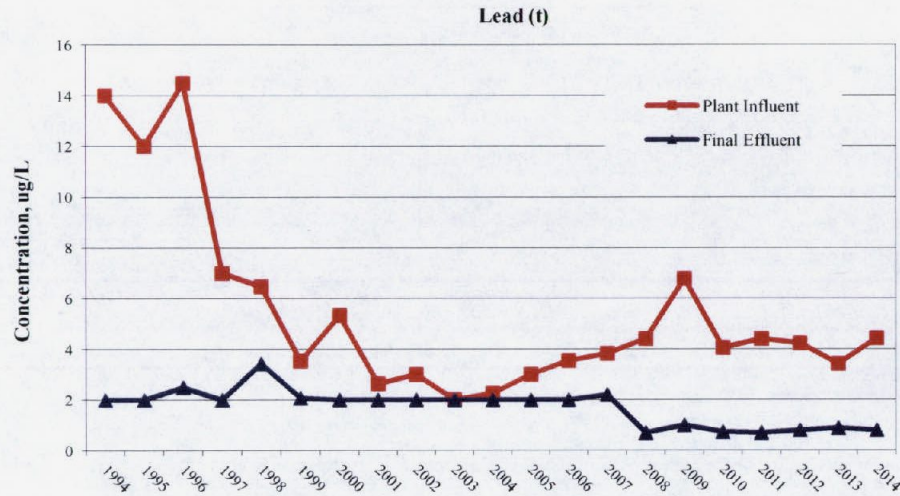
**Copper (t)**  
**270 ug/L**  
**106 ug/L**

**Chromium (t)**  
**260 ug/L**  
**5,590 ug/L**

**Nickel(t)**  
**160 ug/L**  
**2,490 ug/L**

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2014**

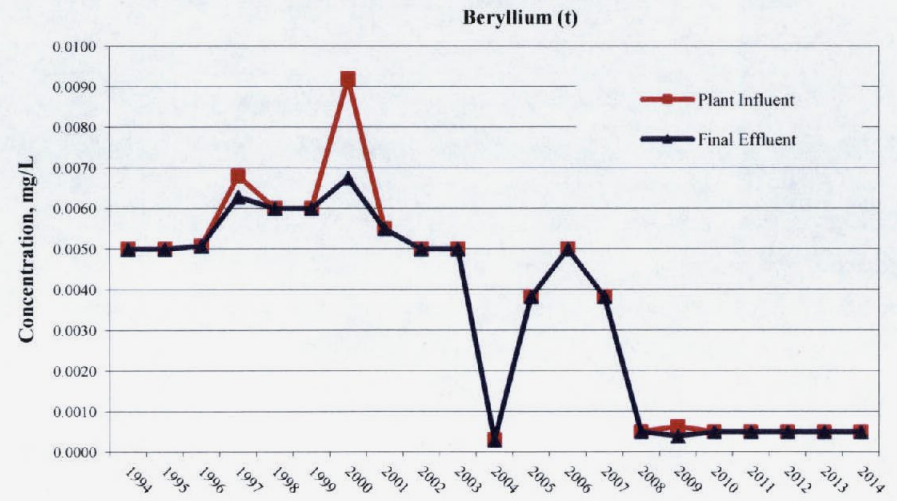
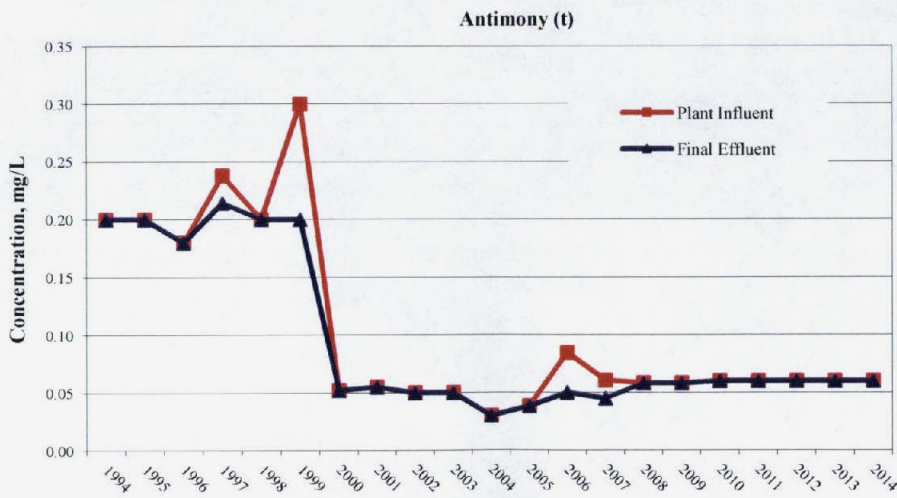
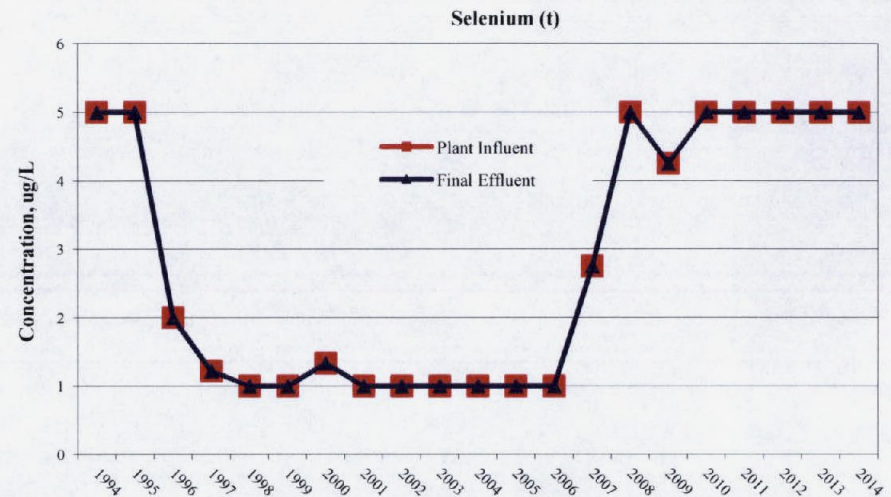
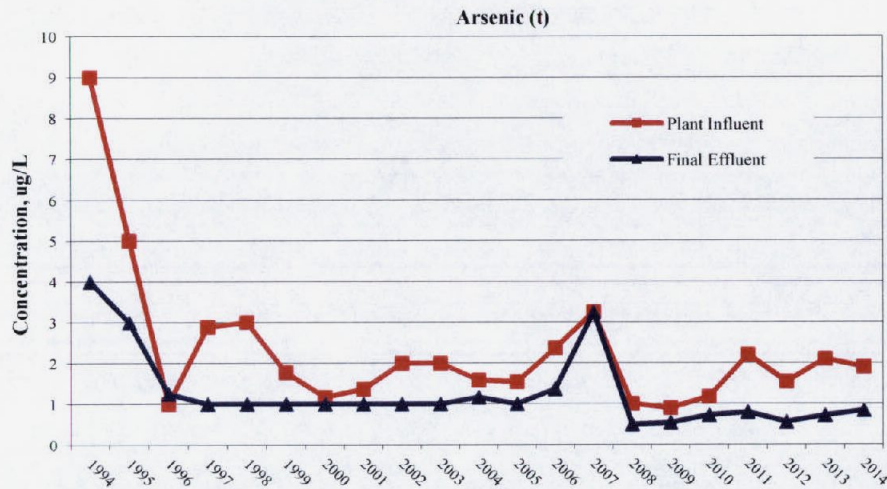
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	<b>Lead (t)</b>	<b>Zinc(t)</b>	<b>Silver(t)</b>	<b>Mercury(t)</b>
<b>Influent Headworks Limit</b>	<b>50 ug/L</b>	<b>0.36 mg/L</b>	<b>180 ug/L</b>	<b>0.2 ug/L</b>
<b>Effluent Water Quality Criteria (Acute)</b>	<b>98 ug/L</b>	<b>0.85 mg/L</b>	<b>28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

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2014**

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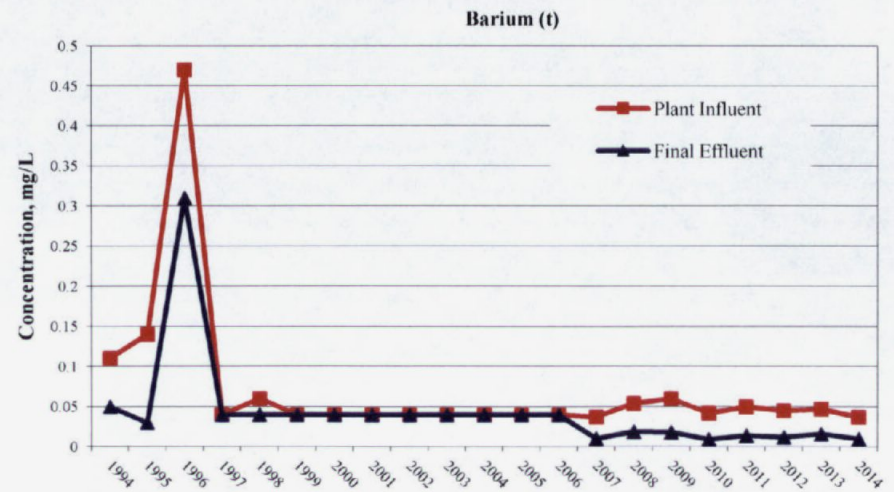
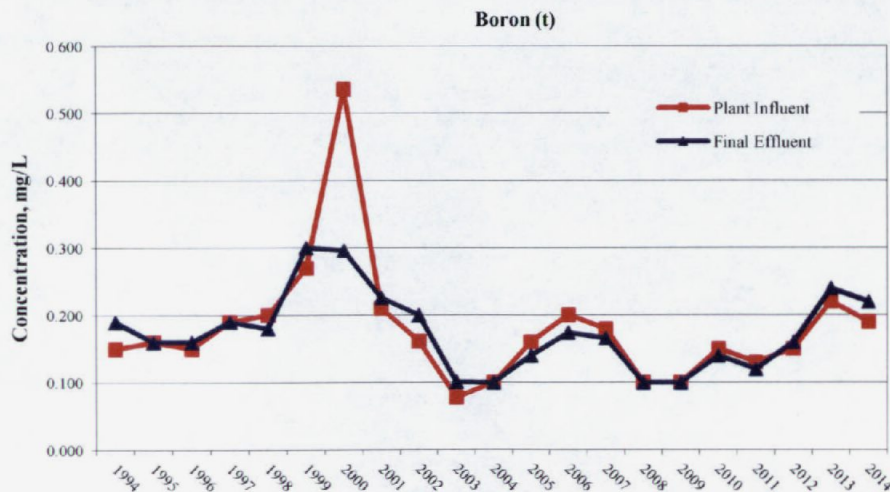
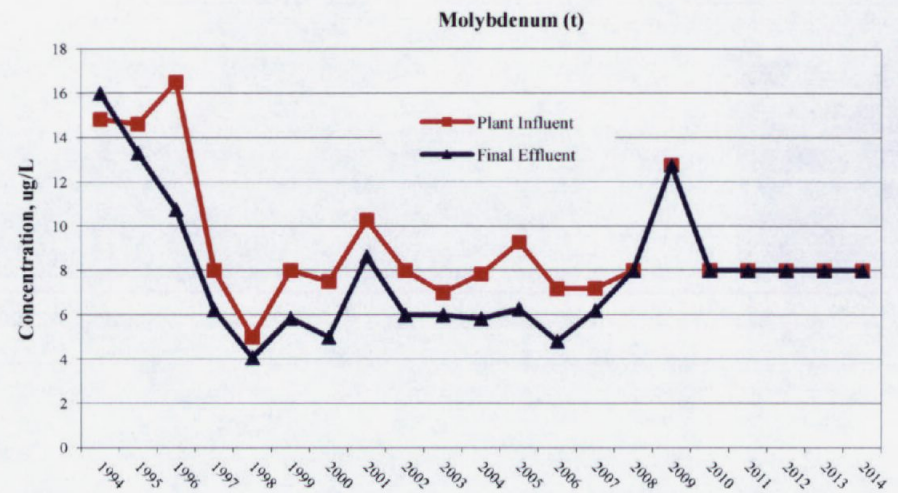
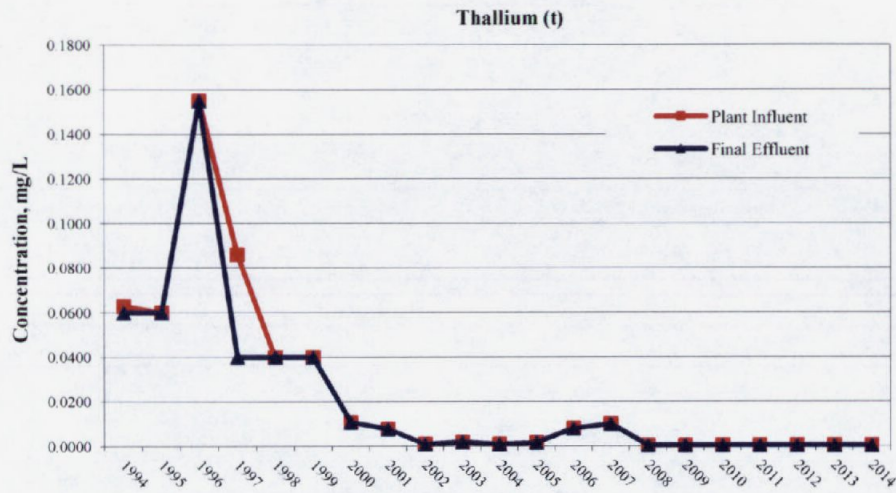


	<b>Arsenic(t)</b>
<b>Influent Headworks Limit</b>	<b>14 ug/L</b>
<b>Effluent Water Quality Criteria (Acute)</b>	<b>1,190 ug/L</b>

<b>Antimony (t)</b>	<b>Selenium (t)</b>	<b>Beryllium (t)</b>
<b>None</b>	<b>10 ug/L</b>	<b>None</b>
<b>None</b>	<b>28 ug/L</b>	<b>None</b>

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2014**

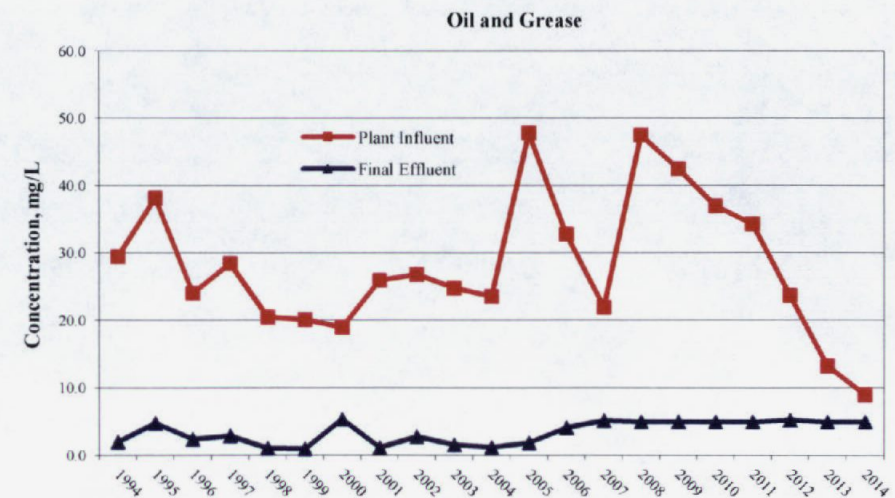
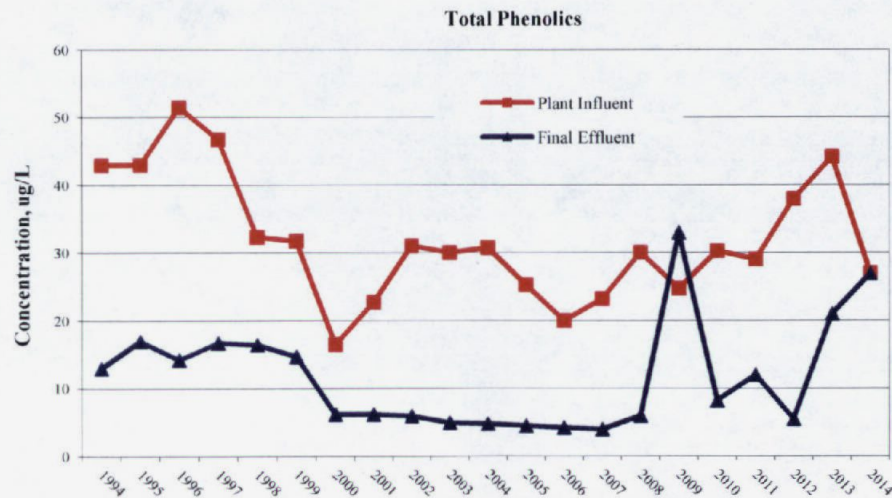
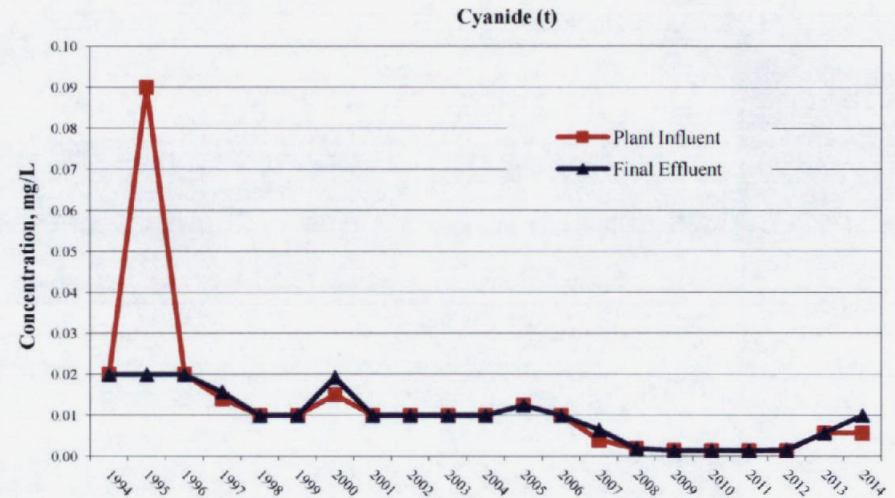
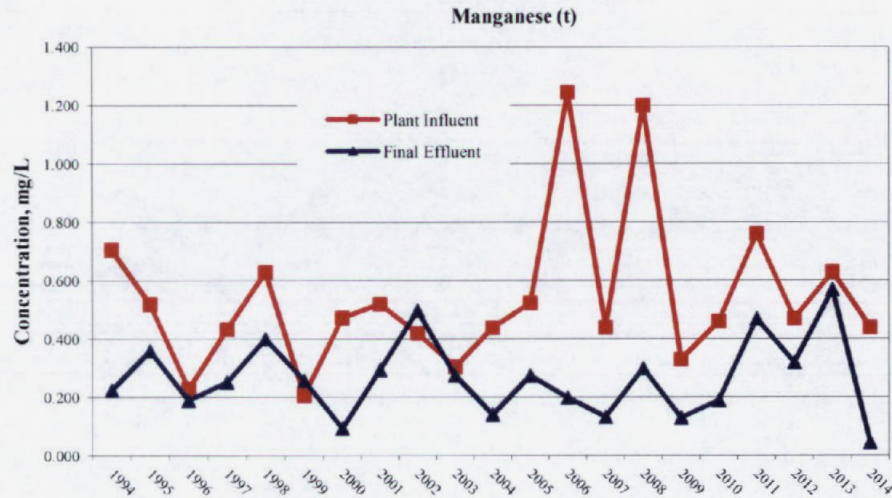
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	Thallium (t)	Boron (t)	Molybdenum(t)	Barium(t)
Influent Headworks Limit	None	None	None	None
Effluent Water Quality Criteria (Acute)	None	None	None	None

**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
ADAMS FIELD 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 (Acute)	None	None	0.29 mg/L	None



## 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 2014 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 2014 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 2014. Item II: Influent/Effluent organic fraction detections trend chart for 1991 through 2014. Item III is the long term summary of positive results. 40 CFR Part 122, Appendix D, Table II monitoring frequency for 2014 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, 1994-2014. Some peaks may be due to changes in test methods and detection limits.



**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT**  
**REPORTING YEAR: JANUARY 1, 2014 TO DECEMBER 31, 2014**  
**CITY OF LITTLE ROCK - FOURCHE CREEK WASTEWATER TREATMENT PLANT**  
**NPDES PERMIT NO.: AR0040177**

**AVERAGE POTW FLOW: 9.54 MGD**

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

METALS, CYANIDE and PHENOLS	MAHC (Total) (µg/l)	INFLUENT DATES SAMPLED (µg/l) Once/quarter				WQ level/limit (µg/l)	EFFLUENT DATES SAMPLED (µg/l) Once/quarter				LABORATORY ANALYSIS		
		Start Date	Start Date	Start Date	Start Date		Start Date	Start Date	Start Date	Start Date	EPA MQL (µg/l)	EPA Method Used	Detection Level Achieved.
		1/14/2014	5/12/2014	9/4/2014	11/6/2014		1/14/2014	5/13/2014	9/4/2014	11/6/2014			
Antimony		< 60	< 60	< 60	< 60		< 60	< 60	< 60	< 60	60	200.8	60
Cadmium	9	0.6	0.5	0.5	0.5	107	0.5	0.5	0.5	0.5	0.5	200.8	0.5
Copper	270	23.0	29.0	15.0	29.0	619	1.9	4.7	3.9	6.1	0.5	200.8	0.5
Lead	50	4.60	2.90	2.10	2.10	395	0.50	0.6	0.5	0.5	0.5	200.8	0.5
Mercury	0.20	0.0131	0.0053	0.1690	0.1489	0.27	0.0088	0.0020	0.0117	0.0179	0.005	1631E	0.0002
Nickel	160	5.1	4.1	4.7	10.0	9,980	4.2	3.6	3.9	15.0	0.5	200.8	0.5
Selenium	10	5	5	5	5	112	5	5	5	5	5	200.8	5
Silver	180	0.5	0.5	0.5	0.5	165	0.5	0.5	0.5	0.5	0.5	200.8	0.5
Zinc	360	92	100	150	140	4,940	20	23	38	97	20	200.8	20
Chromium	260	10	10	10	22	23,500	10	10	10	35	10	200.8	10
Cyanide	90	10.0	10.0	10.0	10.0	116	10.0	10.0	10.0	10.0	10	SM20 4500 C&E	10
Arsenic	14	2.00	1.50	1.70	1.60	6,900	0.88	1.10	0.80	1.10	0.5	200.8	0.5
Molybdenum		8.0	8.0	8.0	8.3		8.0	8.0	8.0	8.0		200.8	8
Phenols		75.0	77.0	201.4	67.1		12.0	14.2	100.8	7.2	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					35					4		200.8	2
Boron					370					290		200.8	100
Manganese					290					220		200.8	2
Oil and Grease		18,000	24,000	29,000	27,000		5,000	5,000	5,000	5,000		1664A	5000
Flow, MGD		9.44	11.10	8.01	9.19		11.68	9.33	8.84	9.84			

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
REPORTING YEAR: JANUARY 1, 2014 TO DECEMBER 31, 2014**

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

**NPDES PERMIT NO.: AR0040177**

**AVERAGE POTW FLOW: 9.54 MGD PERCENT (%) IU FLOW: 6 %**

PLANT INFLUENT	Flow MGD	O&G mg/L	CN- mg/L	Zn mg/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 mg/L	Be mg/L	Tl mg/L	Mn mg/L	Ba mg/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	200.8	200.8	200.8
Detection Level Achieved	5	0.01	0.02	0.5	10	0.5	0.5	8	0.5	0.5	0.5	5	0.0002	2.2/5	0.06	0.0005	0.0005	0.002	0.002	0.1	
01/14/2014	9.44			0.092	0.6	< 10	< 0.5	23.0	< 8.0	5.1	4.60	2.00	< 5			< 0.06	< 0.0005	< 0.0005			
03/10/2014	8.27	18	< 0.0100											0.0131	75.0						
05/12/2014	11.10			0.100	< 0.5	< 10	< 0.5	29.0	< 8.0	4.1	2.90	1.50	< 5			< 0.06	< 0.0005	< 0.0005			
06/05/2014	8.28	24	< 0.0100											0.0053	77.0						
09/04/2014	8.01	29	< 0.0100											0.1690	201.4						
*10/21/2014	7.15			0.150	< 0.5	< 10	< 0.5	15.0	< 8.0	4.7	2.10	1.70	< 5			< 0.06	< 0.0005	< 0.0005			
11/06/2014	9.19	27	< 0.0100											0.2710	67.1						
11/10/2014	6.97			0.140	< 0.5	22	< 0.5	29.0	8.3	10.0	2.10	1.60	< 5			< 0.06	< 0.0005	< 0.0005	0.290	0.035	< 0.37
12/08/2014	9.00													0.0267							
<b>Average</b>	8.60	24	< 0.0100	0.121	0.5	13	< 0.5	24.0	8.1	6.0	2.93	1.70	< 5	0.0970	105.1	< 0.06	< 0.0005	< 0.0005	0.290	0.035	< 0.37
<b>Maximum</b>	11.10	29	< 0.0100	0.150	0.6	22	< 0.5	29.0	8.3	10.0	4.60	2.00	< 5	0.2710	201.4	< 0.06	< 0.0005	< 0.0005	0.290	0.035	< 0.37
<b>Minimum</b>	6.97	18	< 0.0100	0.092	< 0.5	< 10	< 0.5	15.0	< 8.0	4.1	2.10	1.50	< 5	0.0053	67.1	< 0.06	< 0.0005	< 0.0005	0.290	0.035	< 0.37
<b>Headworks limit</b>			0.09	0.360	9.0	260.0	180.0	270		160	50	14	10	0.2							

**Comments:** \*After becoming aware of a scheduling error for the 3rd quarter, samples for metals were immediately collected.

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
REPORTING YEAR: JANUARY 1, 2014 TO DECEMBER 31, 2014**

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

**NPDES PERMIT NO.: AR0040177**

**AVERAGE POTW FLOW: 9.54 MGD**

**PERCENT (%) IU FLOW: 6 %**

FINAL EFFLUENT	Flow MGD	O&G mg/L	CN- mg/L	Zn mg/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 mg/L	Be mg/L	Tl mg/L	Mn mg/L	Ba mg/L	B mg/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	5	0.01	0.02	0.5	10	0.5	0.5	8	0.5	0.5	0.5	5	0.0002	2.2/5	0.06	0.0005	0.0005	0.002	0.002	0.1	
01/14/2014	11.68		< 0.020	< 0.5	< 10	< 0.5	1.9	< 8.0	4.2	< 0.50	0.88	< 5			< 0.06	< 0.0005	< 0.0005				
03/10/2014	9.87	< 5	< 0.0100										0.0088	12							
05/13/2014	14.96		0.023	< 0.5	< 10	< 0.5	4.7	< 8.0	3.6	0.55	1.10	< 5			< 0.06	< 0.0005	< 0.0005				
06/05/2014	9.33	< 5	< 0.0100										0.0020	14.2							
09/04/2014	8.84	< 5	< 0.0100										0.0117	100.8							
*10/22/2014	7.78		0.038	< 0.5	< 10	< 0.5	3.9	< 8.0	3.9	< 0.50	0.80	< 5			< 0.06	< 0.0005	< 0.0005				
11/06/2014	9.84	< 5	< 0.0100										0.0305	7.2							
11/11/2014	8.06		0.097	< 0.5	35	< 0.5	6.1	< 8.0	15.0	< 0.50	1.10	< 5			< 0.06	< 0.0005	< 0.0005	0.220	0.004	0.29	
12/08/2014	10.02												0.0052								
<b>Average</b>	10.04	< 5	< 0.0100	0.045	< 0.5	16	< 0.5	4.2	< 8.0	6.7	0.51	0.97	< 5	0.0116	33.6	< 0.06	< 0.0005	< 0.0005	0.220	0.004	0.29
<b>Maximum</b>	14.96	< 5	< 0.0100	0.097	< 0.5	35	< 0.5	6.1	< 8.0	15.0	0.55	1.10	< 5	0.0305	100.8	< 0.06	< 0.0005	< 0.0005	0.220	0.004	0.29
<b>Minimum</b>	7.78	< 5	< 0.0100	< 0.020	< 0.5	< 10	< 0.5	1.9	< 8.0	3.6	< 0.50	0.80	< 5	0.0020	7.2	< 0.06	< 0.0005	< 0.0005	0.220	0.004	0.29
<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:** \*After becoming aware of a scheduling error for the 3rd quarter, samples for metals were immediately collected.

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
TREATMENT PLANT PERCENT REMOVAL EFFICIENCIES  
REPORTING YEAR: JANUARY 1, 2014 TO DECEMBER 31, 2014**

**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
01/14/2014			78.3%	15.3%	0.0%	0.0%	91.7%	0.0%	17.6%	89.1%	56.0%	0.0%			0.0%	0.0%	0.0%			
03/10/2014	72.2%	0.0%											32.7%	84.0%						
05/12/2014			77.0%	0.0%	0.0%	0.0%	83.8%	0.0%	12.2%	81.0%	26.7%	0.0%			0.0%	0.0%	0.0%			
06/05/2014	79.2%	0.0%											62.9%	81.6%						
09/04/2014	82.5%	0.0%											93.1%	50.0%						
10/21/2014			74.7%	0.0%	0.0%	0.0%	74.0%	0.0%	17.0%	76.2%	52.9%	0.0%								
11/06/2014	81.5%	0.0%											88.7%	89.3%						
11/10/2014			30.7%	0.0%	-59.1%	0.0%	79.0%	3.6%	-50.0%	76.2%	31.3%	0.0%			0.0%	0.0%	0.0%	24.1%	89.1%	21.6%
12/08/2014													80.6%							
Average	78.8%	0.0%	60.8%	3.8%	-14.8%	0.0%	82.1%	0.9%	-0.8%	80.6%	41.7%	0.0%	71.6%	76.2%	0.0%	0.0%	0.0%	24.1%	89.1%	21.6%

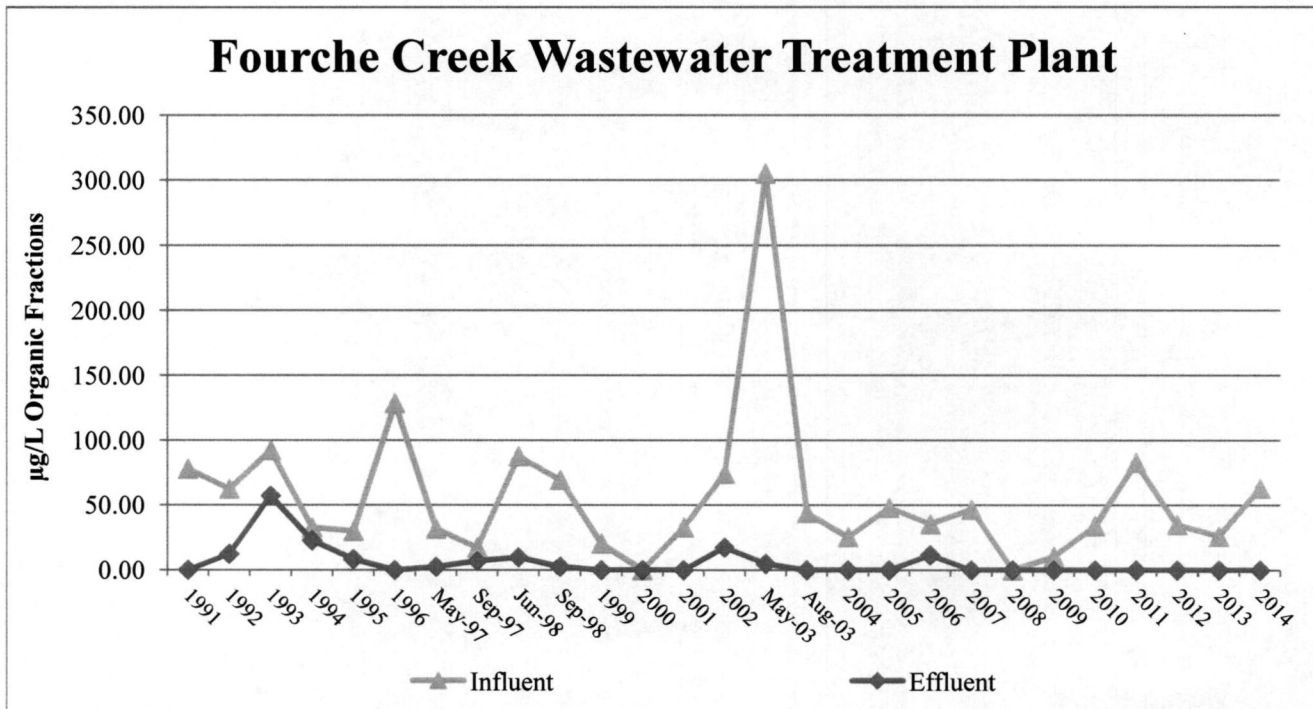
**LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 FOURCHE CREEK WASTEWATER TREATMENT PLANT INFLUENT/FINAL EFFLUENT  
 PRIORITY POLLUTANT SCAN - ORGANIC FRACTIONS**

**I. 2014 POSITIVE RESULTS, µg/L**

FOURCHE CREEK WASTEWATER TREATMENT PLANT		
Sample Date	Compound	Influent
9/4/2014	toulene	21
9/16/2014	bis(2-ethylhexyl)phthalate	17
9/16/2014	phenol	25
Sample Date	Compound	Effluent
9/4/2014	Volatiles	ND
9/16/2014	Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND

Comments: ND - No Detection

**II. TREND OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 2014**



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

March 31, 2015  
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III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 2014

Fourche Creek Wastewater Treatment Plant

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

Comments

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

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III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 2004 THROUGH 2011

Fourche Creek Wastewater Treatment Plant

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

Comments

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

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

Fourche Creek Wastewater Treatment Plant

PPS, µg/L	Jun-98		Sep-98		1999		2000		2001		2002		May-03		Aug-03	
Parameter	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  
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III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 1997

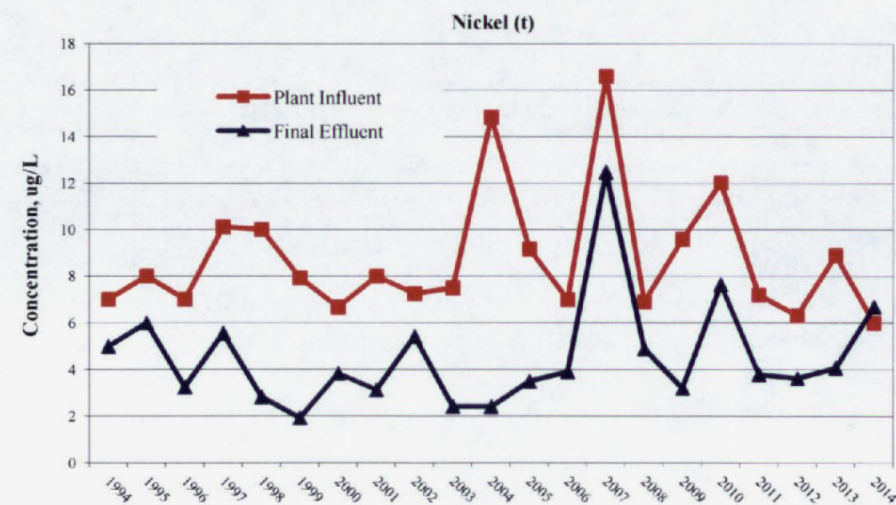
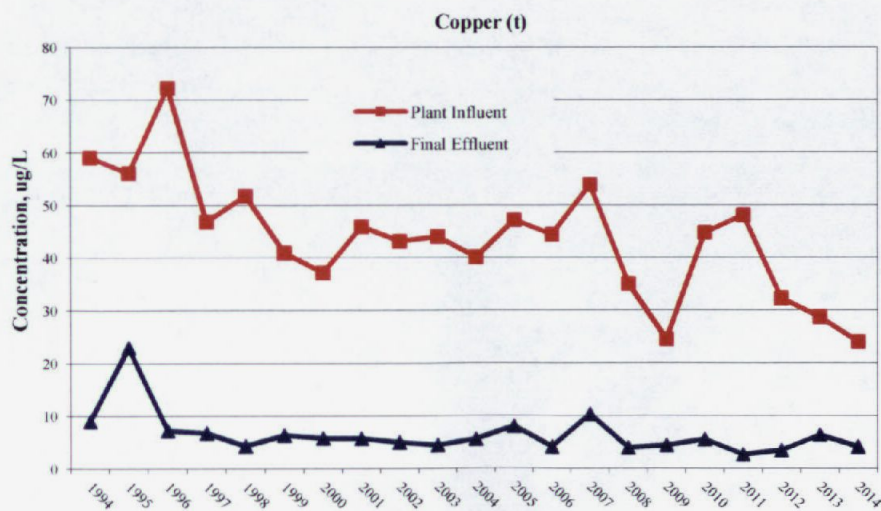
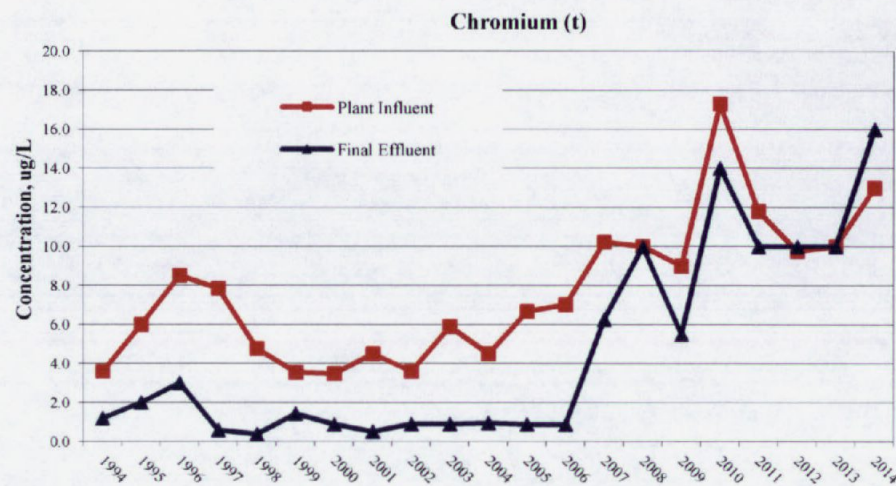
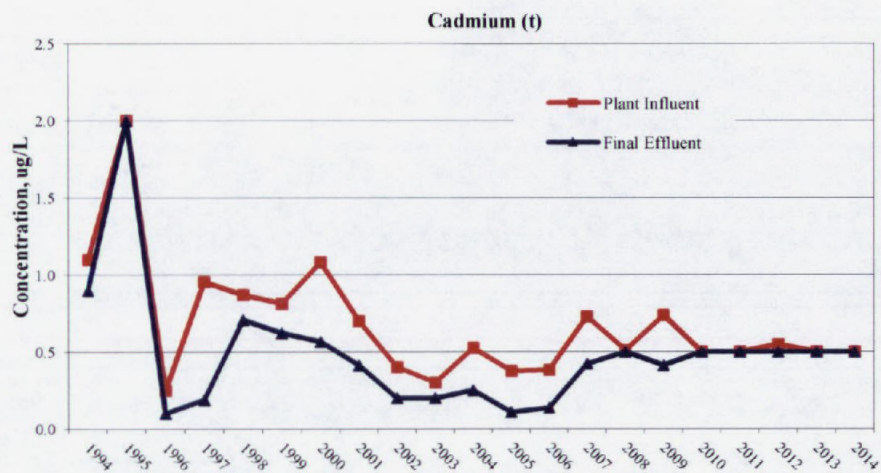
Fourche Creek Wastewater Treatment Plant

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

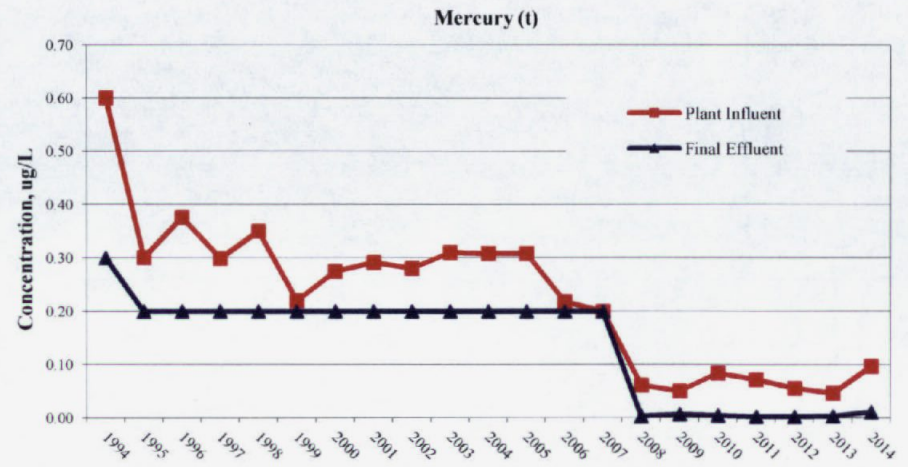
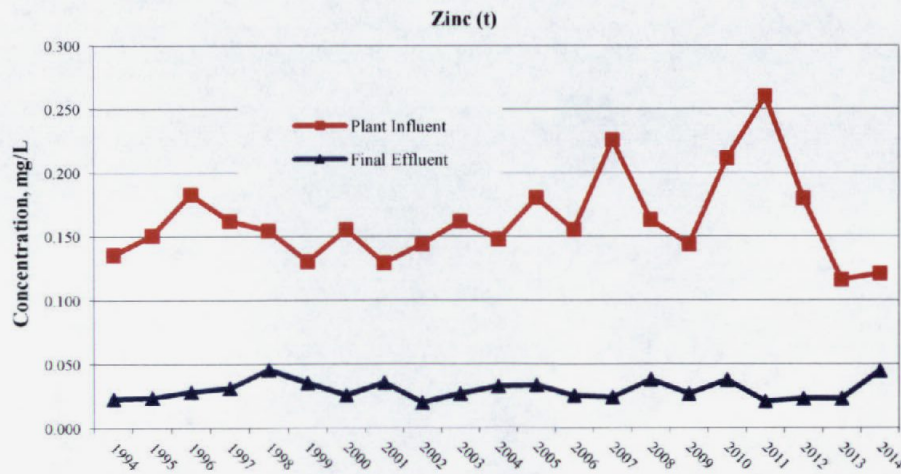
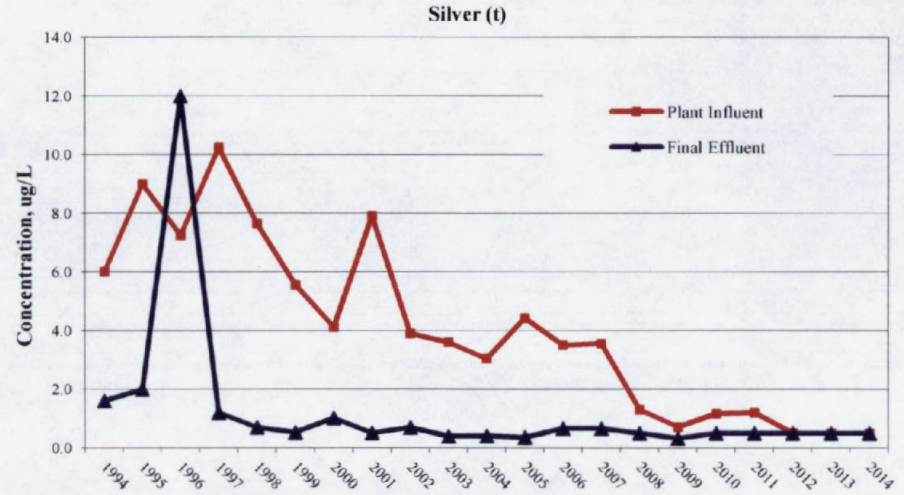
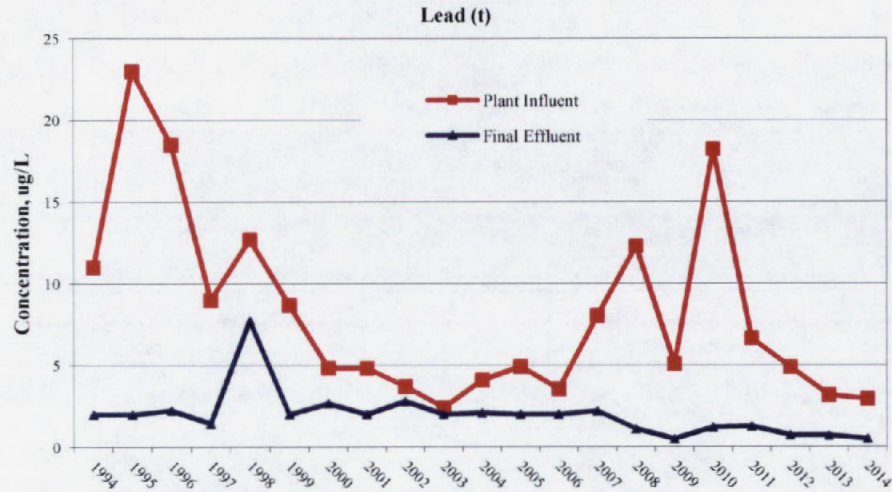
**LITTLE ROCK WASTEWATER  
ENVIRONMENTAL ASSESSMENT DIVISION  
FOURCHE CREEK TREATMENT PLANT CONCENTRATION TRENDS  
1994 THROUGH 2014**

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	Cadmium(t)	Copper (t)	Chromium (t)	Nickel(t)
Influent Headworks Limit	9 ug/L	270 ug/L	260 ug/L	160 ug/L
Effluent Water Quality Criteria	53 ug/L	395 ug/L	11,700 ug/L	4,980 ug/L

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



**Influent Headworks Limit**  
**Effluent Water Quality Criteria**

**Lead (t)**  
**50 ug/L**  
**197 ug/L**

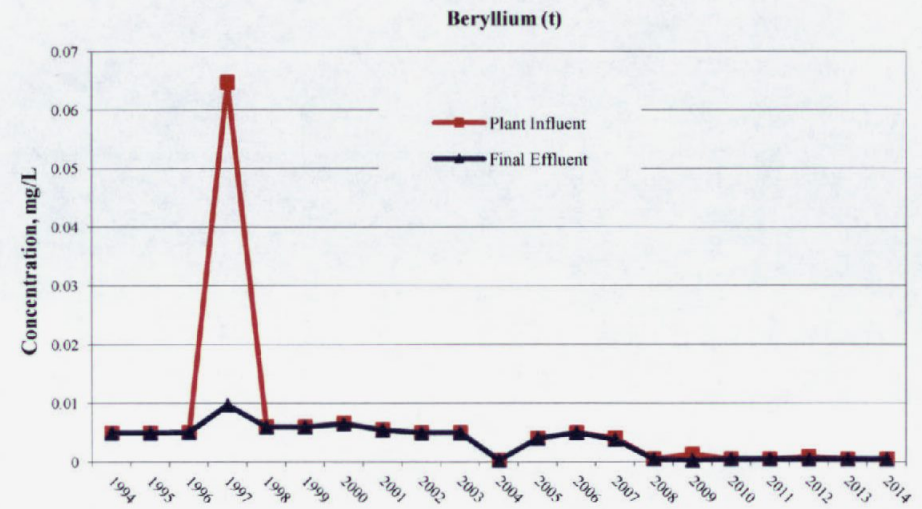
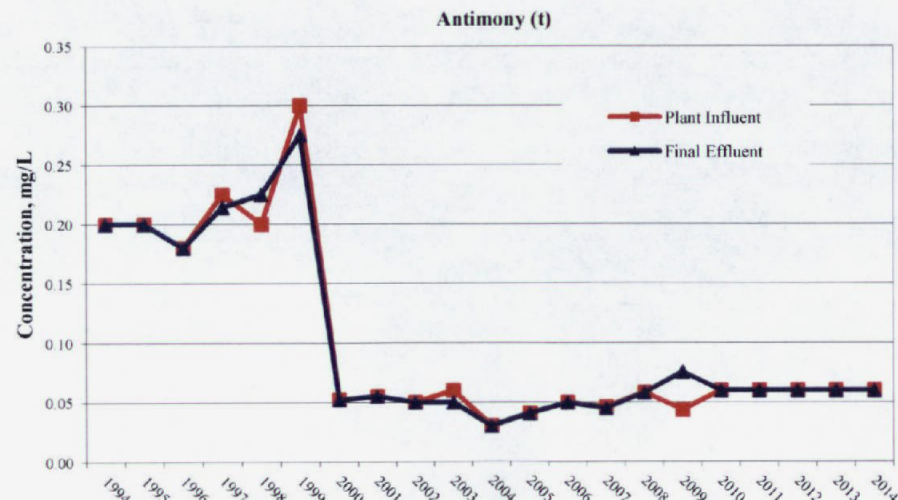
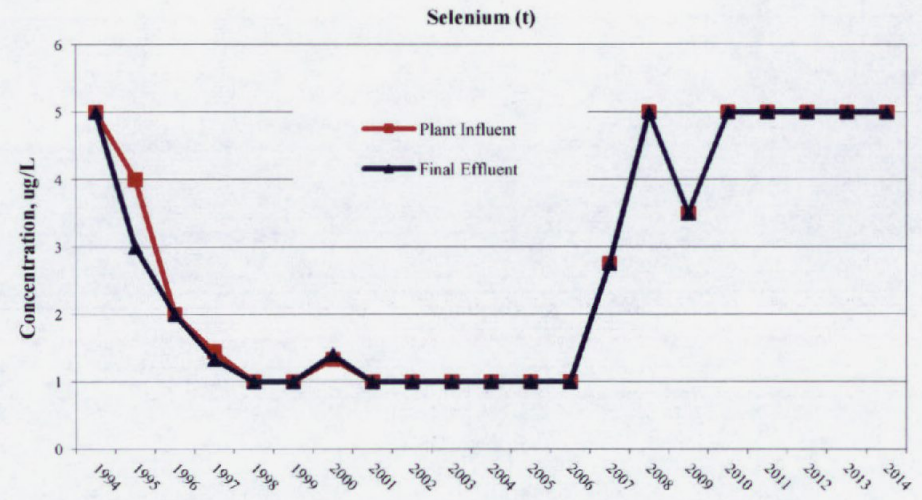
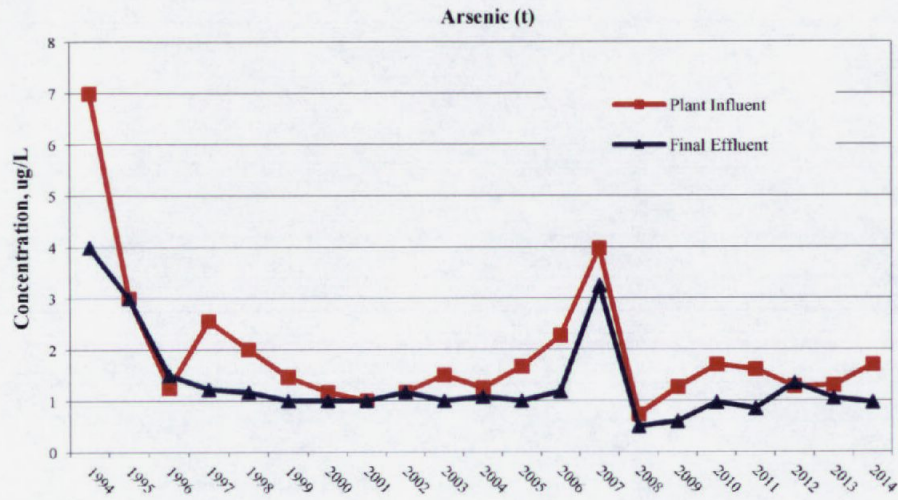
**Zinc(t)**  
**0.36 mg/L**  
**2.46 mg/L**

**Silver(t)**  
**180 ug/L**  
**56 ug/L**

**Mercury(t)**  
**0.2 ug/L**  
**0.14 ug/L**

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

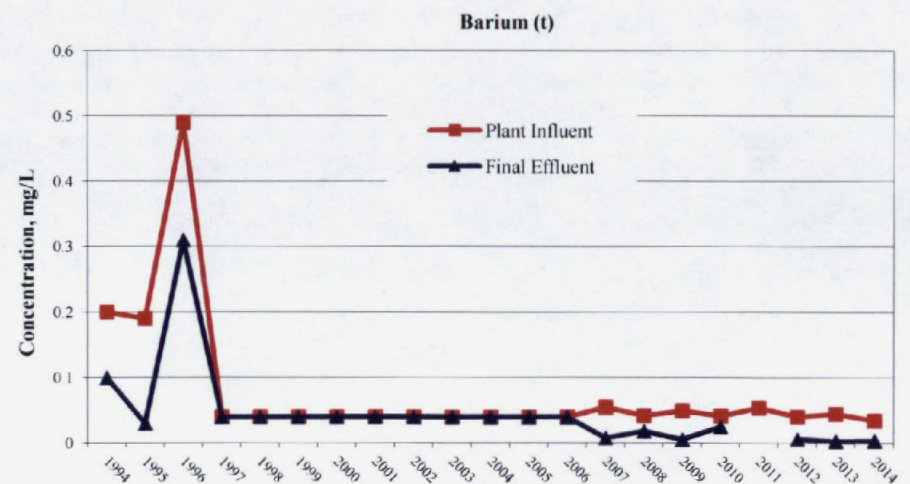
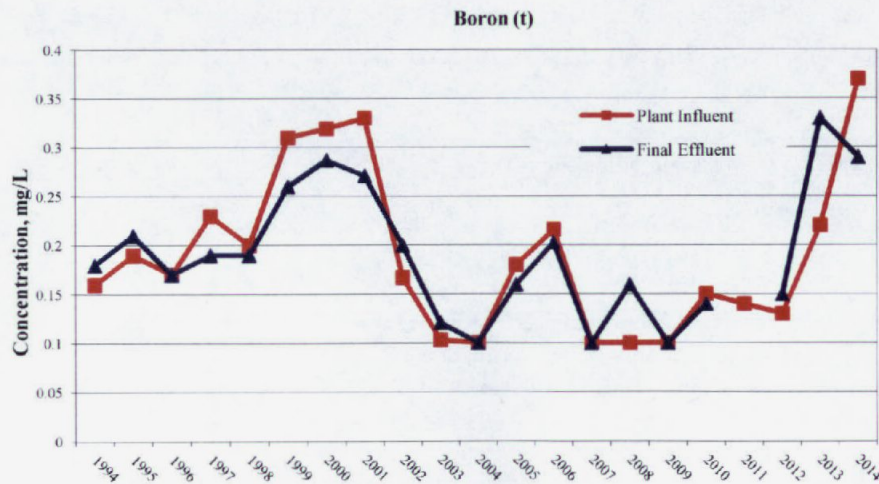
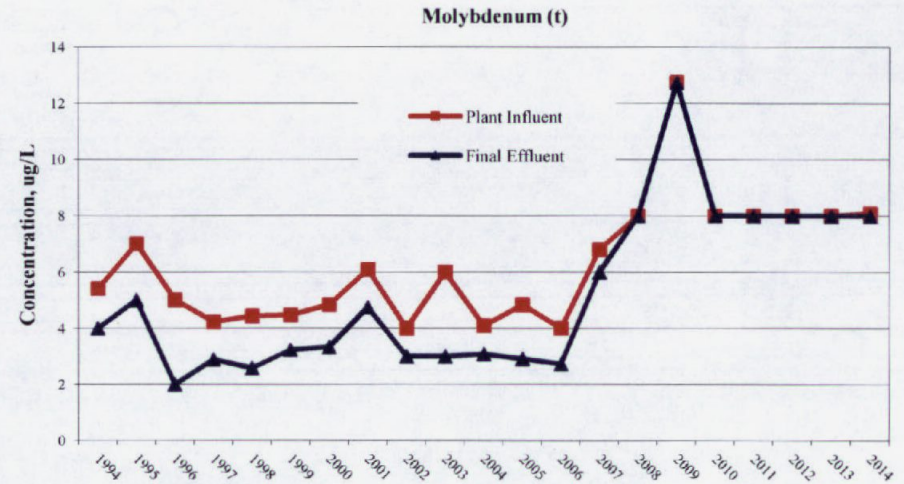
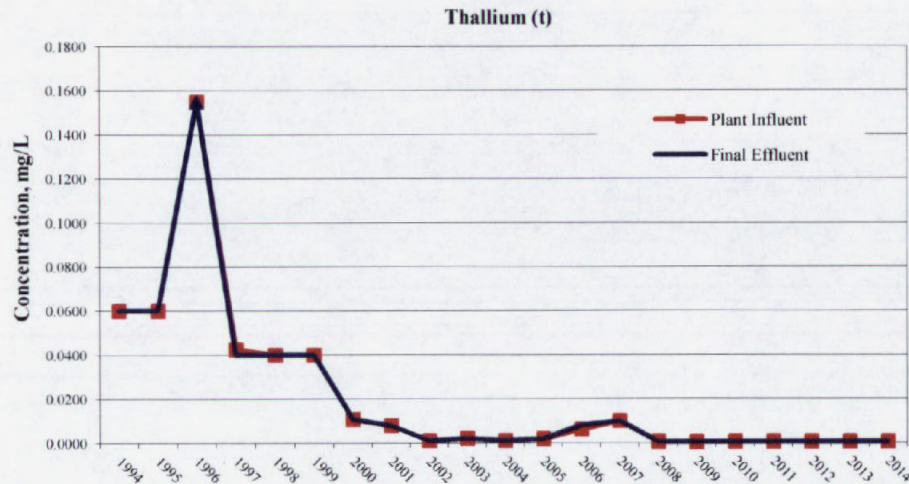
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	Arsenic (t)	Antimony (t)	Selenium (t)	Beryllium (t)
Influent Headworks Limit	14 ug/L	None	10 ug/L	None
Effluent Water Quality Criteria	3,440 ug/L	None	56 ug/L	None

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

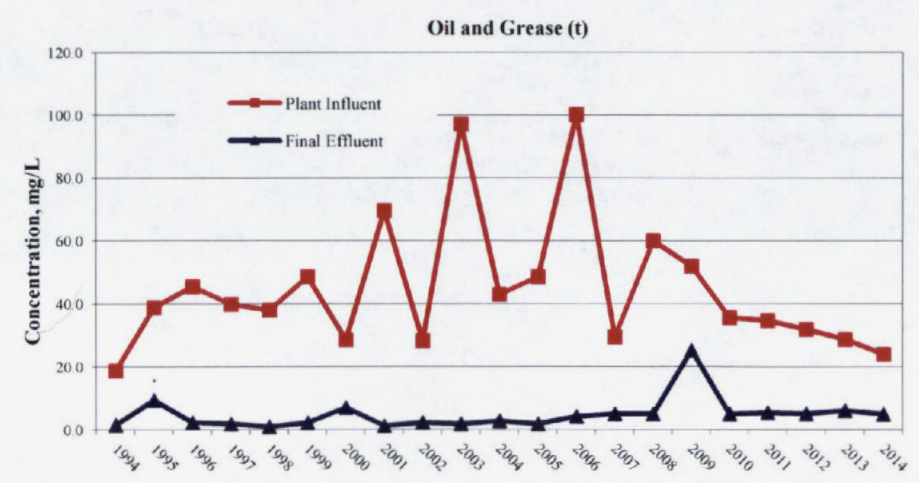
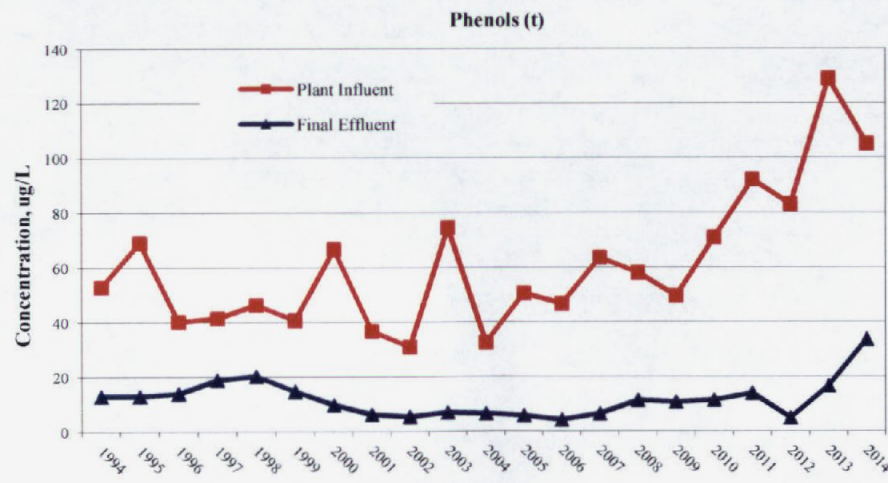
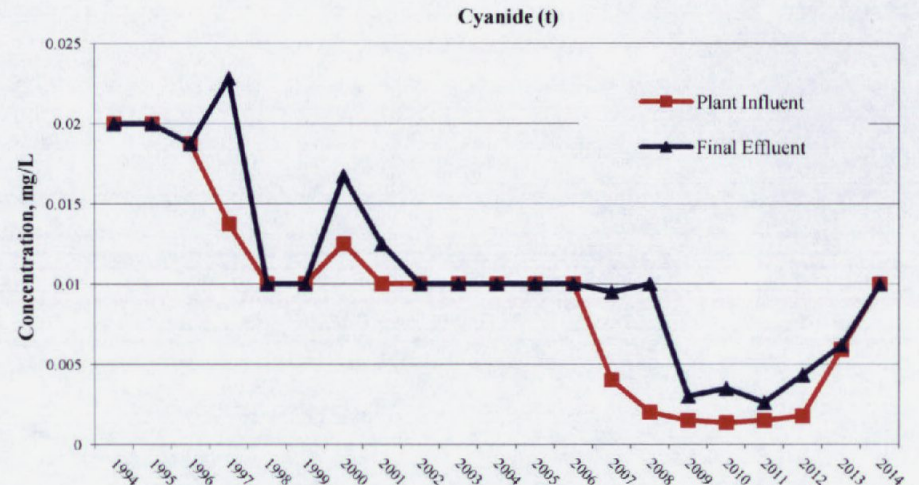
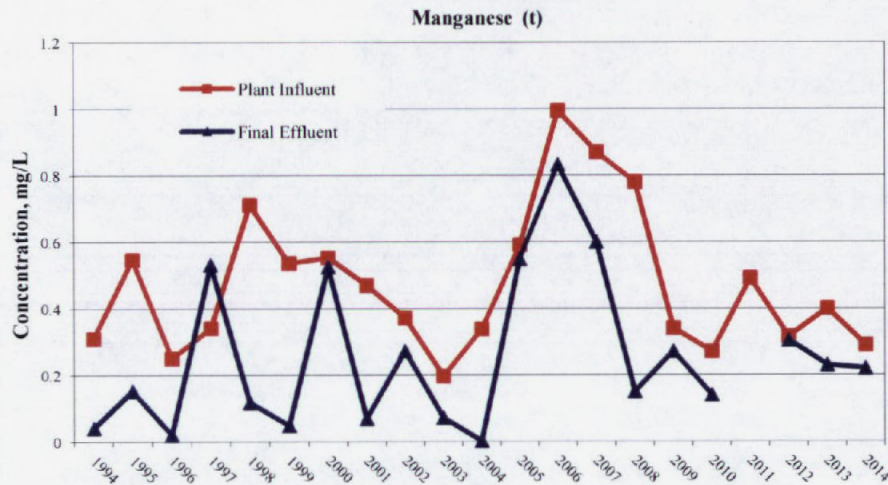
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	Thallium (t)	Boron (t)	Molybdenum(t)	Barium(t)
Influent Headworks Limit	None	None	None	None
Effluent Water Quality Criteria	None	None	None	None

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1994 THROUGH 2014**

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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



## 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 2014 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 2014 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 2014. Item II: Influent/Effluent organic fraction detections trend chart for 2011 through 2014. Item III is the long term summary of positive results. 40 CFR Part 122, Appendix D, Table II monitoring frequency for 2014 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 2011-2014. Some peaks may be due to changes in test methods and detection limits.



**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT**  
**REPORTING YEAR: JANUARY 1, 2014 TO DECEMBER 31, 2014**  
**CITY OF LITTLE ROCK - LITTLE MAUMELLE WASTEWATER TREATMENT PLANT**  
**NPDES PERMIT NO.: AR0050849**

**AVERAGE POTW FLOW: 2.10 MGD**

**PERCENT (%) IU FLOW: 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		
		3/10/2014			10/20/2014		3/10/2014			10/22/2014					
Antimony		<	60			<	60				<	60	60	200.8	60
Cadmium	9	<	0.5			N/A	<	0.5			<	0.5	0.5	200.8	0.5
Copper	270		12.0			N/A		5.0				7.0	0.5	200.8	0.5
Lead	50		0.64			N/A	<	0.5				0.53	0.5	200.8	0.5
Mercury	0.20		0.0391			N/A		0.0073					0.005	1631E	0.0002
Nickel	160		2.1			N/A		1.4				1.7	0.5	200.8	0.5
Selenium	10	<	5			N/A	<	5			<	5	5	200.8	5
Silver	180	<	0.5			N/A	<	0.5			<	0.5	0.5	200.8	0.5
Zinc	360		69			N/A		54				80.5	20	200.8	20
Chromium	260	<	10			N/A	<	10			<	10	10	200.8	10
Cyanide	90	<	10.0			N/A	<	10.0					10	SM20 4500 C&E	10
Arsenic	14		0.73			N/A	<	0.5				0.58	0.5	200.8	0.5
Molybdenum		<	8				<	8			<	8		200.8	8
Phenols			73.0					13.0					5	420.1	5
Beryllium		<	0.5				<	0.5			<	0.5	0.5	200.8	0.5
Thallium		<	0.5				<	0.5			<	0.5	0.5	200.8	0.5
Barium												7		200.8	2
Boron												220		200.8	100
Manganese												39		200.8	2
Oil and Grease			9,000				<	5,000						1664A	5000
Flow, MGD			2.52					2.36				1.57			

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
REPORTING YEAR: JANUARY 1, 2014 TO DECEMBER 31, 2014**

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

**NPDES PERMIT NO.: AR0050849**

**AVERAGE POTW FLOW: 2.10 MGD**

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

PLANT INFLUENT	Flow MGD	O&G mg/L	CN- mg/L	Zn mg/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 mg/L	Be mg/L	Tl mg/L	Mn mg/L	Ba mg/L	B mg/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	200.8	200.8	200.8	200.8
Detection Level Achieved	5	0.01	0.02	0.5	10	0.5	0.5	8	0.5	0.5	0.5	5	0.0002	2.275	0.06	0.0005	0.0005	0.002	0.002	0.002	0.1	
03/10/2014	2.52	9	< 0.0100											0.0391	73.0							
03/17/2014	2.68			0.069	< 0.5	< 10	< 0.5	12.0	< 8	2.1	0.64	0.73	< 5			< 0.06	< 0.0005	< 0.0005				
10/20/2014	1.79			0.110	< 0.5	< 10	< 0.5	10.0	< 8	3.3	1.20	0.78	< 5			< 0.06	< 0.0005	< 0.0005				
11/17/2014	1.65			0.120	1.5	< 10	< 0.5	20.0	< 8	2.3	0.99	1.00	< 5			< 0.06	< 0.0005	< 0.0005	0.390	0.033	0.19	
<b>Average</b>	2.16	9	< 0.0100	0.100	0.8	< 10	< 0.5	14.0	< 8	2.6	0.94	0.84	< 5	0.0391	73.0	< 0.06	< 0.0005	< 0.0005	0.390	0.033	0.19	
<b>Maximum</b>	2.68	9	< 0.0100	0.120	1.5	< 10	< 0.5	20.0	< 8	3.3	1.20	1.00	< 5	0.0391	73.0	< 0.06	< 0.0005	< 0.0005	0.390	0.033	0.19	
<b>Minimum</b>	1.65	9	< 0.0100	0.069	< 0.5	< 10	< 0.5	10.0	< 8	2.1	0.64	0.73	< 5	0.0391	73.0	< 0.06	< 0.0005	< 0.0005	0.390	0.033	0.19	
<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, 2014 TO DECEMBER 31, 2014**

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

NPDES PERMIT NO.: AR0050849

AVERAGE POTW FLOW: 2.10 MGD

PERCENT (%) IU FLOW: 0 %

FINAL EFFLUENT	Flow MGD	O&G mg/L	CN- mg/L	Zn mg/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 mg/L	Be mg/L	Tl mg/L	Mn mg/L	Ba mg/L	B mg/L
EPA Test Method Used	1664A	SM201b 4500 C&F	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	5	0.01	0.02	0.5	10	0.5	0.5	8	0.5	0.5	0.5	5	0.0002	5.0	0.06	0.0005	0.0005	0.002	0.002	0.1	
03/10/2014	2.36	< 5.0	< 0.0100											0.0073	13.0						
03/18/2014	2.22			0.054	< 0.5	< 10	< 0.5	5.0	< 8	1.4	< 0.50	< 0.50	< 5		< 0.06	< 0.0005	< 0.0005				
10/22/2014	1.57			0.099	< 0.5	< 10	< 0.5	7.1	< 8	2.0	0.56	0.66	< 5		< 0.06	< 0.0005	< 0.0005				
11/19/2014	1.52			0.062	< 0.5	< 10	< 0.5	6.9	< 8	1.4	< 0.50	< 0.50	< 5		< 0.06	< 0.0005	< 0.0005	0.039	0.007	0.22	
Average	1.92	< 5.0	< 0.0100	0.072	< 0.5	< 10	< 0.5	6.3	< 8	1.6	0.52	0.55	< 5	0.0073	13.0	< 0.06	< 0.0005	< 0.0005	0.039	0.007	0.22
Maximum	2.36	< 5.0	< 0.0100	0.099	< 0.5	< 10	< 0.5	7.1	< 8	2.0	0.56	0.66	< 5	0.0073	13.0	< 0.06	< 0.0005	< 0.0005	0.039	0.007	0.22
Minimum	1.52	< 5.0	< 0.0100	0.054	< 0.5	< 10	< 0.5	5	< 8	1.4	< 0.50	< 0.50	< 5	0.0073	13.0	< 0.06	< 0.0005	< 0.0005	0.039	0.007	0.22
WQS Effluent Level			n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a	n/a							
Day Max.																					
Month Avg.																					

Comments: None

**MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT  
TREATMENT PLANT PERCENT REMOVAL EFFICIENCIES  
REPORTING YEAR: JANUARY 1, 2014 TO DECEMBER 31, 2014**

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

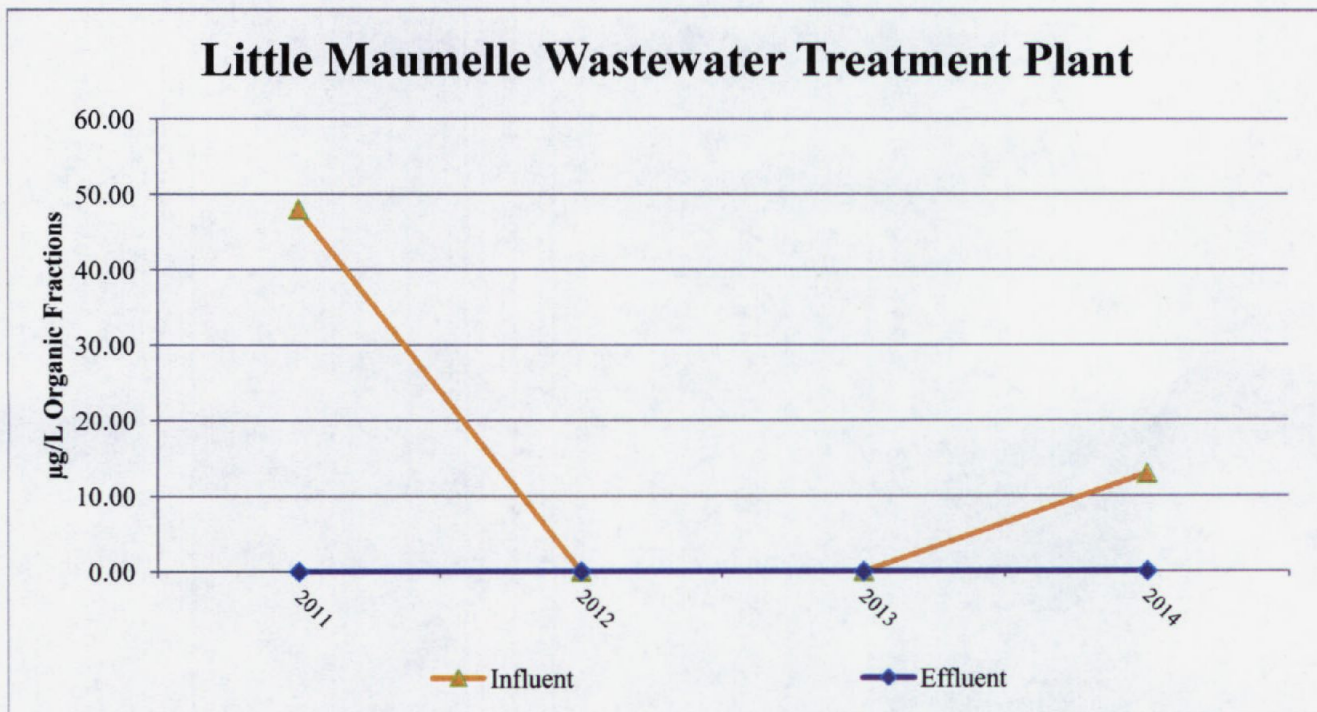
	O&G	CN-	Zn	Cd	Cr	Ag	Cu	Mo	Ni	Pb	As	Se	Hg	Phenol	Sb	Be	Tl	Mn	Ba	Bi
03/10/2014	42.5%	0.0%											81.4%	82.2%						
03/17/2014			21.7%	0.0%	0.0%	0.0%	58.3%	0.0%	33.3%	21.9%	31.5%	0.0%			0.0%	0.0%	0.0%			
10/20/2014			10.0%	0.0%	0.0%	0.0%	29.0%	0.0%	39.4%	53.3%	15.4%	0.0%			0.0%	0.0%	0.0%			
11/17/2014			48.3%	66.7%	0.0%	0.0%	65.5%	0.0%	39.1%	49.5%	50.0%	0.0%			0.0%	0.0%	0.0%	90.0%	78.2%	-15.8%
Average	42.5%	0.0%	29.2%	22.2%	0.0%	0.0%	50.9%	0.0%	37.3%	41.6%	32.3%	0.0%	81.4%	82.2%	0.0%	0.0%	0.0%	90.0%	78.2%	-15.8%

**I. 2014 POSITIVE RESULTS, µg/L**

LITTLE MAUMELLE WASTEWATER TREATMENT PLANT		
Sample Date	Compound	Influent
9/23/2014	Volatiles	ND
9/23/2014	Bis (2-ethylhexyl)phthalate	13
Sample Date	Compound	Effluent
9/23/2014	Volatiles	ND
9/23/2014	Base/Neutral, Acid Compounds, Pesticides/PCBs, Chlorpyrifos	ND

Comments: ND - No Detection

**II. TREND OF POSITIVE RESULTS - REPORTING PERIOD 2011 THROUGH 2014**



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

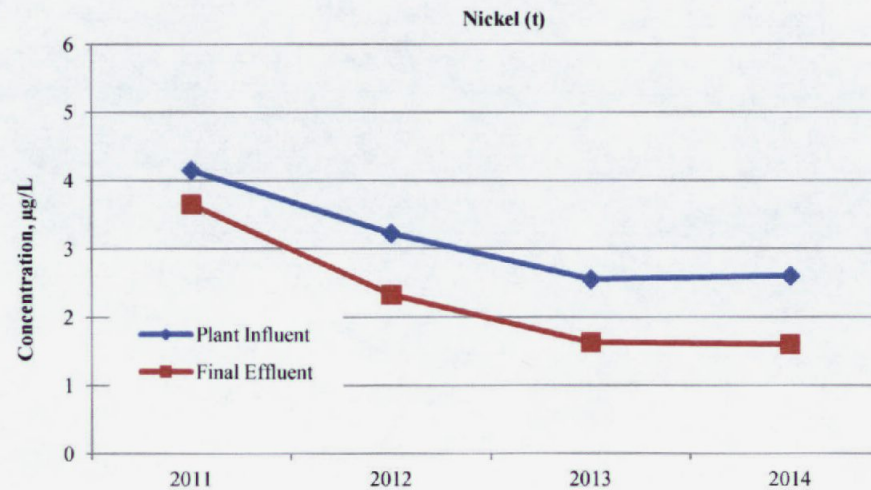
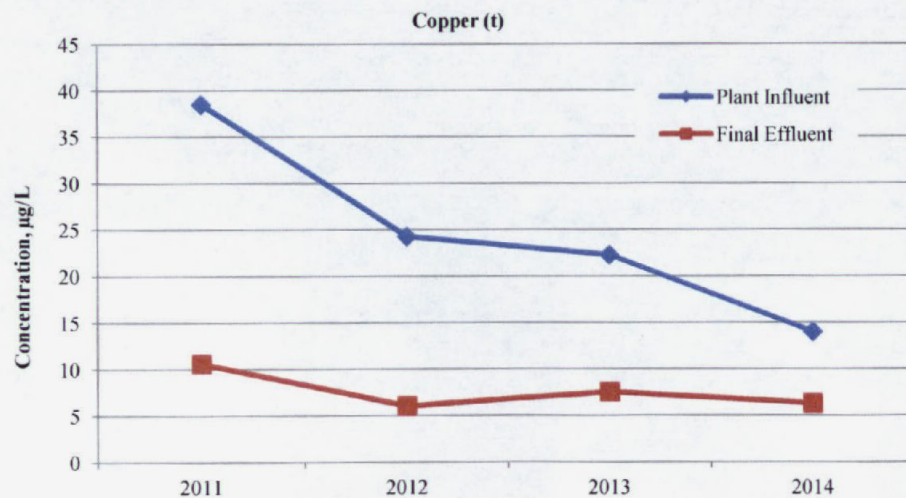
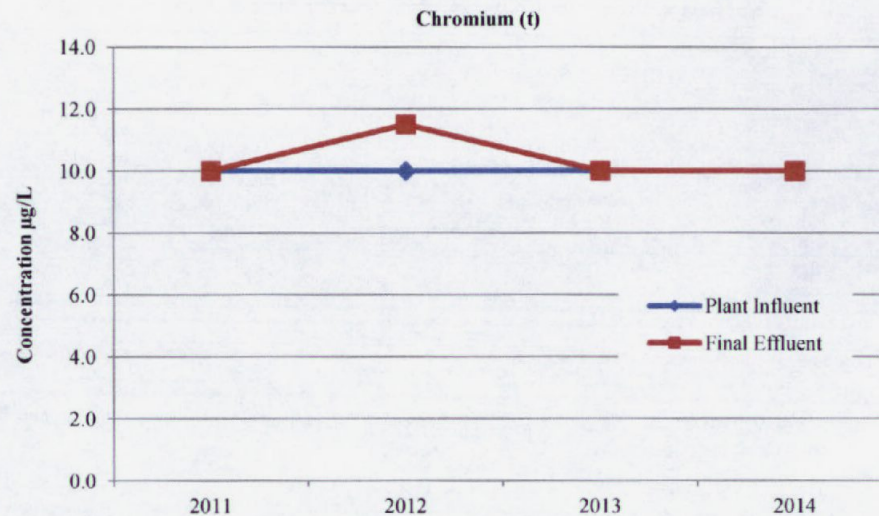
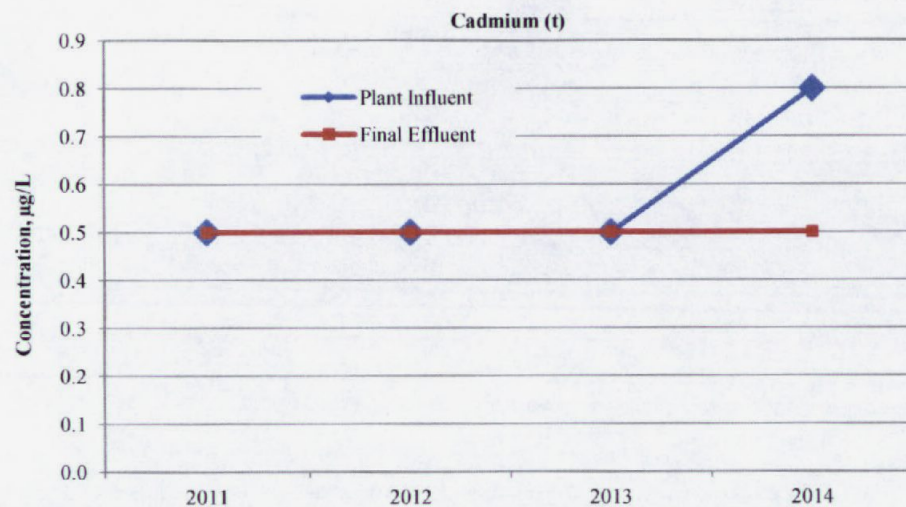
March 31, 2015  
 Page 2 of 2

III. SUMMARY OF POSITIVE RESULTS - REPORTING PERIOD 1991 THROUGH 2014

Little Maumelle Wastewater Treatment Plant

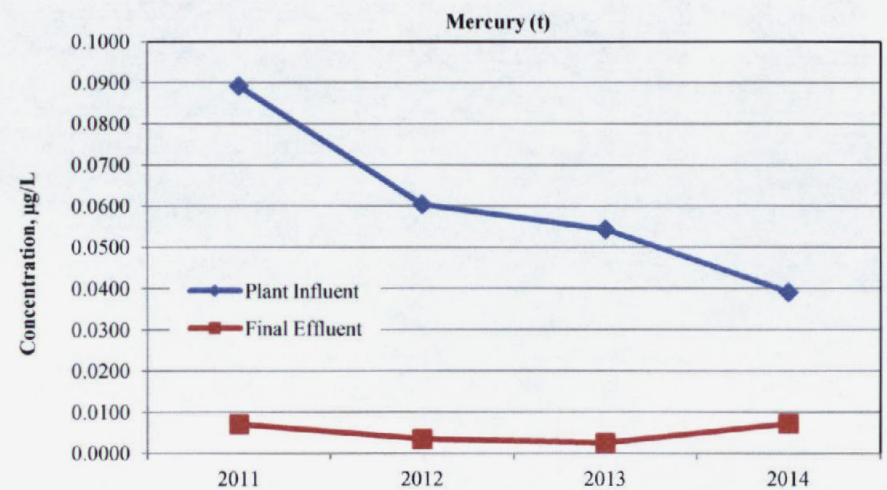
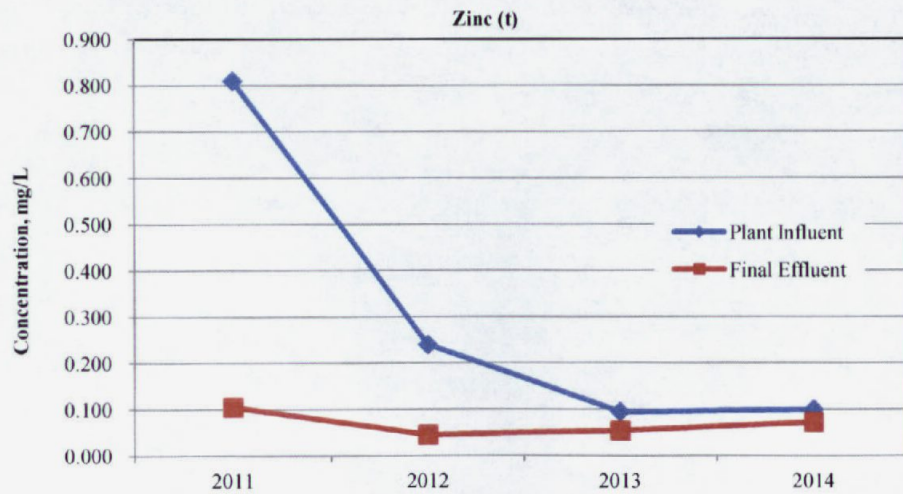
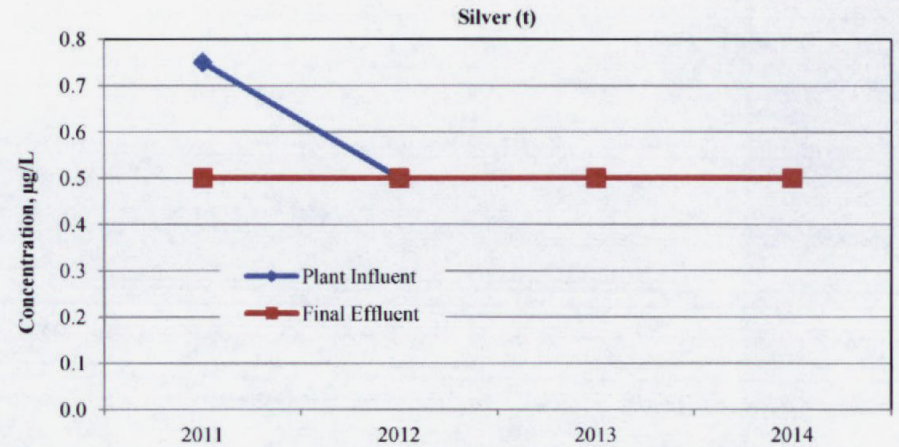
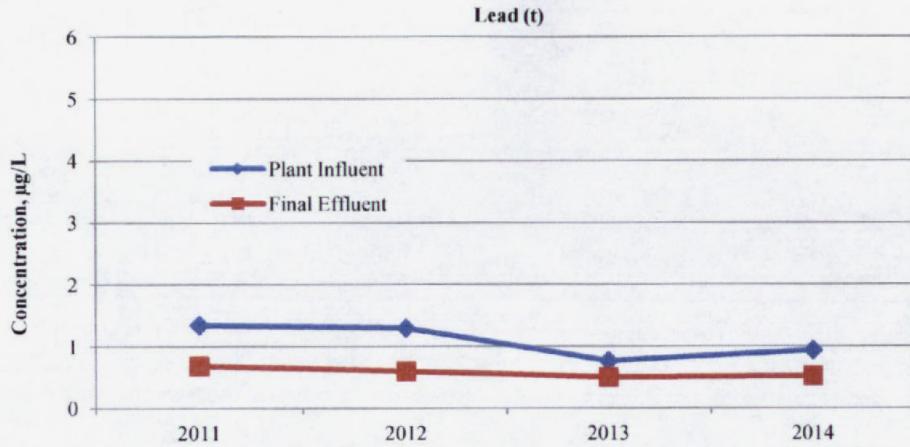
PPS, µg/L Parameter	2011		2012		2013		2014	
	INF	EFF	INF	EFF	INF	EFF	INF	EFF
Toluene	37	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)Phthalate	ND	ND	ND	ND	ND	ND	13	ND
Diethylphthalate	11	ND	ND	ND	ND	ND	ND	ND
<b>Total</b>	<b>48.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>13.00</b>	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

LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
 2011 THROUGH 2014



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

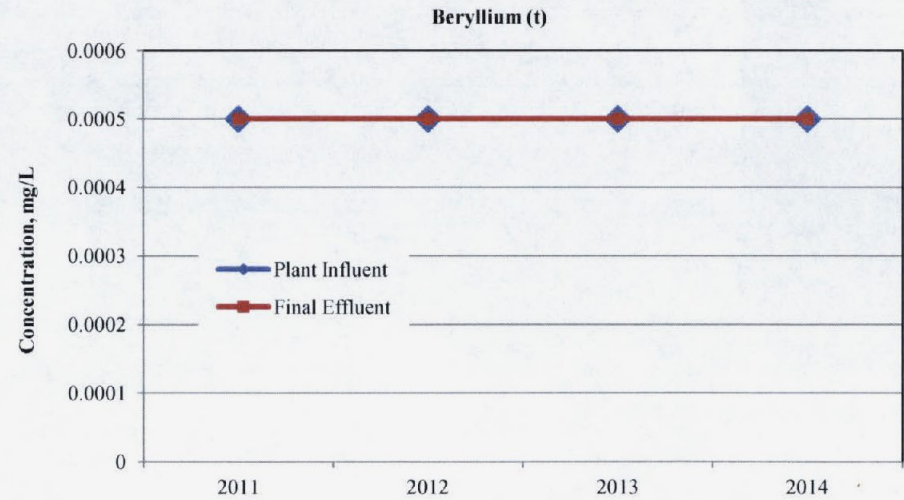
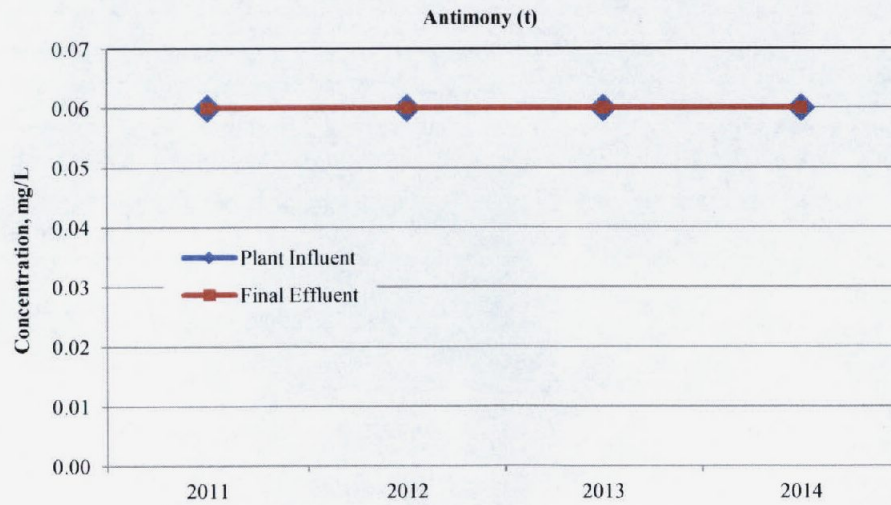
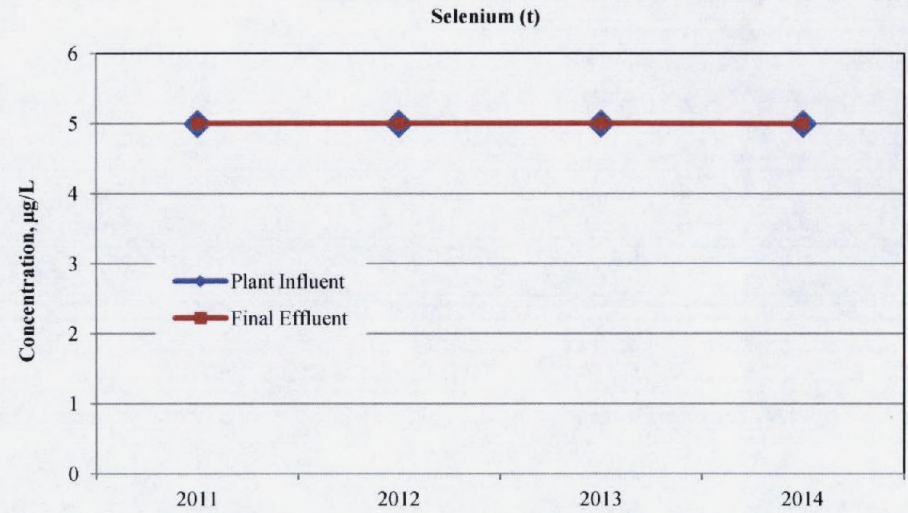
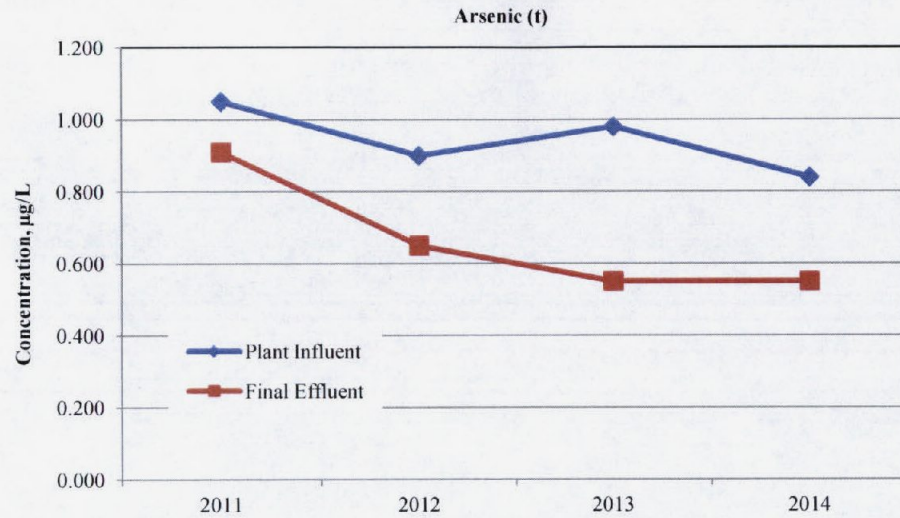
LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
 2011 THROUGH 2014



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

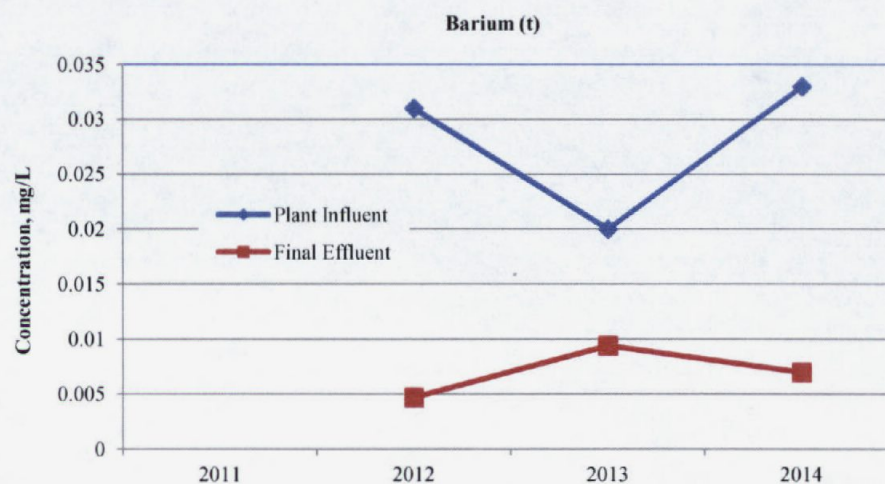
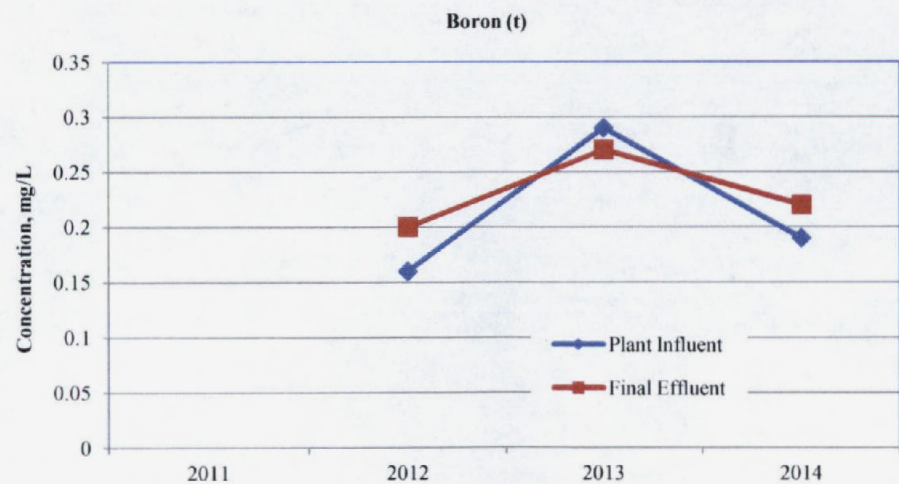
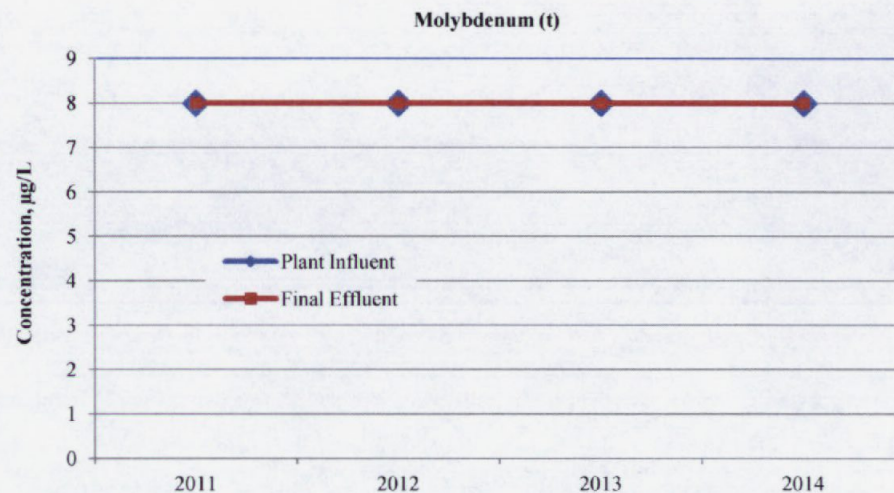
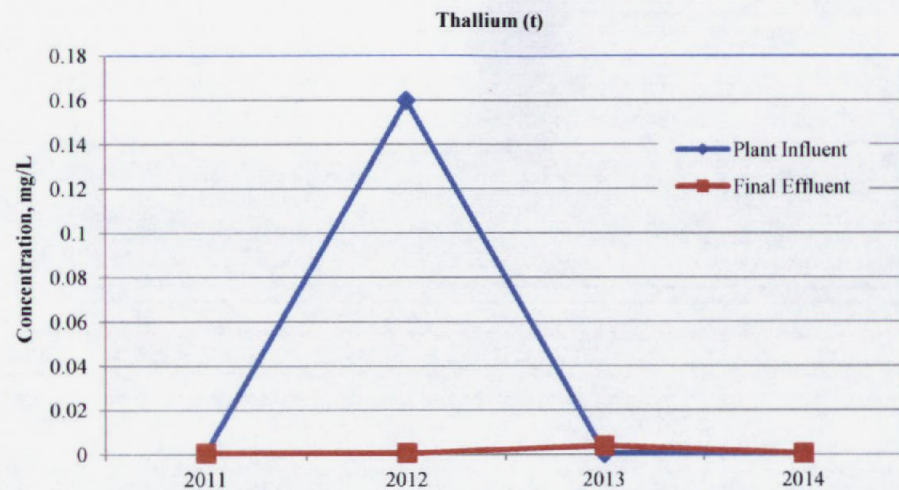


**LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
 2011 THROUGH 2014**



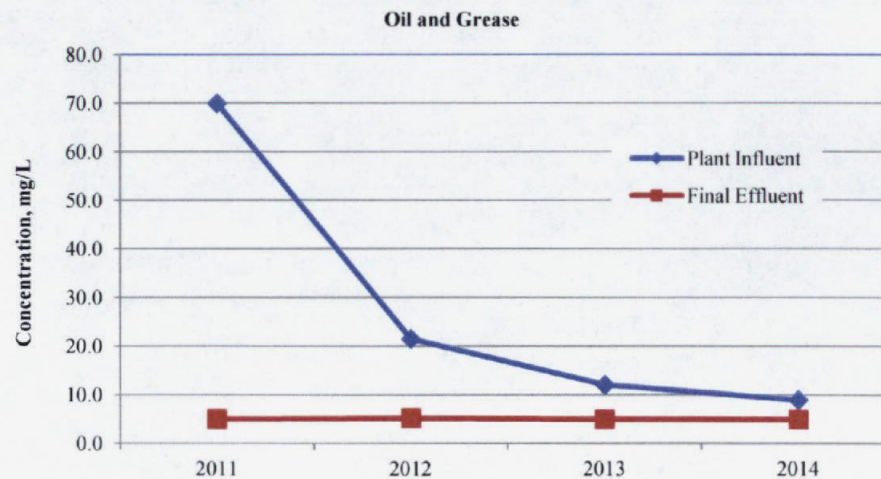
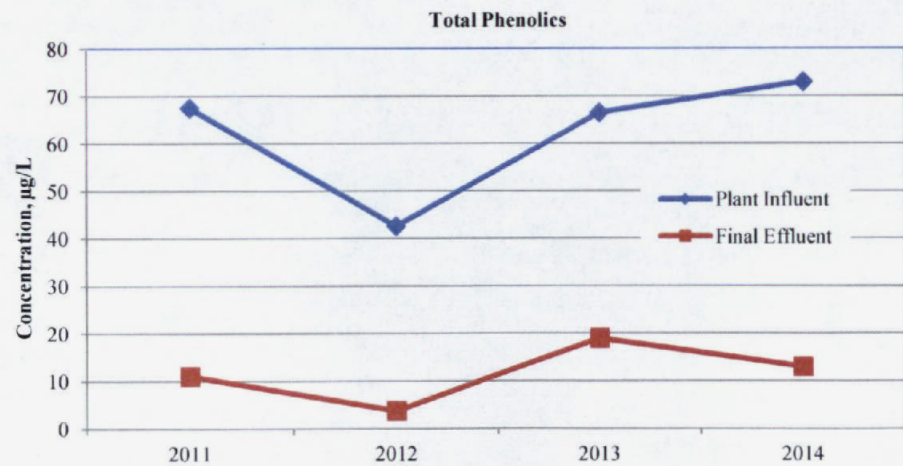
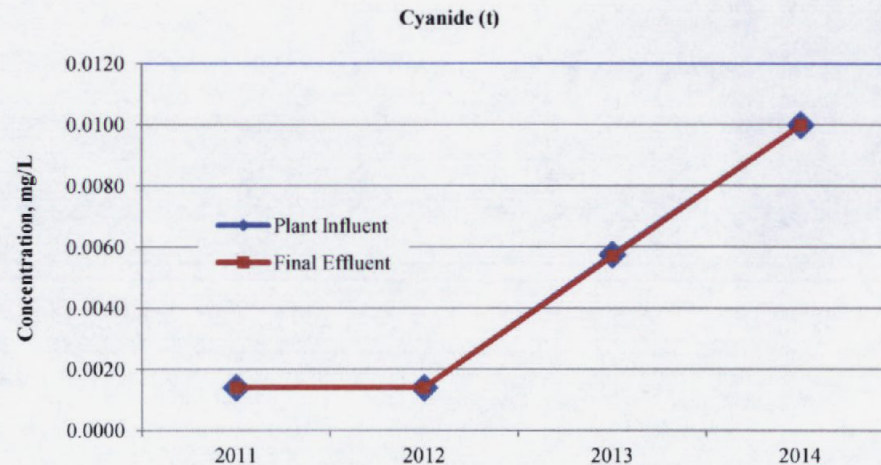
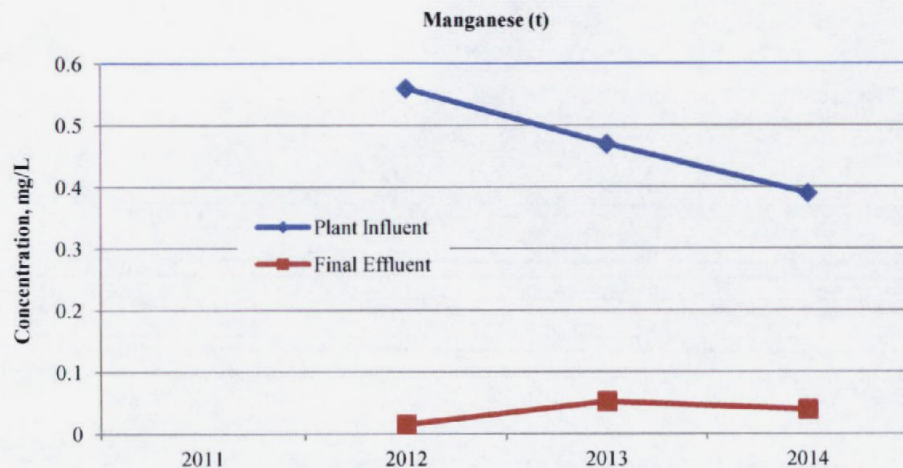
	<b>Arsenic(t)</b>	<b>Antimony (t)</b>	<b>Selenium (t)</b>	<b>Beryllium (t)</b>
<b>Influent Headworks Limit</b>	<b>14 ug/L</b>	<b>None</b>	<b>10 ug/L</b>	<b>None</b>
<b>Effluent Water Quality Criteria (Acute)</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
 2011 THROUGH 2014



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

LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 LITTLE MAUMELLE TREATMENT PLANT CONCENTRATION TRENDS  
 2011 THROUGH 2014



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



## SUMMARY OF WASTEWATER TREATMENT PLANT LOADING TRENDS

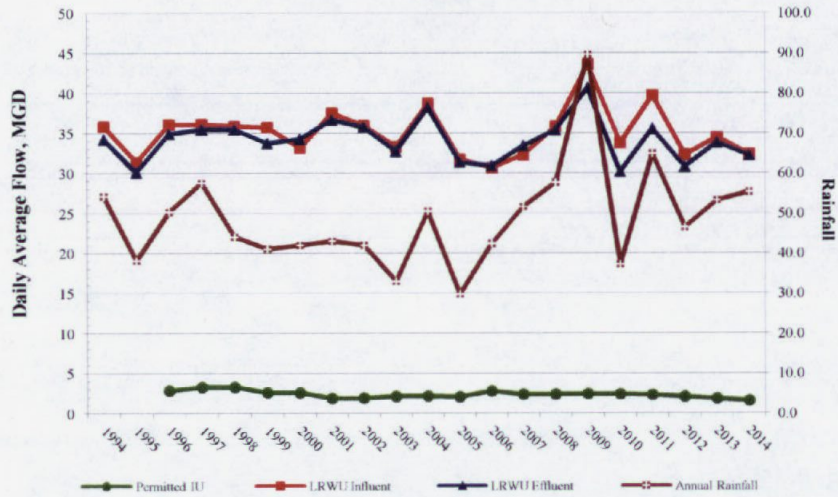
Trend charts are used to evaluate pollutant loading for the Little Rock Wastewater (LRW) system, for each wastewater treatment plant and to evaluate Industrial User (IU) contributions. Little Maumelle Treatment Plant came on line in 2011 and is included on the charts beginning 2011. The charts are organized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

- Total System Loading Trends - These charts show 1994 - 2014 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 IU BOD trend ends in 2013 due to monitoring changes for surcharge parameters beginning 2014.

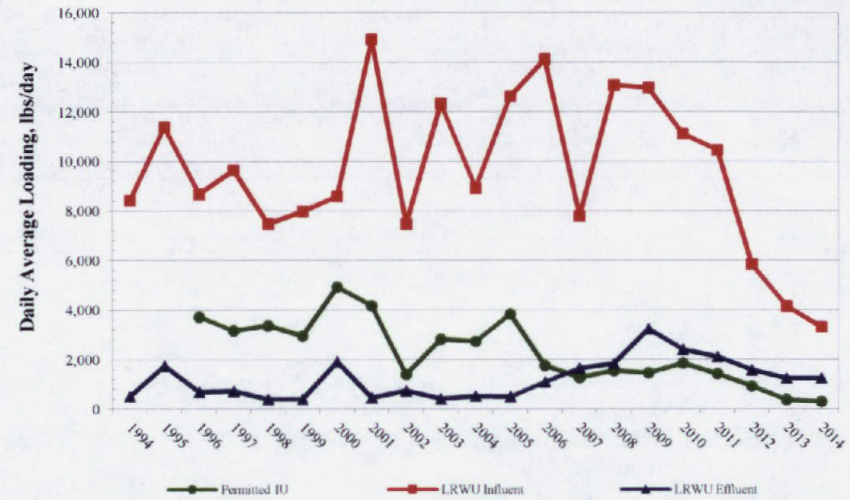
For each individual analytical point the lbs/day is calculated using the flow for each sample date. In cases where the concentration is reported as less than the detection limit the detection limit number was used to calculate the lbs/day. This causes the loading (lbs/day) to be higher than what it would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

- IU Percent Contributions 1996 - 2014 - 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 - 2014. LM-WWTP loading data (lbs/day) for 2011 - 2014 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.)

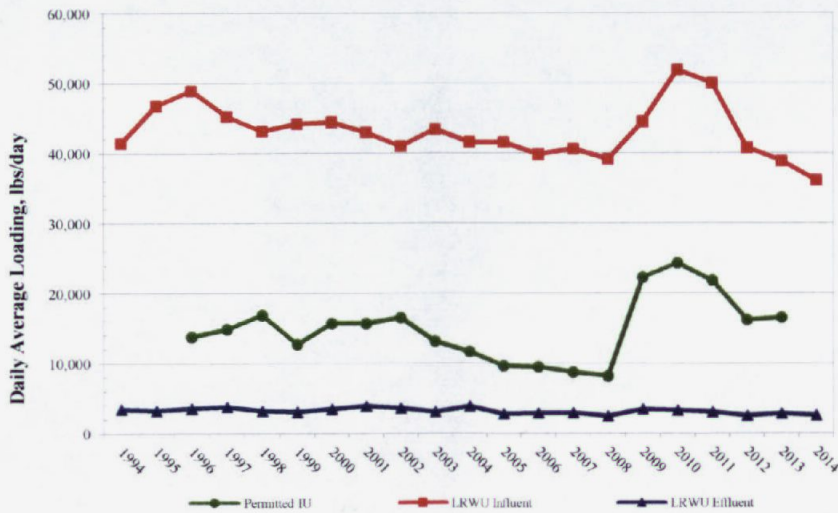
Hydraulic



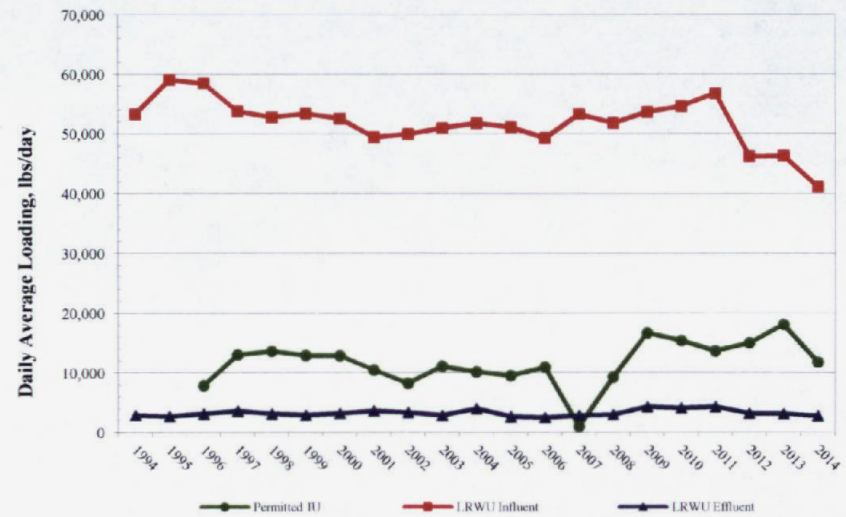
Oil & Grease



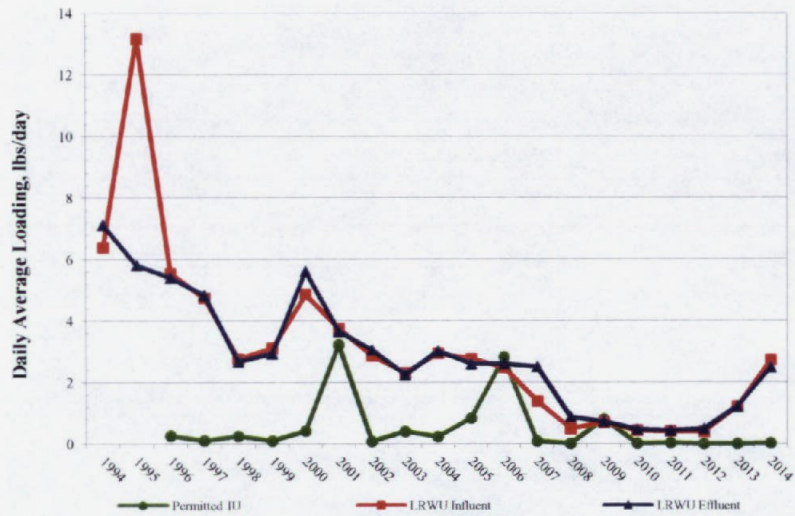
BOD<sub>5</sub>



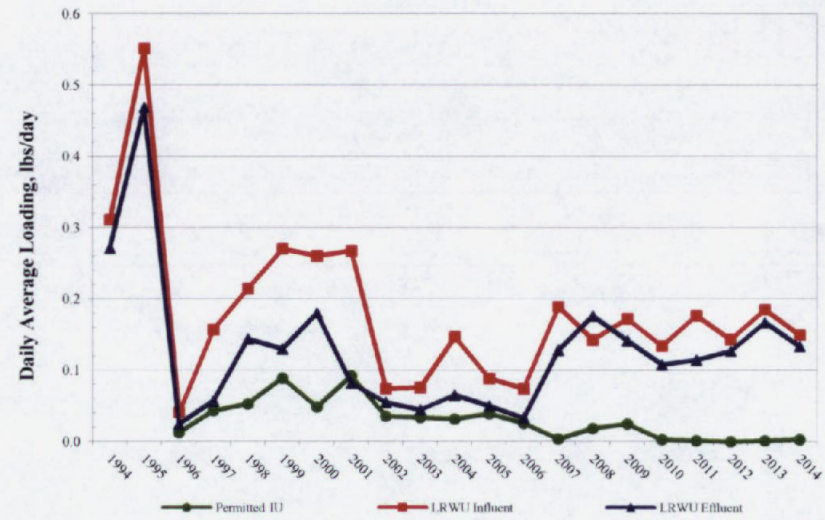
TSS



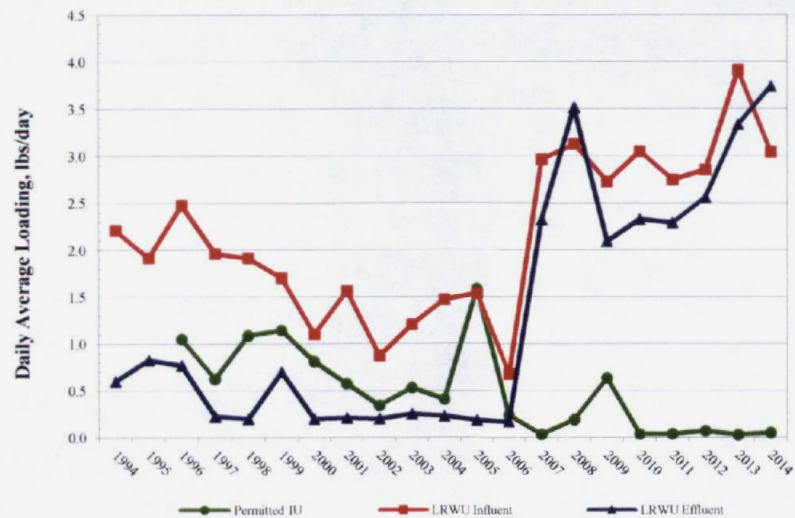
Cyanide (t)



Cadmium (t)



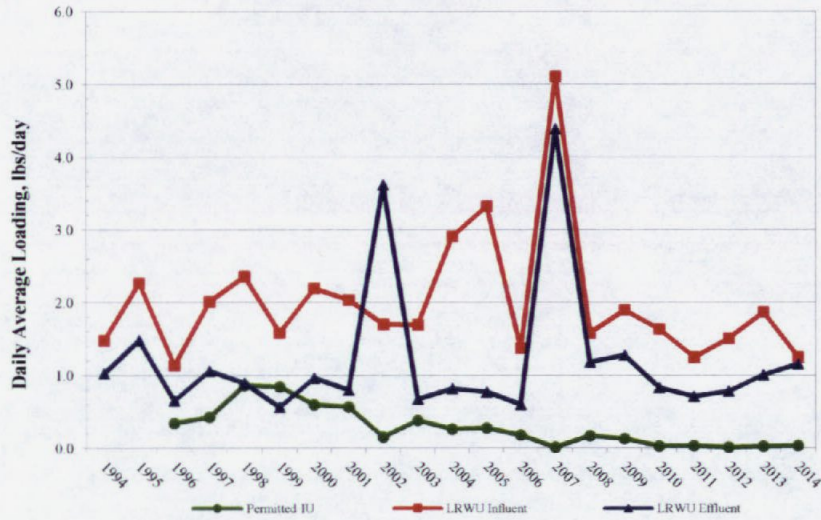
Chromium (t)



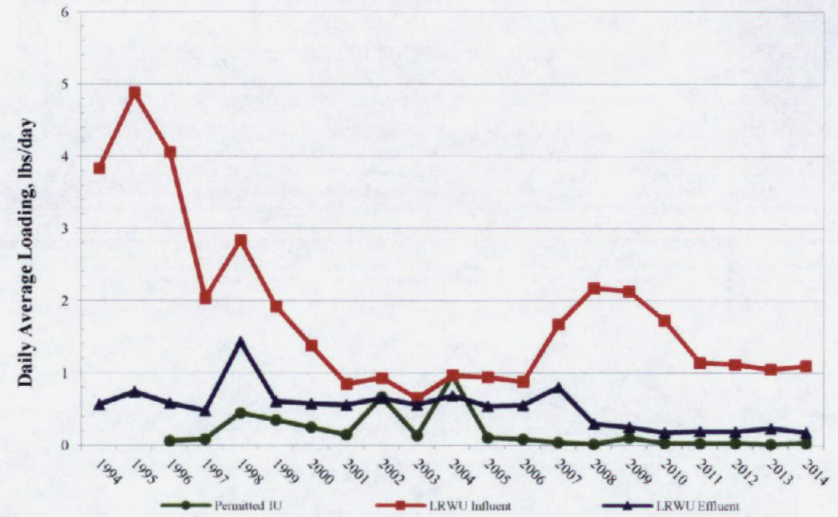
Copper (t)



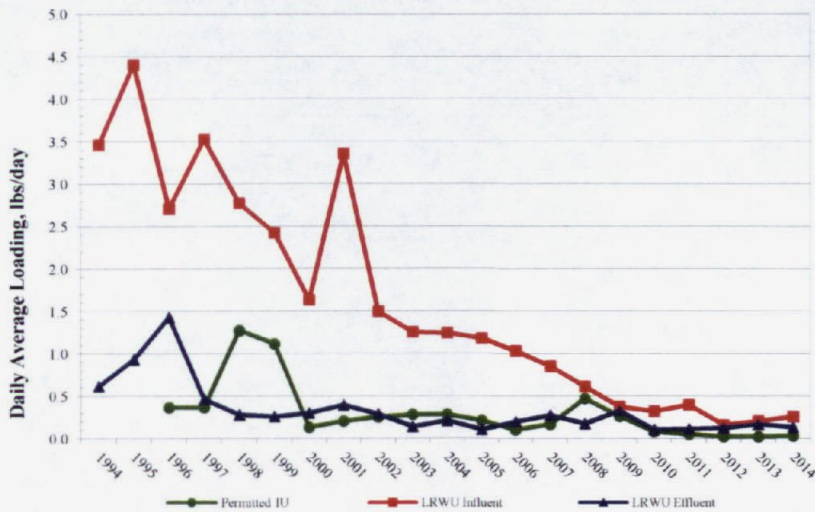
Nickel (t)



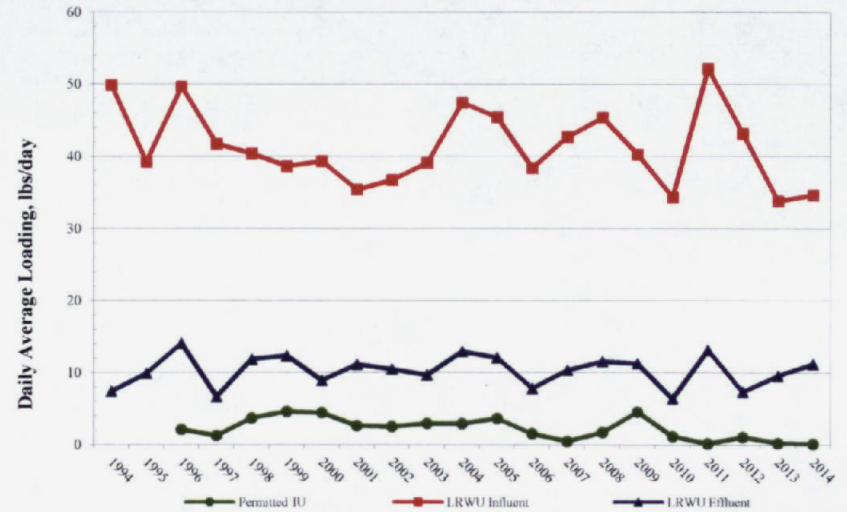
Lead (t)



Silver (t)

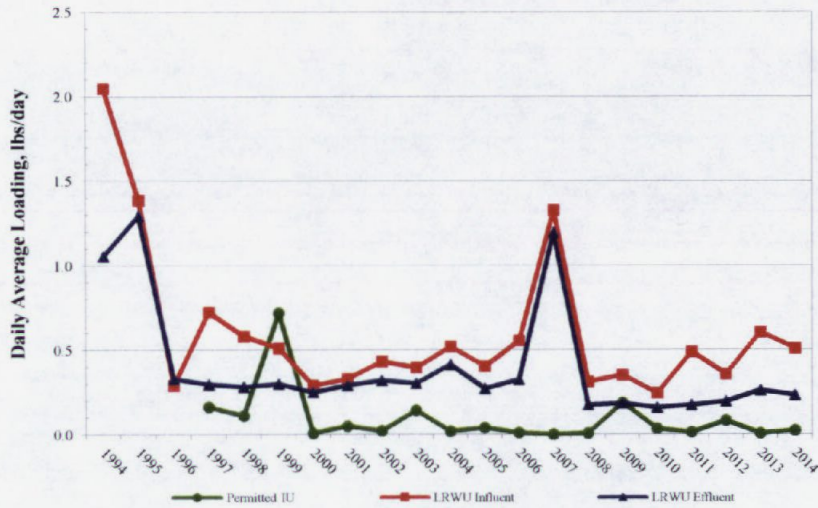


Zinc (t)

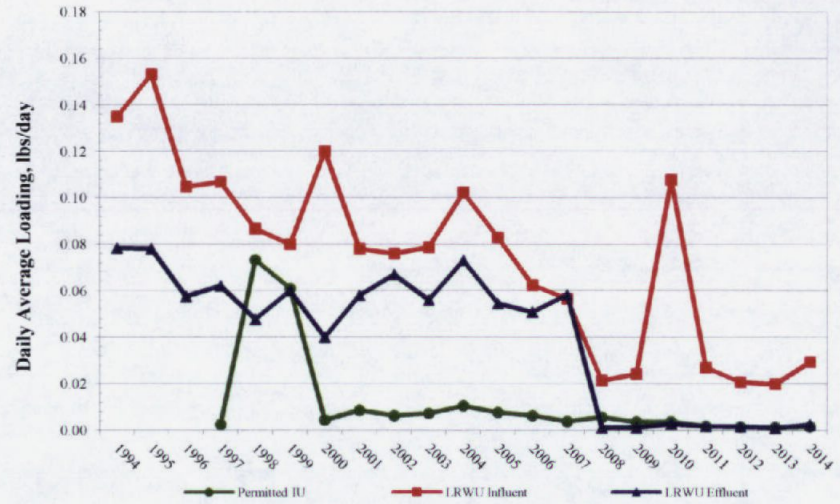




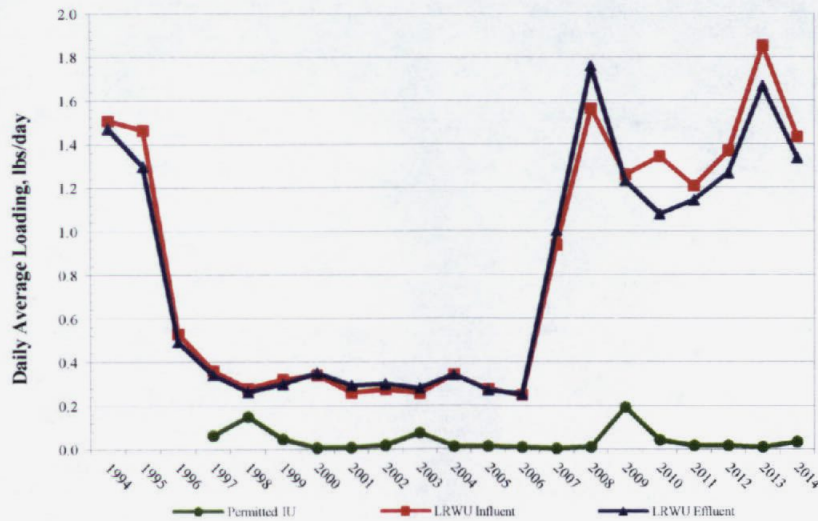
Arsenic (t)



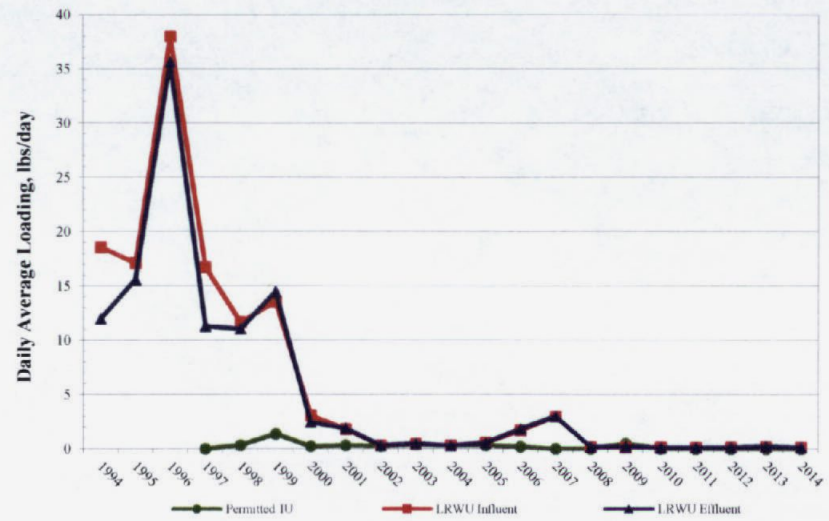
Mercury (t)

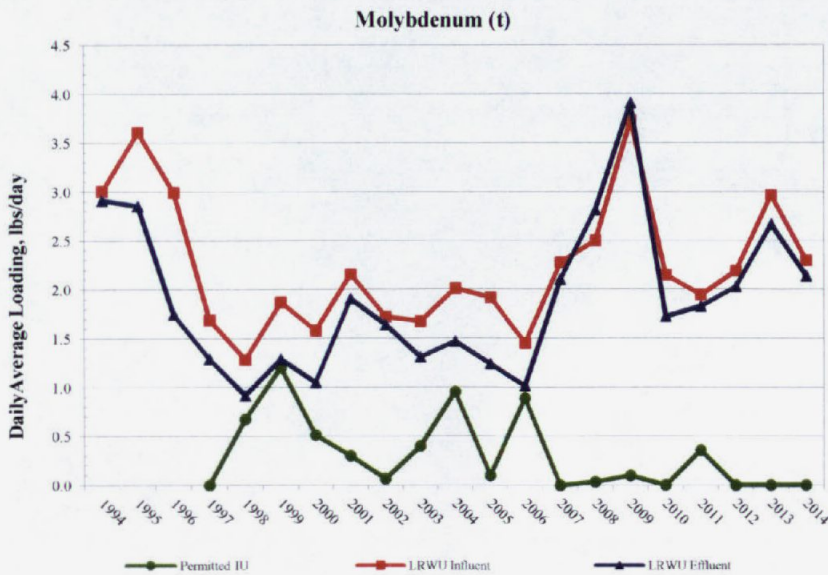
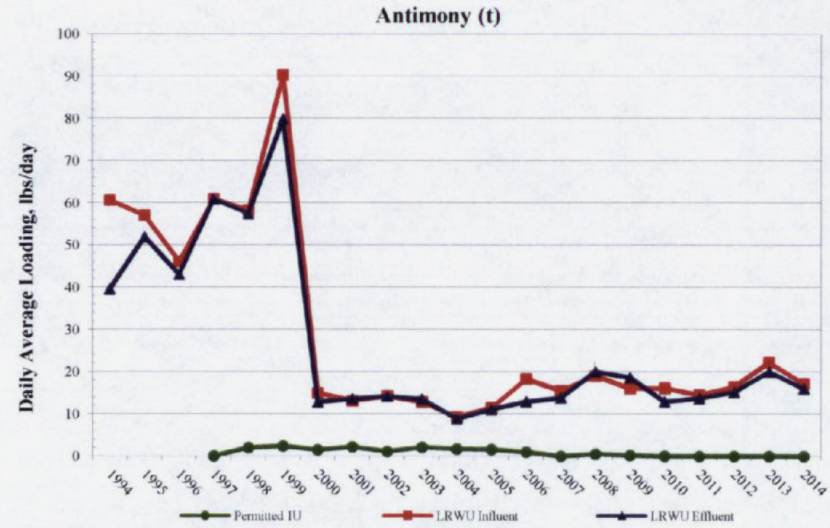
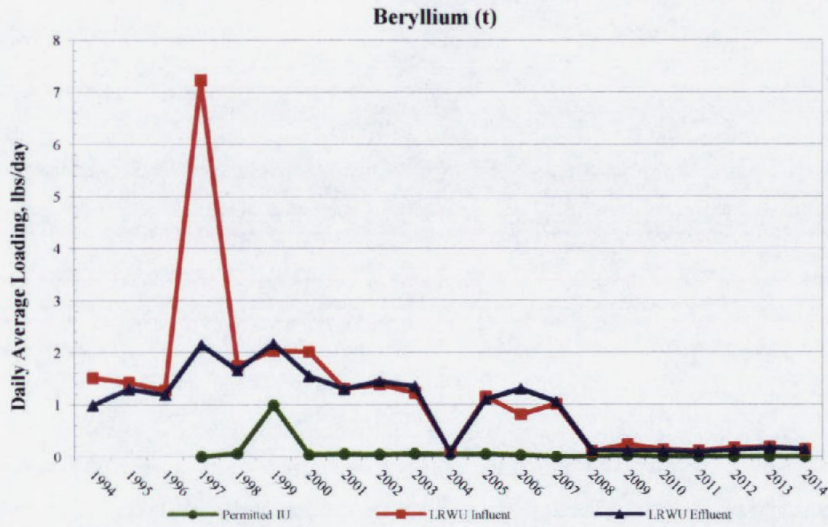


Selenium (t)



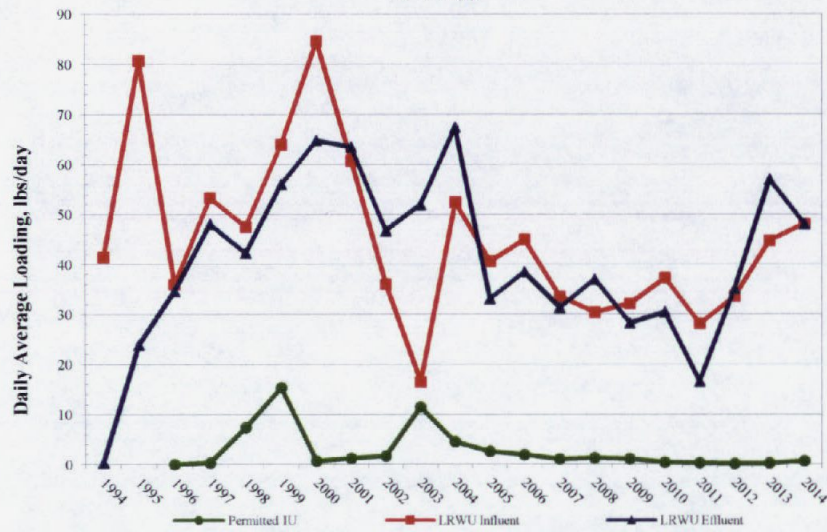
Thallium (t)



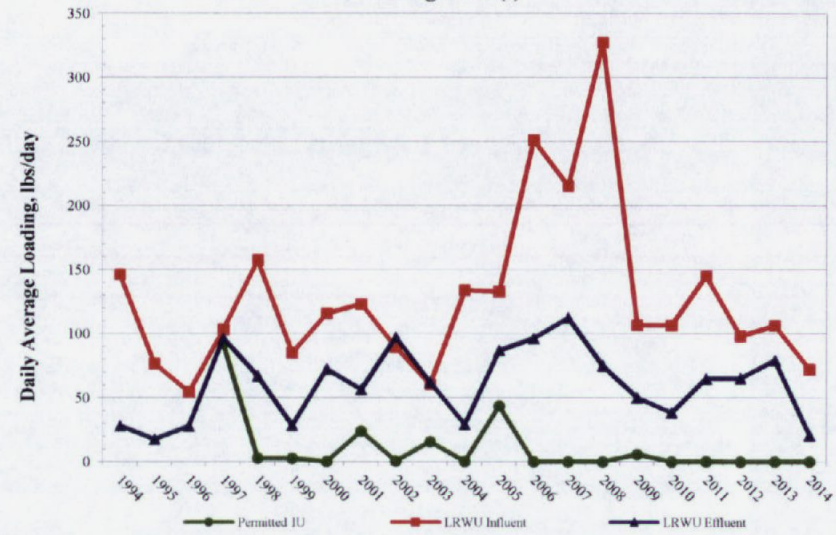


LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 LRW TOTAL SYSTEM LOADING TRENDS

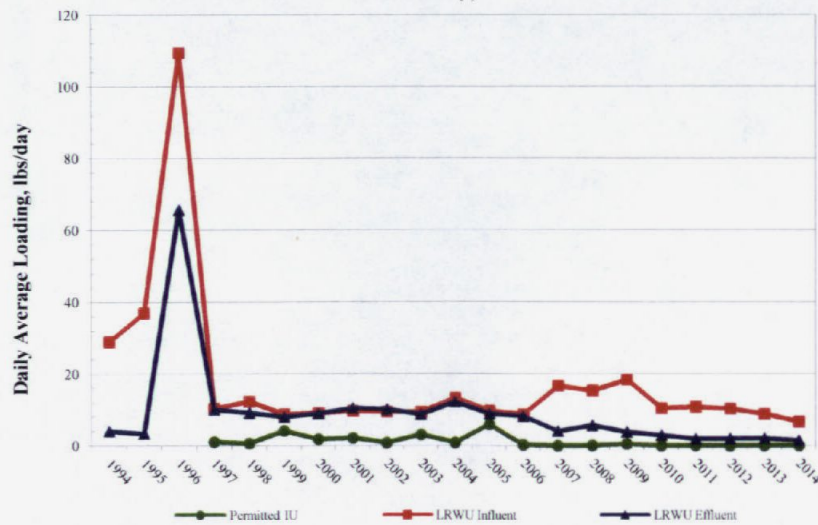
Boron (t)



Manganese (t)



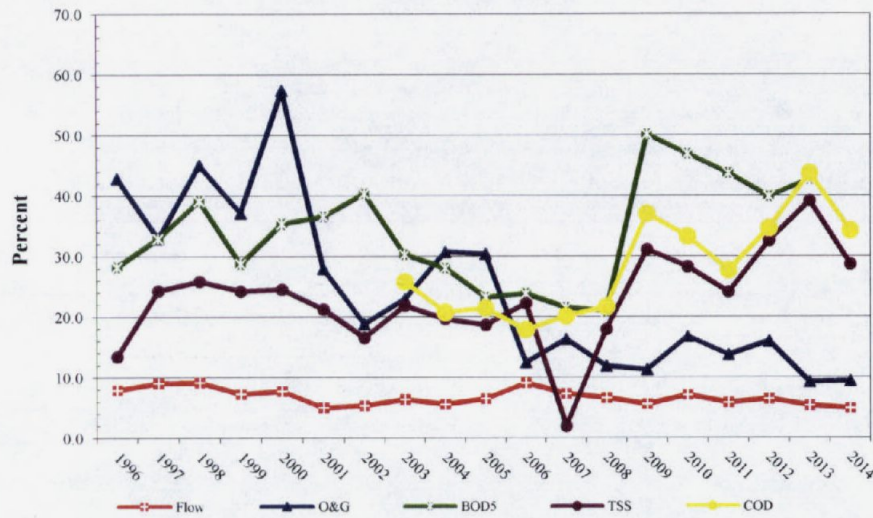
Barium (t)



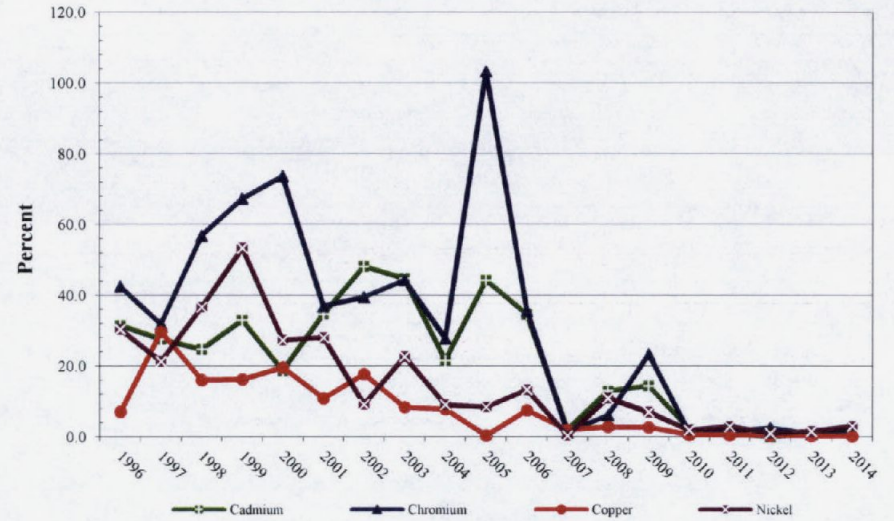
LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 IU PERCENT CONTRIBUTIONS

March 31, 2015  
 Page 1 of 2

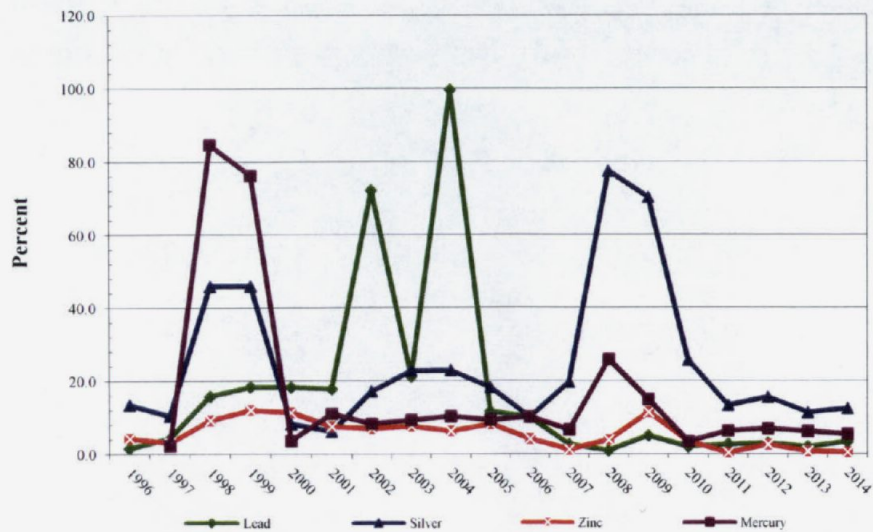
IU % Contributions



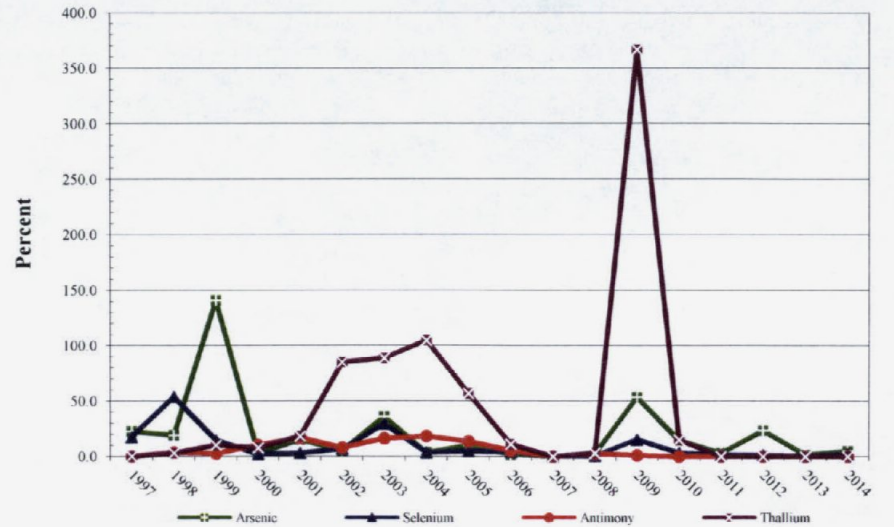
IU % Contributions



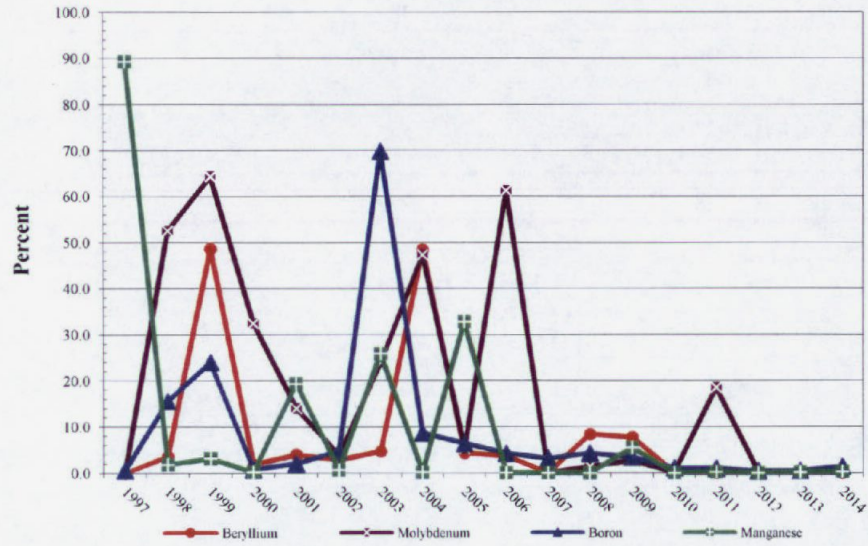
IU % Contributions



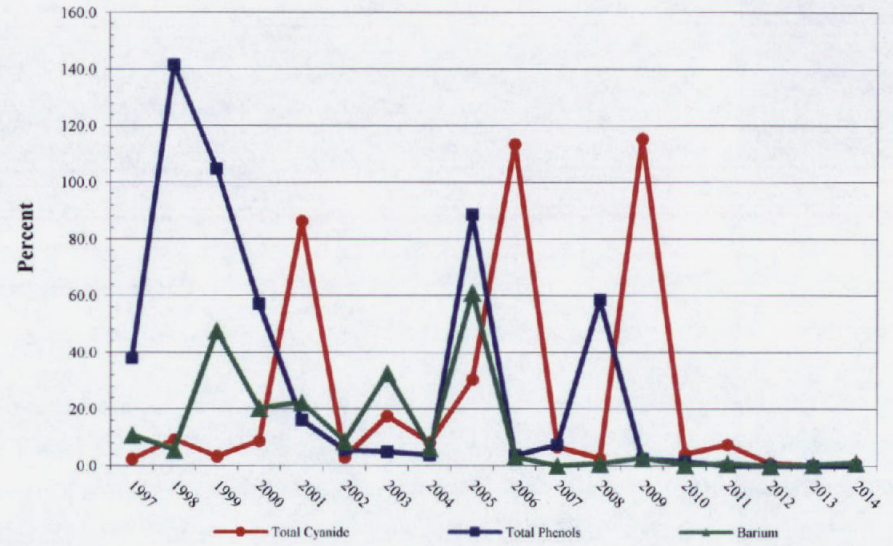
IU % Contributions



IU % Contributions

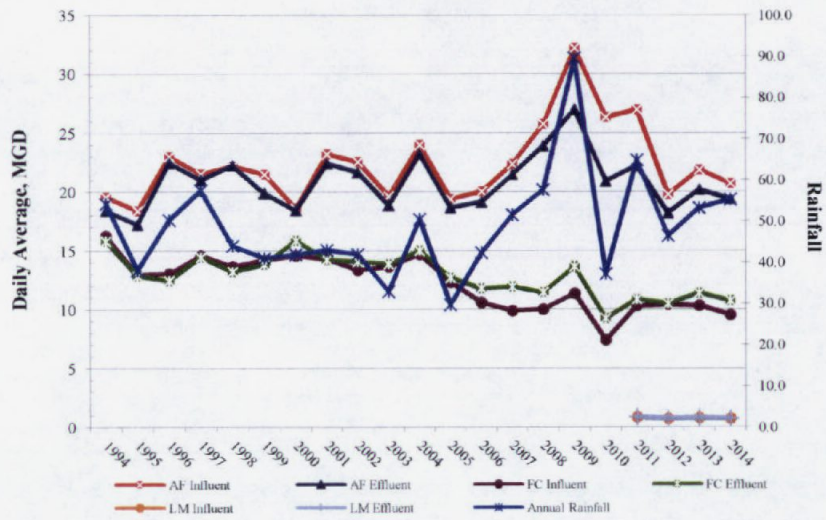


IU % Contributions

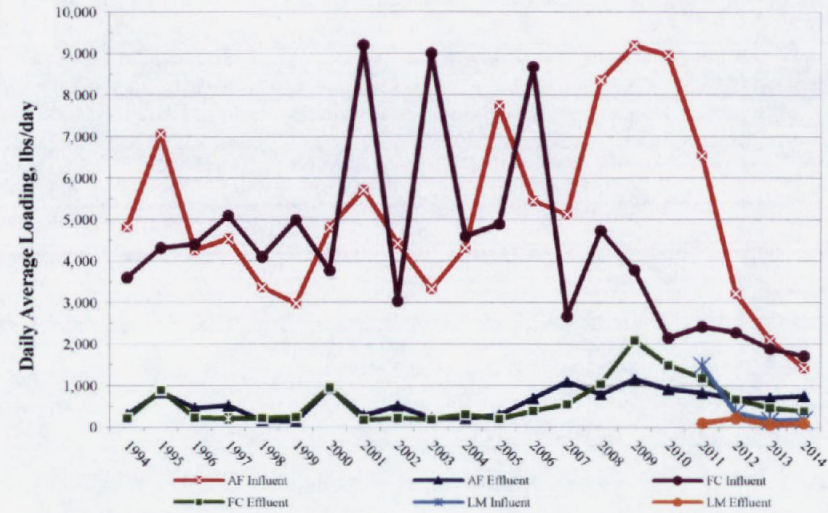


LITTLE ROCK WASTEWATER  
 ENVIRONMENTAL ASSESSMENT DIVISION  
 POTW PLANT INFLUENT/FINAL EFFLUENT LOADING TRENDS

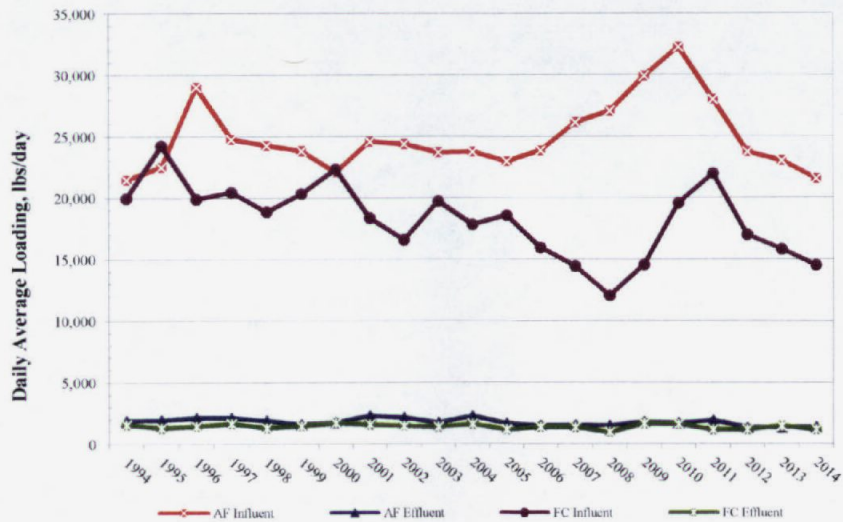
Hydraulic



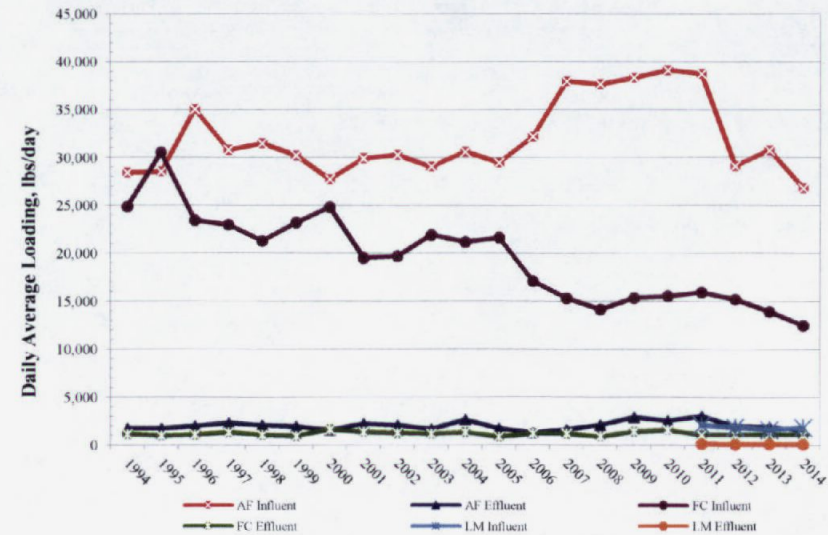
Oil & Grease



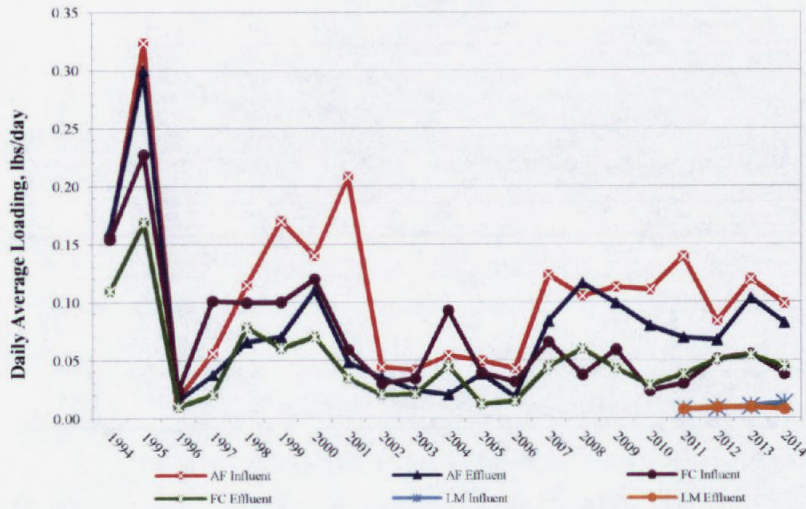
BOD<sub>5</sub>



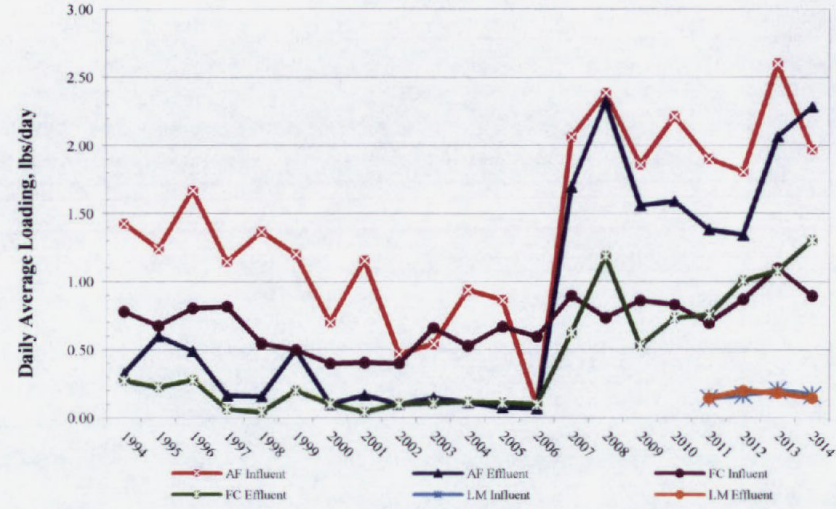
TSS



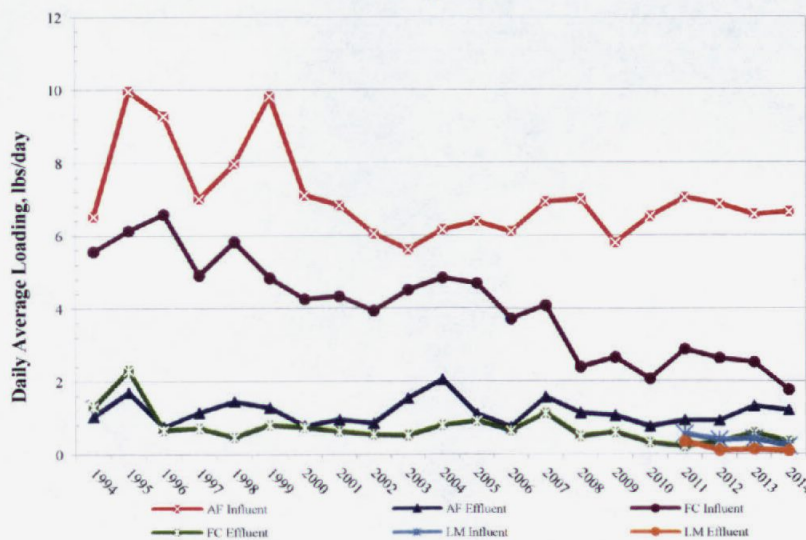
Cadmium (t)



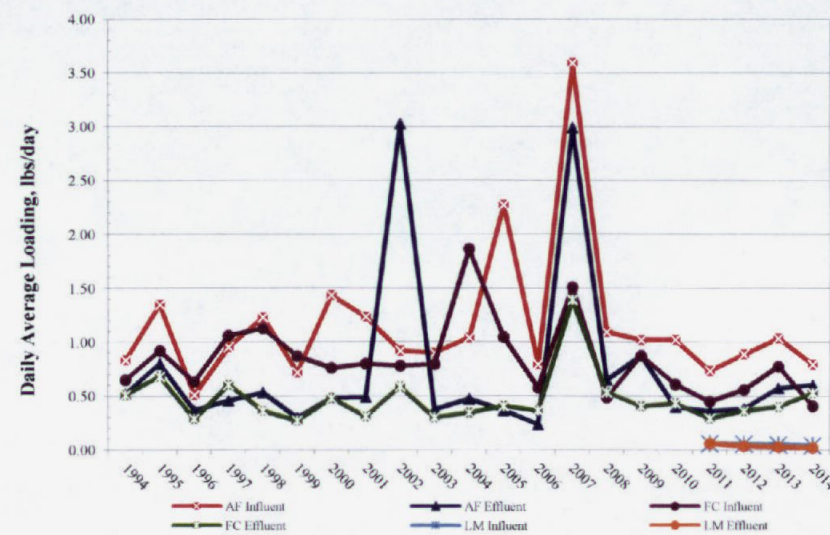
Chromium (t)



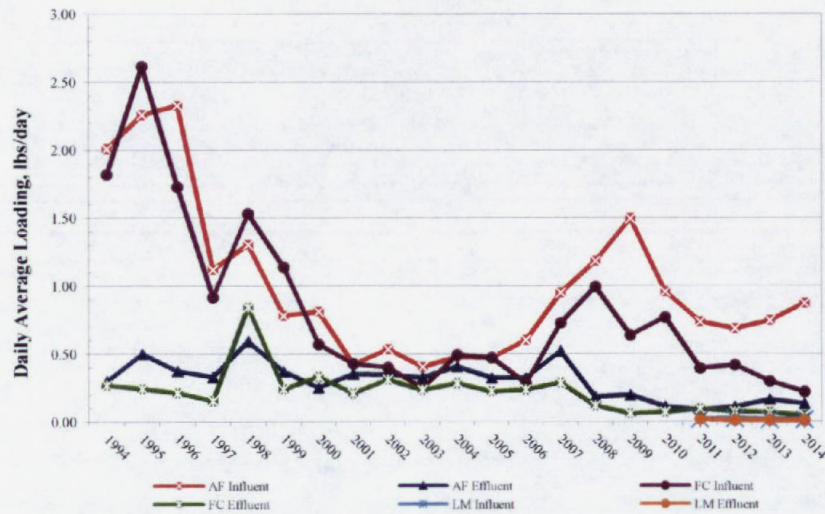
Copper (t)



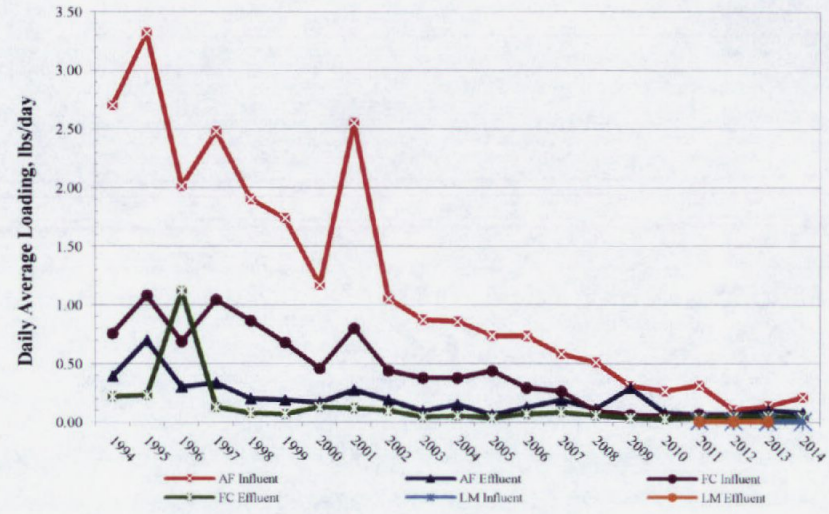
Nickel (t)



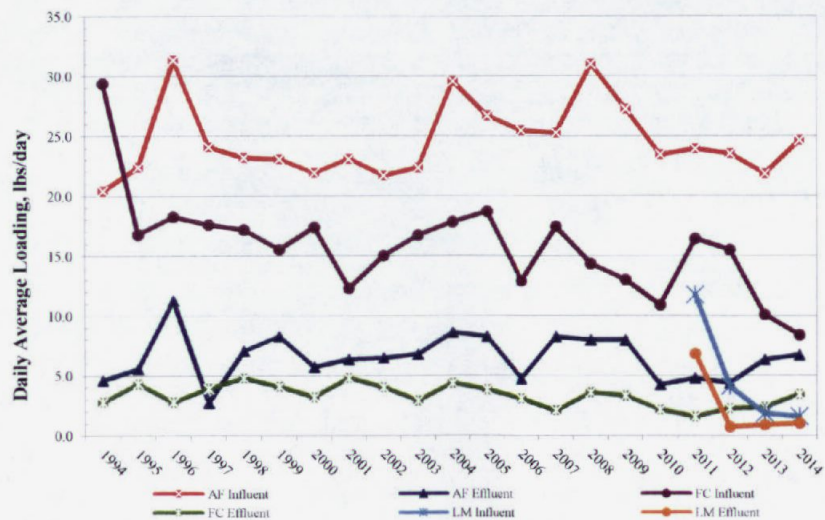
Lead (t)



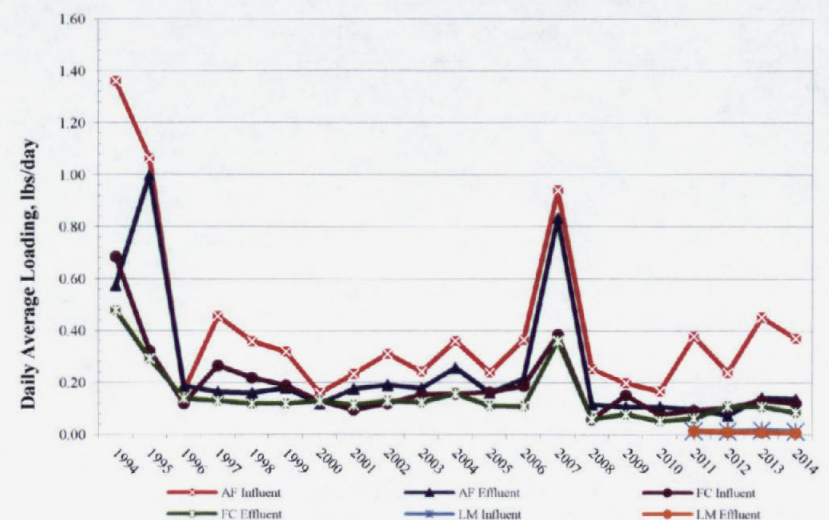
Silver (t)



Zinc (t)

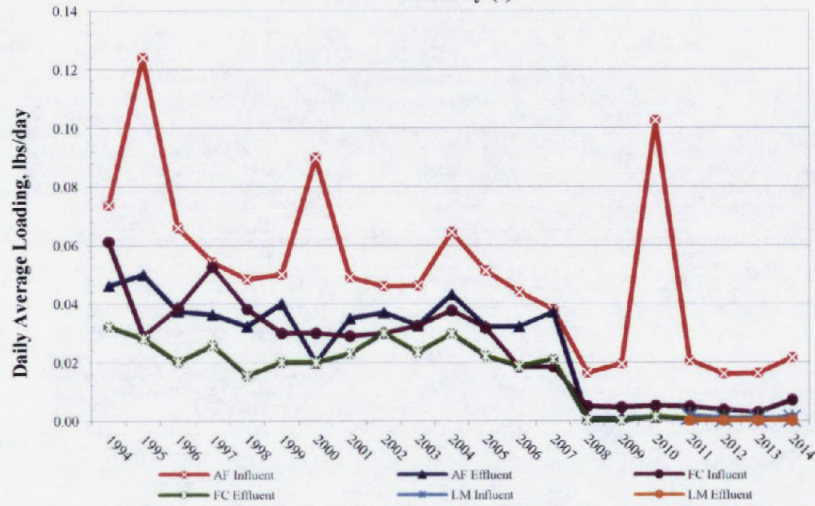


Arsenic (t)

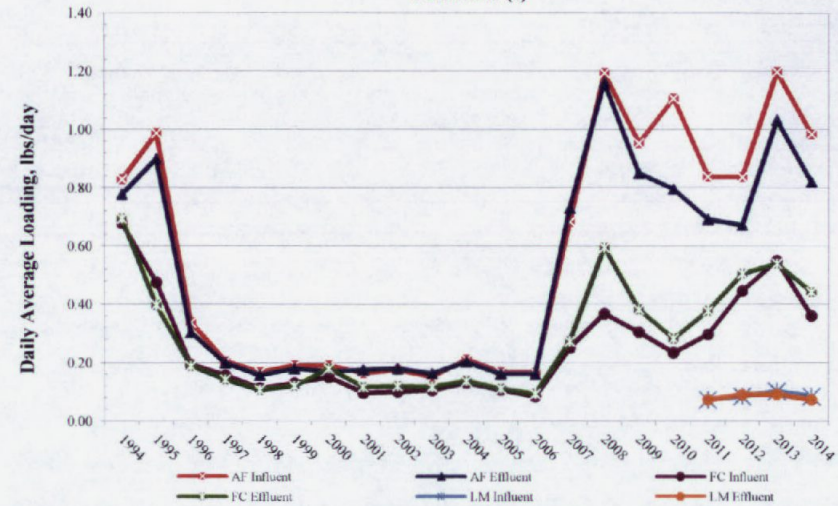




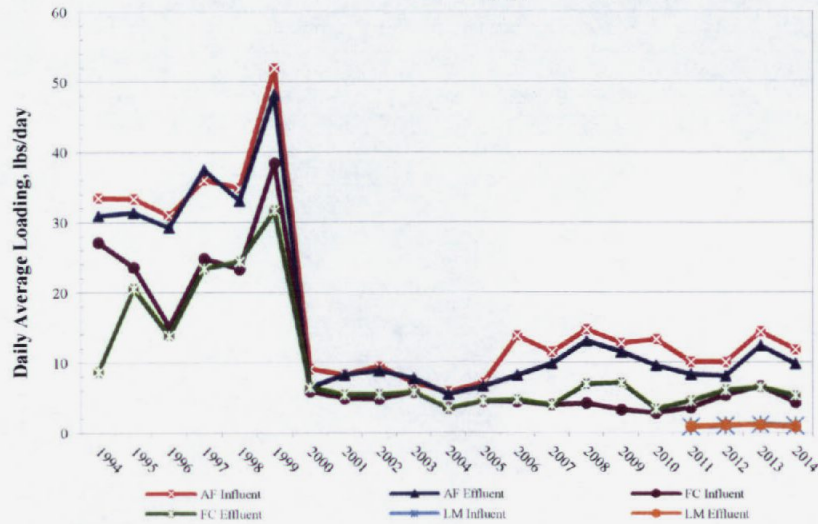
Mercury (t)



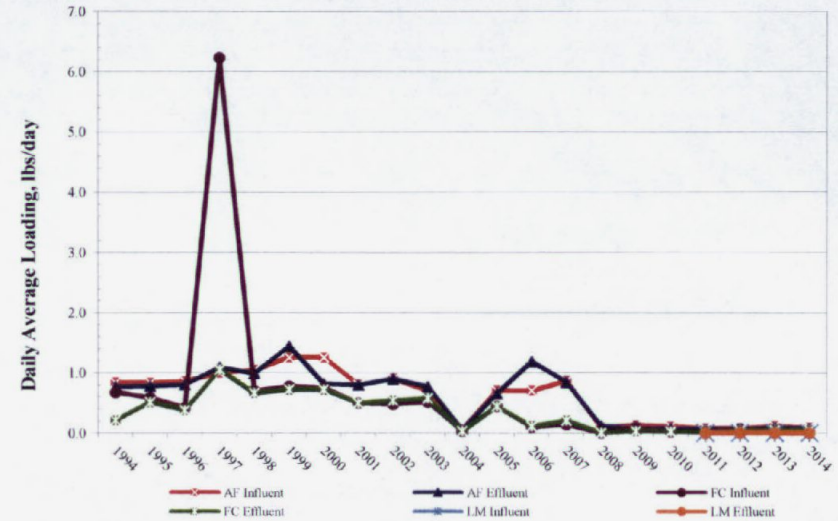
Selenium (t)



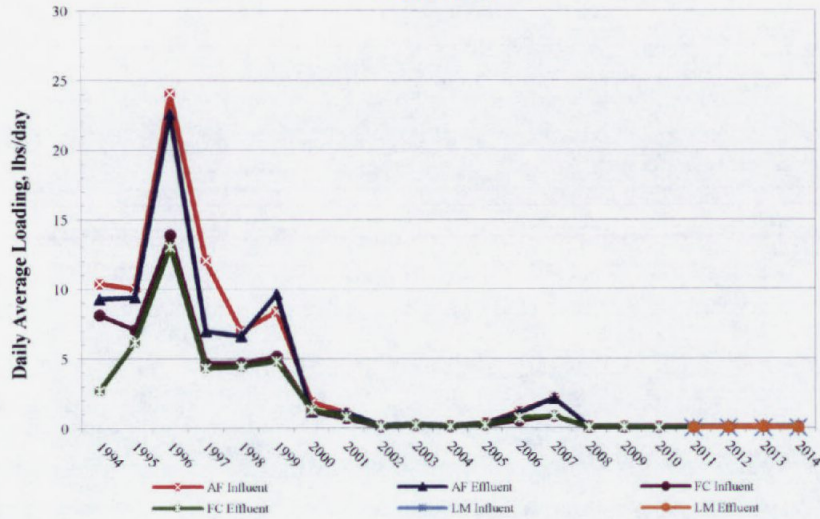
Antimony (t)



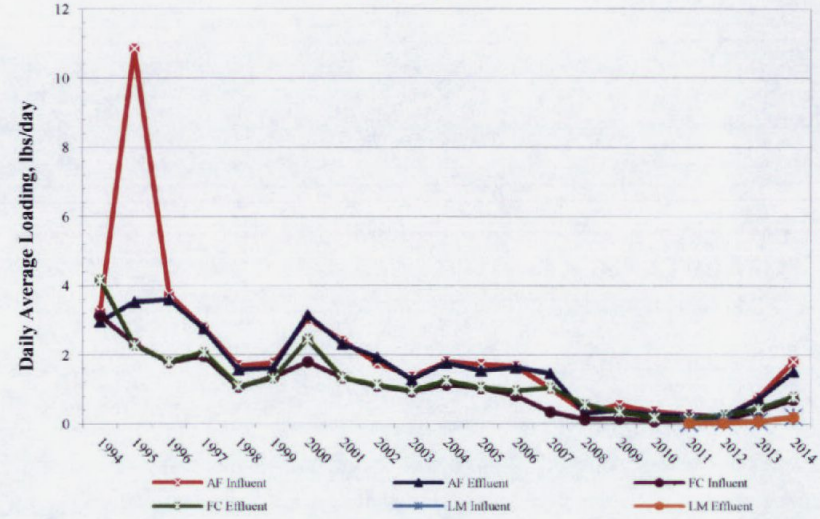
Beryllium (t)



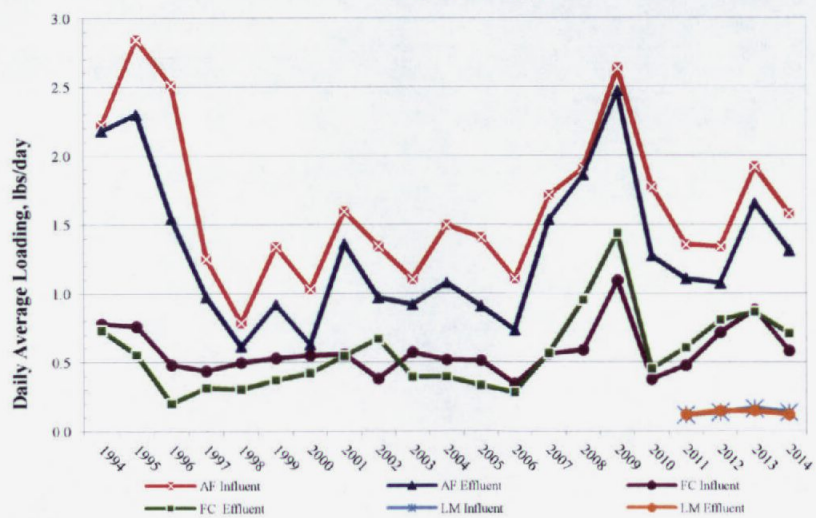
Thallium (t)



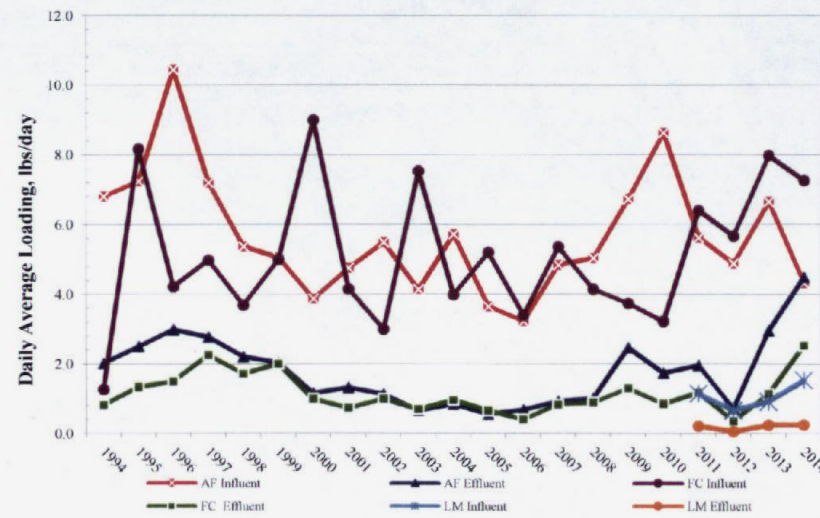
Total Cyanide



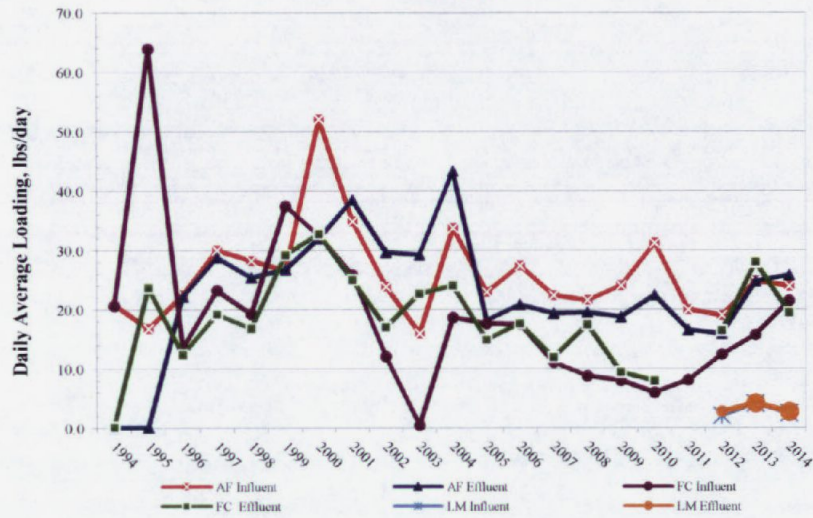
Molybdenum (t)



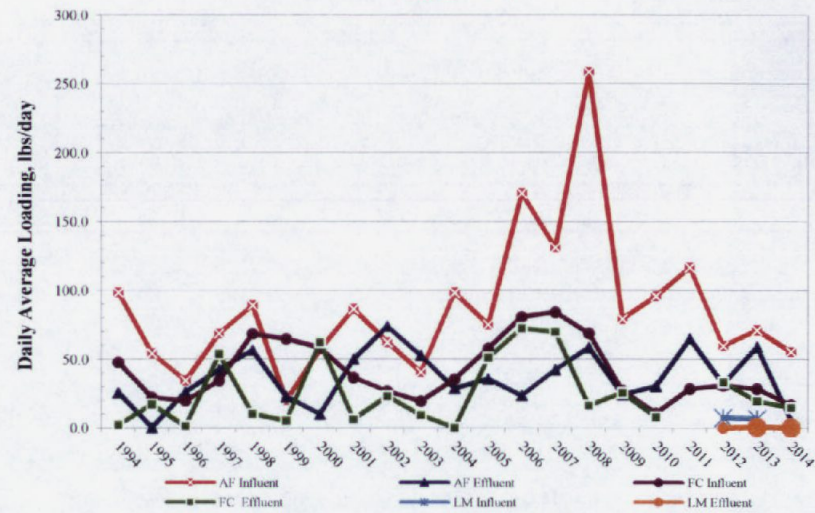
Total Phenolics



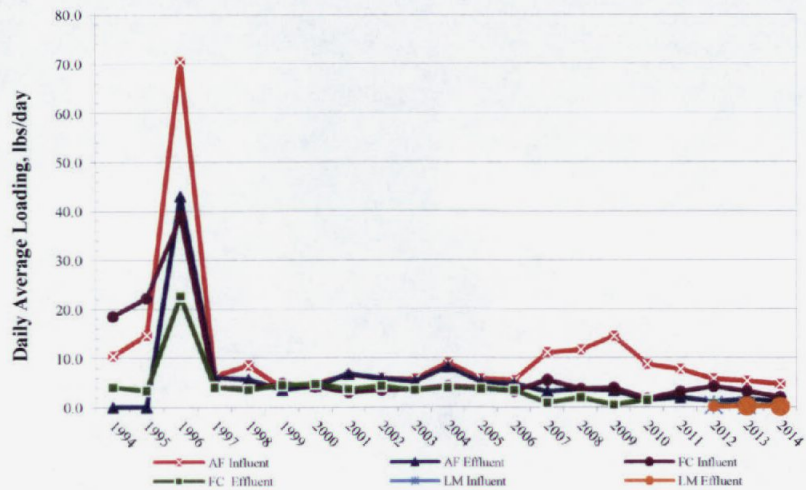
Boron (t)



Manganese (t)



Barium (t)





**BIOSOLIDS 2014**  
**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 grass farms and pasture lands in Pulaski County, Arkansas. A total of 5,962 dry tons of biosolids were land applied during 2014 .

Biosolids from Lagoon 1 and 2 were below the ceiling and pollutant concentrations listed in 40 CFR 503. Biosolids from lagoon 1 was land applied (3,387 dry tons) under Class A pathogen requirements stated in 40 CFR 503.32(a)(6). Lagoon 2 was land applied (2,575 dry tons) as a Class B. The data collected prior to land application is organized in the following tables:

- Metal Analyses Summary for FC-WWTP Biosolids Lagoon 1 and 2 - This table includes the required metal test data from 40 CFR Part 503. The metals concentrations were below the 503.13 Table 1 Ceiling Concentrations and the 503.13 Table 3 Pollutant Concentrations. The ceiling concentrations and pollutant concentration limits, where applicable, are included in the table for comparison.
- Nutrient Analyses Summary for FC-WWTP Biosolids Lagoon 1 and 2 - This table includes the Nutrient, PCB, and TCLP results from sampling conducted prior to land application.
- Biosolids % of the 503 Pollutant Concentration (EQ) Limit - This graph is a long term trend chart that plots the actual average values for all metal tests conducted each year against the metal concentrations of 40 CFR 503 Pollutant Concentration Limits (Table 3 of 503.13) required for certification of Exceptional Quality (EQ) Biosolids.

**FOURCHE CREEK WASTEWATER TREATMENT PLANT  
BIOSOLIDS 2014-LAGOONS 1 AND 2  
METAL ANALYSIS SUMMARY**

Sample Date	Sample Location	Sample Type	Test Parameters - Reported in mg/kg dry												% volatile		
			As(t)	Cd(t)	Cr(t)	Cu(t)	Pb(t)	Hg(t)	Mo(t)	Ni(t)	Se(t)	Ag(t)	Zn(t)	CN-(t)	% solids	solids	pH
3/19/2014	046-1-001	grab	< 5	< 7	46	320	< 70	< 2.0	< 20	24.0	< 7	< 20	890	< 2.0	5.83	54.53	7.78
	046-1-002	grab	< 5	< 9		390	< 90	< 3.0	17	24.0	< 7		1100		6.76	53.26	7.94
	046-1-003	grab	< 5	< 7		300	< 70	< 2.0	< 20	18.0	< 7		940		5.46	55.49	7.62
	046-1-004	grab	< 5	< 5		210	< 50	< 2.0	< 9	16.0	< 7		650		6.63	52.55	7.12
	046-1-005	grab	< 5	< 7		290	< 70	< 2.0	< 20	20.0	< 7		870		8.69	51.02	8.06
	046-1-006	grab	< 5	< 5		230	< 50	< 2.0	< 9	16.0	< 7		680		5.79	54.93	8.11
	<b>Lagoon 1</b>	<b>AVG</b>	<b>&lt; 5</b>	<b>&lt; 7</b>	<b>46</b>	<b>290</b>	<b>&lt; 67</b>	<b>&lt; 2.2</b>	<b>16</b>	<b>19.7</b>	<b>&lt; 7</b>	<b>&lt; 20</b>	<b>855</b>	<b>&lt; 2.0</b>	<b>6.53</b>	<b>53.63</b>	<b>7.77</b>
3/19/2014	046-2-001	grab	< 5	< 7	41	270	< 70	< 2.0	< 20	17.0	< 7	< 20	800	1.7	6.36	55.01	8.02
	046-2-002	grab	< 5	< 7		290	< 70	< 2.0	< 20	17.0	< 7		860		5.79	55.06	8.23
	046-2-003	grab	< 5	< 4		150	< 40	< 0.9	< 7	9.5	< 7		450		6.14	54.79	8.17
	046-2-004	grab	< 5	< 7		280	< 70	< 2.0	< 20	18.0	< 7		850		5.52	56.45	8.12
	046-2-005	grab	< 5	< 8		320	< 80	< 2.0	< 20	21.0	< 7		930		5.63	55.35	8.28
	046-2-006	grab	< 5	< 8		320	< 80	< 2.0	< 20	21.0	< 7		920		5.43	55.91	8.23
	<b>Lagoon 2</b>	<b>AVG</b>	<b>&lt; 5</b>	<b>&lt; 7</b>	<b>41</b>	<b>272</b>	<b>&lt; 68</b>	<b>&lt; 1.8</b>	<b>&lt; 18</b>	<b>17.3</b>	<b>&lt; 7</b>	<b>&lt; 20</b>	<b>802</b>	<b>1.7</b>	<b>5.81</b>	<b>55.43</b>	<b>8.18</b>

<b>Average</b>	<b>&lt; 5</b>	<b>&lt; 7</b>	<b>44</b>	<b>281</b>	<b>&lt; 68</b>	<b>&lt; 2.0</b>	<b>17</b>	<b>18.5</b>	<b>&lt; 7</b>	<b>&lt; 20</b>	<b>828</b>	<b>1.9</b>	<b>6.17</b>	<b>54.53</b>	<b>7.70</b>
<b>Maximum</b>	<b>&lt; 5</b>	<b>&lt; 9</b>	<b>46</b>	<b>390</b>	<b>&lt; 90</b>	<b>&lt; 3.0</b>	<b>&lt; 20</b>	<b>24.0</b>	<b>&lt; 7</b>	<b>&lt; 20</b>	<b>1100</b>	<b>&lt; 2.0</b>	<b>8.69</b>	<b>56.45</b>	<b>8.28</b>
<b>Minimum</b>	<b>&lt; 5</b>	<b>&lt; 4</b>	<b>41</b>	<b>150</b>	<b>&lt; 40</b>	<b>&lt; 0.9</b>	<b>&lt; 7</b>	<b>9.5</b>	<b>&lt; 7</b>	<b>&lt; 20</b>	<b>450</b>	<b>1.7</b>	<b>5.43</b>	<b>51.02</b>	<b>7.12</b>

<b>*Ceiling Conc., mg/kg dry</b>	<b>75</b>	<b>85</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</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 2014-LAGOONS 1 AND 2  
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*
3/19/2014	046-1-001	Grab	< 8	< 8	28000	2500	14000	51000		
	046-1-002	Grab	< 10	< 10	34000	3300	17000	60000		
	046-1-003	Grab	< 9	< 9	30000	2700	15000	33000		
	046-1-004	Grab	< 5	< 5	21000	1700	11000	36000		
	046-1-005	Grab	< 8	< 8	27000	2600	13000	40000		
	046-1-006	Grab	< 6	< 6	20000	1700	9300	35000		
	<b>Lagoon 1</b>	<b>AVG</b>	<b>&lt; 8</b>	<b>&lt; 8</b>	<b>26667</b>	<b>2417</b>	<b>13217</b>	<b>42500</b>	<b>&lt; 0.2</b>	<b>Pass</b>
3/19/2014	046-2-001	Grab	< 8	< 8	26000	2400	13000	48000		
	046-2-002	Grab	< 8	< 8	25000	2300	14000	43000		
	046-2-003	Grab	< 4	< 4	13000	1100	6900	18000		
	046-2-004	Grab	< 8	< 8	29000	2700	13000	49000		
	046-2-005	Grab	< 9	< 9	31000	3100	15000	49000		
	046-2-006	Grab	< 9	< 9	29000	3100	14000	39000		
	<b>Lagoon 2</b>	<b>AVG</b>	<b>&lt; 8</b>	<b>&lt; 8</b>	<b>25500</b>	<b>2450</b>	<b>12650</b>	<b>41000</b>	<b>&lt; 0.2</b>	<b>Pass</b>

<b>Average</b>	< 8	< 8	26083	2433	12933	41750	< 0.2	Pass
<b>Maximum</b>	< 10	< 10	34000	3300	17000	60000	< 0.2	
<b>Minimum</b>	< 4	< 4	13000	1100	6900	18000	< 0.2	

\* 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

