

Annual Report

Public Water System Violations Calendar Year 1998

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Contents

Introduction.....	2
Purpose.....	3
The Statutory Origin.....	4
Accessibility to Public.....	5
Violation Tables-Inorganic and Organic Contaminants.....	6
Violation Tables-TCR and Surface Water Rule.....	7
Violation Tables-Lead and Copper Rule & Radionuclide.....	8
Definitions for the Violation Tables.....	9
Summary.....	13
Conclusions.....	14
Enforcement Actions.....	15
Compliance Assistance Efforts.....	15

List of Appendices

Appendix-A.....	PWSs with Microbiological Acute MCL
Appendix-B.....	PWSs with Microbiological MCL
Appendix-C.....	PWSs with Microbiological Monitoring Violations
Appendix-D.....	PWSs with Microbiological Monitoring Violations (follow-up)
Appendix-E.....	PWSs with SWTR Monitoring Violations
Appendix-F	PWSs with SWTR Treatment Technique Violations
Appendix-G.....	PWSs with Organic & Inorganic MCL Violations
Appendix-H.....	PWSs with Radionuclide and Lead & Copper Rule Violations

Introduction

Arkansas Land Use

Total area of Arkansas	34,036,672 acres
Total area of land	33,328,192 acres
Total area of water	708,480 acres
Total area of forest	15,950,000 acres
Total area of arable land	7,295,000 acres
Total area of wetland	820,619 acres
Total area of barren land	42,000 acres
Total area of developed land	205,340 acres

Characteristics of Arkansas's Water Systems

Population of Arkansas	2,523,000
Population served by public water systems	2,271,289
Population served by surface water systems	1,222,365
Population served by ground water systems	852,685
Population served by ground & surface systems	196,239
% population served by individual private wells	10.0 %
% population served by public water systems	90.0 %

Total number of public water systems	1,208
Number of community public water systems	723
Number of nontransient non-community public water systems	110
Number of transient non-community public water systems	375

Total water used by public water systems (MGD)	442
Number of systems using surface water	312
Number of systems using ground water	852
Number of systems using ground & surface	44

Purpose:

The purpose of this report is to summarize the Arkansas Public Water System violations data submitted to the Safe Drinking Water Information System (SDWIS/FED) for the calendar year 1998. The data include PWS inventory statistics, the incidence of Maximum Contaminant Level, Major Monitoring, and Treatment Technique violations, and the enforcement actions taken against violators. The report provides a total annual representation of the numbers of violations for each of the four categories listed in Section 1414(c)(3) of the Safe Drinking Water Act reauthorization. These four categories include MCLs, treatment techniques, variances and exemptions, and significant monitoring violations. This report is based on the data submitted by the Arkansas Department of Health to SDWIS/FED during the calendar year 1998.

The Statutory Origin:

The EPA established the Public Water System Supervision (PWSS) Program under the authority of the 1974 Safe Drinking Water Act (SDWA). Under the SDWA and its 1986 and 1996 Amendments, EPA sets national limits for contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs). For some regulations, EPA establishes treatment techniques in lieu of MCLs to control unacceptable levels of contaminants in water. The EPA also regulates how often public water systems (PWSs) monitor their water for contaminants and requires the monitoring results to be reported to the States or EPA. Generally, the larger the population served by a water system, the more frequent the monitoring and reporting (M/R) requirements. In addition, EPA requires PWSs to monitor for unregulated contaminants to provide data for future regulatory development. Finally, EPA requires PWSs to notify the public when they have violated these regulations. The 1996 Amendments to the SDWA require public notification to include a clear and understandable explanation of the nature of the violation, its potential adverse health effects, steps that the PWS is undertaking to correct the violation and the possibility of alternative water supplies during the violation.

The SDWA applies to the 50 States, the District of Columbia, Indian Lands, Puerto Rico, the Virgin Islands, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Republic of Palau.

The SDWA allows States and Territories to seek EPA approval to administer their own PWSS Programs. The authority to run a PWSS Program is called primacy. To receive primacy, States must meet certain requirements laid out in the SDWA and the regulations, including the adoption of drinking water regulations that are at least as stringent as the Federal regulations and a demonstration that they can enforce the program requirements. Of the 57 States and Territories, all but Wyoming and the District of Columbia have primacy. The EPA Regional Offices administer the PWSS Programs within these two jurisdictions.

Accessibility to Public:

1. The full report will be made available on the Department's website. The website address is <http://www.health.state.ar.us/eng/doi.htm>
2. The notice of availability will be published in the Division's quarterly newsletter. This newsletter reaches all Community and Non-transient Non-community PWSs, Consulting Engineers, Government Agencies, and other interested citizens of the state of Arkansas.
3. Copies of the report will be made available at all local health units in Arkansas for public inspection.

Violations Tables:

State: ARKANSAS
Reporting Period: January 1, 1998 – December 31, 1998

	SDWIS Codes	MCL (mg/l)	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of violations	Number of Systems with Violations	Number of Violations	Number of Systems with Violations	Number of Violations	Number of Systems With Violations
Inorganic Contaminants								
Fluoride	1025	4.0	6	3			0	0
Total nitrate and nitrite	1040	10 (as N)	1	1			0	0
Subtotal			7	4			0	0

State: ARKANSAS
Reporting Period: January 1, 1998 – December 31, 1998

	SDWIS Codes	MCL (mg/l)	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of violations	Number of Systems with Violations	Number of Violations	Number of Systems with Violations	Number of Violations	Number of Systems With Violations
Organic Contaminants								
Total Polychlorinatedbiphenyls	2383	0.0005	1	1			0	0
1,1,2-Trichloroethane	2985	0.005	1	1			0	0
Tetrachloroethylene	2987	0.005	1	1			0	0
Subtotal			3	2			0	0

State: ARKANSAS
Reporting Period: January 1, 1998 – December 31, 1998

	SDWIS Codes	MCL (mg/l)	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of violations	Number of Systems with Violations	Number of Violations	Number of Systems with Violations	Number of Violations	Number of Systems With Violations
Total Coliform Rule								
Acute MCL violation	21	Presence	4	4				
Non-Acute MCL violation	22	Presence	98	71				
Major routine monitoring	23						176	119
Major follow up monitoring	25						28	16
Sanitary survey	28						0	0
Subtotal			102	75			204	135

State: ARKANSAS
Reporting Period: January 1, 1998 – December 31, 1998

	SDWIS Codes	MCL (mg/l)	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of violations	Number of Systems with Violations	Number of Violations	Number of Systems with Violations	Number of Violations	Number of Systems With Violations
Surface Water Treatment Rule								
<u>Filtered Systems</u>								
Monitoring, routine/repeat	36						65	21
Treatment techniques	41				103	20		
<u>Unfiltered Systems</u>								
Monitoring, routine/repeat	31						0	0
Failure to filter	42				1	1		
Subtotal					104	21	65	21

State: ARKANSAS
Reporting Period: January 1, 1998 – December 31, 1998

	SDWIS Codes	MCL (mg/l)	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of violations	Number of Systems with Violations	Number of Violations	Number of Systems with Violations	Number of Violations	Number of Systems With Violations
Lead and Copper Rule								
Initial lead and copper tap M/R	51						0	0
Follow-up or routine lead and copper tap M/R	52				1	1		
Treatment Installation	58							
Public education	65				0	0		
Subtotal					1	1	0	0

State: ARKANSAS
Reporting Period: January 1, 1998 – December 31, 1998

	SDWIS Codes	MCL (mg/l)	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
			Number of violations	Number of Systems with Violations	Number of Violations	Number of Systems with Violations	Number of Violations	Number of Systems With Violations
Radionuclide MCLs								
Gross alpha	4000	15 Pci/l	0	0			0	0
Radium-226 and radium-228	4010	5 pCi/l	17	5			0	0
Gross beta	4101	4 mrem/yr	0	0			0	0
Subtotal			17	5			0	0

Definitions for the Violations Tables:

Filtered Systems: Water systems that have installed filtration treatment [40 CFR 141, Subpart H].

Inorganic Contaminants: Non-carbon-based compounds such as metals, nitrates, and asbestos. These contaminants are naturally-occurring in some water, but can get into water through farming, chemical manufacturing, and other human activities. EPA has established MCLs for 15 inorganic contaminants [40 CFR 141.62].

Lead and Copper Rule: This rule established national limits on lead and copper in drinking water [40 CFR 141.80-91]. Lead and copper corrosion pose various health risks when ingested at certain levels, and can enter drinking water from household pipes and plumbing fixtures. States report violations of the Lead and Copper Rule in the following six categories:

Initial lead and copper tap M/R: SDWIS Violations Code 51 indicates that a system did not meet initial lead and copper testing requirements, or failed to report the results of those tests to the State.

Follow-up or routine lead and copper tap M/R: SDWIS Violations code 52 indicates that a system did not meet follow-up or routine lead and copper tap testing requirements, or failed to report the results.

Treatment installation: SDWIS Violation Code 58 AND 62 indicate a failure to install optimal corrosion control treatment system (58) or source water treatment system (62) which would reduce lead and copper levels in water at the tap. [One number is to be reported for the sum of violations in these two categories].

Public Education: SDWIS Violation Code 65 shows that a system did not provide required public education about reducing or avoiding lead intake from water.

Maximum Contaminant Level (MCL): The highest amount of a contaminant that EPA allows in drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk. MCLs are defined in milligrams per liter (parts per million) unless otherwise specified.

Monitoring: EPA specifies which water testing methods the water systems must use, and sets schedules for the frequency of testing. A water system that does not follow EPA's schedule or methodology is in violation [40 CFR 141].

States must report monitoring violations that are significant as determined by the EPA Administrator and in consultation with the States. For purposes of this report, significant monitoring violations are major violations and they occur when no samples are taken or no results are reported during a compliance period.

A major monitoring violation for the surface water treatment rule occurs when at least 10% of the required samples are not taken or results are not reported during the compliance period.

Organic Contaminants: Carbon-based compounds, such as industrial solvents and pesticides. These contaminants generally get into water through runoff from cropland or discharge from factories. EPA has set legal limits on 54 organic contaminants that are to be reported [40 CFR 141.61].

Radionuclides: Radioactive particles, which can occur naturally in water or result from human activity. EPA has set legal limits on four types of radionuclides: radium-226, radium 228, gross alpha, and beta particle/photon radioactivity [40 CFR 141]. Violations for these contaminants are to be reported using the following three categories:

Gross alpha: SDWIS Contaminant Code 4000 for alpha radiation above MCL of 15 picocuries/liter. Gross alpha includes radium-226 but excludes radon and uranium.

Combined radium-226 and radium-228: SDWIS Contaminant Code 4010 for combined radiation from these two isotopes above MCL of 5 pCi/L.

Gross beta: SDWIS Contaminant Code 4101 for the combination of beta particles and photon radioactivity resulting from man-made radionuclides above 4 millirem/year.

Reporting Interval: The reporting interval for violations reported in the 1998 PWS Annual Compliance Report is January 1, 1998 through December 31, 1998.

SDWIS Code: Specific numeric codes from the Safe Drinking Water Information System (SDWIS) have been assigned to each violation type included in this report. The violations to be reported include exceeding contaminant MCLs, failure to comply with treatment requirements, and failure to meet monitoring and reporting requirements. Four-digit SDWIS Contaminant Codes have also been included in the chart for specific MCL contaminants.

Surface Water Treatment Rule: The Surface Water Treatment Rule establishes criteria under which water systems supplied by surface water sources, or ground water sources under the direct influence of surface water, must filter and disinfect their water [40 CFR 141, Subpart H]. Violations of the "Surface Water Treatment Rule" are to be reported for the following four categories:

Monitoring, routine/repeat (for filtered systems): SDWIS Violation Code 36 indicates a system's failure to carry out required tests, or to report the results of those tests.

Treatment techniques (for filtered systems): SDWIS Violation 41 shows a system's failure to properly treat its water.

Monitoring, routine/repeat (for unfiltered systems): SDWIS Violation Code 31 indicates a system's failure to carry out required water tests, or to report the results of those tests.

Failure to filter (for unfiltered systems): SDWIS Violation Code 42 shows a system's failure to properly treat its water. Data for this violation code will be supplied to the States by EPA.

Total Coliform Rule (TCR): The Total Coliform Rule establishes regulations for microbiological contaminants in drinking water. These contaminants can cause short-term health problems. If no samples are collected during the one-month compliance period, a significant monitoring violation occurs. States are to report four categories of violations:

Acute MCL violation: SDWIS Violation Code 21 indicates that the system found fecal coliform or E. coli, potentially harmful bacteria, in its water, thereby violating the rule.

Non-acute MCL violation: SDWIS Violation code 22 indicates that the system found total coliform in samples of its water at a frequency or at a level that violates the rule. For systems collecting fewer than 40 samples per month, more than one positive sample for total coliform is a violation. For systems collecting 40 or more samples per month, more than 5% of the samples positive for total coliform is a violation.

Major routine and follow-up monitoring: SDWIS Violation Codes 23 AND 25 show that a system did not perform any monitoring. [One number is to be reported for the sum of violations in these two categories.]

Sanitary Survey: SDWIS Violation Code 28 indicates a major monitoring violation if a system fails to collect 5 routine monthly samples if a sanitary survey is not performed

Treatment Techniques: A water treatment process that EPA requires instead of an MCL for contaminants that laboratories cannot adequately measure. Failure to meet other operational and system requirements under the Surface Water Treatment and the Lead and Copper Rules have also been included in this category of violation for purposes of this report.

Unfiltered Systems: Water systems that do not need to filter their water before disinfecting it because the source is very clean [40 CFR, Subpart H].

Violation: A failure to meet any state or federal drinking water regulation.

Public Water System: A Public Water System (PWS) is defined as a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year. There are three types of PWSs. PWSs can be community (such as towns), nontransient non-community (such as schools or factories), or transient non-community systems (such as rest stops or parks). For this report when the acronym “PWS” is used, it means systems of all types unless otherwise specified.

Variances and Exemptions: Variances and exemptions to specific requirements under the Safe Drinking Water Act Amendments of 1996 may be granted under certain circumstances. If, due to the characteristics of the raw water sources reasonably available, a PWS cannot meet the MCL, a primacy State can grant the PWS a variance from the applicable primary drinking water regulation on the condition that the system install the best available technology, treatment techniques, or other means which the Administrator finds are available (taking costs into account). The state must find that the variance will not result in an unreasonable risk to health, and shall prescribe, at the time the variance is granted, a schedule (including increments of progress) in accordance with which the PWS must come into compliance with the MCL. Small systems (serving 3,300 or fewer persons; or 10,000 or fewer persons with the Administrator’s approval) may be granted variances if they cannot afford (as determined by application of the Administrator’s affordability criteria) to comply with certain MCLs (non-microbial, promulgated after January 1, 1986) by means of treatment, alternative source of water, or restructuring or consolidation. Small systems must, within 3 years, install and operate EPA approved small system variance technology. The variance must ensure adequate protection of human health, and the variance shall be reviewed not less than every 5 years to determine whether the system remains eligible for the variance. A primacy State may by exemption relieve a PWS of its obligation to comply with an MCL, treatment technique, or both if the system’s noncompliance results from compelling factors (which may include economic factors, the system was in operation on the effective date of the MCL or treatment technique requirement) or if not in operation by that date, only if no reasonable alternative source of drinking water is available to such new systems, management or restructuring changes cannot reasonably be made that will result in compliance with the SDWA or improvement of water quality, and the exemption will not result in an unreasonable risk to public health. The State will require the PWS to comply with the MCL or treatment technique as expeditiously as practicable, but not later than 3 years after the otherwise applicable compliance date.

No variances or exemptions were issued to any public water system in Arkansas during the calendar year 1998.

Summary:

- No violations occurred during 1998 for the contaminants and rules not shown in the violation tables.
- Approximately **1208** public water systems were in operation during 1998.
- Four (4) PWSs had microbiological acute MCL violations. Three (3) PWSs were transient non-community, and one PWSs was a small public water system.
- Seventy-one (71) PWSs had microbiological MCL violations. Thirty-nine (39) were community water systems, five (5) were small non-transient non-community systems, and twenty-seven (27) were transient non-community public water systems.
- One hundred and ninety-nine (119) PWSs had at least one major routine microbiological monitoring violation. Ninety-eight (98) of these systems were non-community (mostly transient) public water systems.
- Sixteen (16) PWSs had at least one major follow up microbiological monitoring violation. Ten of these systems were non-community (mostly transient) public water systems.
- Sixty-five (65) PWSs had at least one monitoring violation under the surface water treatment rule.
- Twenty (20) PWSs had at least one treatment technique violation under the surface water treatment rule.
- Four (4) PWSs exceeded an inorganic contaminant MCL, three systems for fluoride and one system for total nitrate.
- Two (2) PWSs exceeded an organic contaminant MCL, one system for total polychlorinated biphenyls, and one system for both 1,1,2-trichloroethane and tetrachloroethylene.
- Five (5) PWSs had exceeded the radium-226/228 MCL.
- One PWS had a follow-up and routine tap monitoring violation for not submitting reduced monitoring samples under the lead and copper rule.
- **No variances or exemptions were issued to any public water system in Arkansas during the calendar year 1998.**

Conclusions:

- The microbiological MCL violations were mostly among small community and transient non-community public water systems.
- 99.83% of the public water systems in Arkansas did not have an organic (SOC,VOC,TTHM) MCL violation. One system that exceeded Organic MCLs is currently inactive and the other system has abandoned its source and has installed a new one.
- 99.91% of the public water systems in Arkansas did not have a nitrate MCL violation. Only one system (transient non-community) had a total nitrate MCL violation.
- 99.58% of the public water systems in Arkansas did not exceed the radium-226/228 MCL. Only five (5) PWSs exceeded the MCL. These PWSs are currently on quarterly monitoring schedule for radium-226/228.
- There were no monitoring violations for chemicals covered under Phases I, II, IIB, & V. The Arkansas Department of Health performs monitoring of these chemicals on behalf of the public water systems.
- The compliance rate for the contaminants and rules not shown on the violation tables was 100%.

Enforcement Summary:

The Arkansas Department of Health is actively enforcing the Safe Drinking Water Act Regulations. Enforcement is with the attitude of protecting the public health with any and all tools available to achieve compliance.

Following is a summary of the enforcement actions taken in 1998.

Community Public Water Systems:

Warnings of Administrative Order	30
Administrative Orders Issued	9
Proposed Penalties Issued	5
Consent Orders Signed	4
Penalties Imposed	5
Total Enforcement Actions for CWSs	53

Non-Community Non-Transient Systems:

Warnings of Administrative Order	9
Administrative Orders Issued	2
Proposed Penalties Issued	1
Consent Orders Signed	1
Penalties Imposed	2
Total Enforcement Actions for NTNCs	15

Transient Non-Community Systems:

Warnings of Administrative Order	49
Administrative Orders Issued	7
Proposed Penalties Issued	8
Consent Orders Signed	9
Penalties Imposed	17
Total Enforcement Actions for TNCs	90

Compliance Assistance Efforts:

Technical assistance is provided to all PWSs under enforcement. The owner of a PWS under enforcement is contacted after the "Warning of Administrative Order" is issued. The contact is either made by telephone or by an onsite visit. Technical assistance may be offered on proper sampling techniques, operation of disinfection equipment, TCR requirements, enforcement procedures, etc. At least one site inspection is performed during the course of the enforcement period.

APPENDICES

Appendix - A

<i>PWS ID</i>	<i>PWS Name</i>	<i>Vio.Type</i>	<i>Definition</i>	<i>Population</i>
N0130	Ferndale Christian Child Care	21	Microbiological Mcl (Acute)	50
T0787	USFS Haw Creek	21	Microbiological Mcl (Acute)	25
T1038	Red Bud Valley Resort	21	Microbiological Mcl (Acute)	25
T1042	New Hope One Stop	21	Microbiological Mcl (Acute)	25

Appendix - B

<i>PWS ID</i>	<i>PWS Name</i>	<i>Vio.Type</i>	<i>Definition</i>	<i>Population</i>
056	Siloam Springs Waterworks	22	Microbiological Mcl	8499
063	Lead Hill Waterworks	22	Microbiological Mcl	460
070	Hampton Waterworks	22	Microbiological Mcl	1972
072	Thornton Waterworks	22	Microbiological Mcl	967
074	Berryville Waterworks	22	Microbiological Mcl	5023
090	Piggott Waterworks	22	Microbiological Mcl	5000
093	Rector Waterworks	22	Microbiological Mcl	2820
110	Mc Neil Waterworks	22	Microbiological Mcl	763
111	Emerson Waterworks	22	Microbiological Mcl	1003
128	Monette Waterworks	22	Microbiological Mcl	1110
159	Hickory Ridge Waterworks	22	Microbiological Mcl	548
164	Fordyce Water Co	22	Microbiological Mcl	5240
173	Reed Waterworks	22	Microbiological Mcl	389
178	Bois D'arc Water System	22	Microbiological Mcl	150
276	Jefferson - Samples - Dexter Water	22	Microbiological Mcl	1940
299	Lynn Waterworks	22	Microbiological Mcl	650
305	Portia Waterworks	22	Microbiological Mcl	520
361	Luxora Waterworks	22	Microbiological Mcl	1350
364	Eaker A.F.B B G R A A	22	Microbiological Mcl	200
365	Blytheville Waterworks	22	Microbiological Mcl	21000
370	Wilson Water System	22	Microbiological Mcl	1500
382	Marie Water System	22	Microbiological Mcl	129
416	West Helena Water Works	22	Microbiological Mcl	10500
420	Lakeview - Wabash Water Association	22	Microbiological Mcl	1036
449	Des Arc Waterworks	22	Microbiological Mcl	3882
531	Hughes Waterworks	22	Microbiological Mcl	1875
576	Country Mobile Estates	22	Microbiological Mcl	53
584	Bald Knob Waterworks	22	Microbiological Mcl	3783

<i>PWS ID</i>	<i>PWS Name</i>	<i>Vio.Type</i>	<i>Definition</i>	<i>Population</i>
618	Tollette Water	22	Microbiological Mcl	450
677	Lake Forest Subordinate Dist	22	Microbiological Mcl	72
718	Lurton - Pelsor Water Association	22	Microbiological Mcl	294
747	Leisure Hills Mobile Home Park	22	Microbiological Mcl	100
750	Suburban Water And Sewer	22	Microbiological Mcl	314
764	Alpine Water Association	22	Microbiological Mcl	543
780	Lake Lucerne Estates	22	Microbiological Mcl	35
797	Horseshoe Homes Water Assoc	22	Microbiological Mcl	56
814	Fulton County Water Association	22	Microbiological Mcl	190
827	Kings Hill Estates	22	Microbiological Mcl	30
869	Kingwood Mhp	22	Microbiological Mcl	30
N0002	Alread School	22	Microbiological Mcl	128
N0024	Fourche Valley School	22	Microbiological Mcl	175
N0043	Mennonite School	22	Microbiological Mcl	85
N0157	Wal Mart Supercenter Rogers	22	Microbiological Mcl	25
N0181	CIBA Speciality Chemicals	22	Microbiological Mcl	225
T0015	AHTD - Lonsdale Rest Area	22	Microbiological Mcl	25
T0084	Marcia's Fallsville Store	22	Microbiological Mcl	25
T0092	The Store	22	Microbiological Mcl	25
T0102	Byrd's Canoe Rental	22	Microbiological Mcl	25
T0188	Dequeen Country Club	22	Microbiological Mcl	25
T0265	Indian Lake Snack Bar	22	Microbiological Mcl	25
T0311	Lake G. P. Concession	22	Microbiological Mcl	25
T0313	Lake Norfolk Inn	22	Microbiological Mcl	25
T0326	Lester Flatt Memorial Park	22	Microbiological Mcl	25
T0336	Lizzie's Seafood Patio	22	Microbiological Mcl	25
T0338	Lowery's Campground	22	Microbiological Mcl	25
T0407	Ozark Vue Rv Park	22	Microbiological Mcl	25
T0414	Parkway Travel Park	22	Microbiological Mcl	25
T0426	Pier "27"	22	Microbiological Mcl	25

<i>PWS ID</i>	<i>PWS Name</i>	<i>Vio.Type</i>	<i>Definition</i>	<i>Population</i>
T0446	Peters General Store	22	Microbiological Mcl	25
T0451	Purifoy's Grocery	22	Microbiological Mcl	25
T0456	R. R. Crawford Provisions	22	Microbiological Mcl	25
T0504	Sister Creek Resort	22	Microbiological Mcl	25
T0532	Tanglewood Lodge	22	Microbiological Mcl	25
T0576	USCOE Bmw08 Ashley Creek	22	Microbiological Mcl	25
T0674	USCOE Gsw Narrows Dam	22	Microbiological Mcl	25
T0732	USCOE Owp1 Citadel Bluff	22	Microbiological Mcl	25
T0750	USCOE Pbw115 Dam Site 5	22	Microbiological Mcl	25
T0798	USFS Lone Pine Camp	22	Microbiological Mcl	25
T0825	Waldron's Valley Cafe	22	Microbiological Mcl	25
T0875	Shade Tree Park	22	Microbiological Mcl	25
T0930	Wild Bill's Canoe Rental	22	Microbiological Mcl	25

Appendix - C

<i>PWS ID</i>	<i>PWS Name</i>	<i>Vio. Type</i>	<i>Definition</i>	<i>Population</i>
044	Centerton Waterworks	23	Microbiological Monitoring - None Submitted	1558
047	Garfield Waterworks	23	Microbiological Monitoring - None Submitted	305
064	Omaha Waterworks	23	Microbiological Monitoring - None Submitted	525
105	Quitman Waterworks	23	Microbiological Monitoring - None Submitted	1400
165	Carthage Watersewer Committee	23	Microbiological Monitoring - None Submitted	465
173	Reed Waterworks	23	Microbiological Monitoring - None Submitted	389
202	Pleasant View Water Association	23	Microbiological Monitoring - None Submitted	1200
266	Tuckerman Waterworks	23	Microbiological Monitoring - None Submitted	2223
355	Summit Waterworks	23	Microbiological Monitoring - None Submitted	688
391	Norman Waterworks	23	Microbiological Monitoring - None Submitted	1225
409	Yarborough Landing Waterworks	23	Microbiological Monitoring - None Submitted	475
427	Heafer - Black Oak Water Association	23	Microbiological Monitoring - None Submitted	520
449	Des Arc Waterworks	23	Microbiological Monitoring - None Submitted	3882
668	Mount Olive Water Association	23	Microbiological Monitoring - None Submitted	3452
693	Gateway Rural Water Association	23	Microbiological Monitoring - None Submitted	1328
704	Western Greene Ct R W D	23	Microbiological Monitoring - None Submitted	3330
731	Biggers Bluff Development	23	Microbiological Monitoring - None Submitted	191
777	Brushy Island Water Association	23	Microbiological Monitoring - None Submitted	450
801	Oak Grove Water	23	Microbiological Monitoring - None Submitted	431
808	Little Portion Hermitage	23	Microbiological Monitoring - None Submitted	30
851	South Logan County Water	23	Microbiological Monitoring - None Submitted	788
869	Kingwood Mhp	23	Microbiological Monitoring - None Submitted	30
N0038	Kirby High School	23	Microbiological Monitoring - None Submitted	459
N0063	Springhill School	23	Microbiological Monitoring - None Submitted	503
N0068	Marcella Natural Spring	23	Microbiological Monitoring - None Submitted	25
N0118	Water Fresh Corporation	23	Microbiological Monitoring - None Submitted	25
N0119	Water Fresh Corporation	23	Microbiological Monitoring - None Submitted	25
N0120	Water Fresh Corporation	23	Microbiological Monitoring - None Submitted	25
N0140	Harmony Brook	23	Microbiological Monitoring - None Submitted	25
N0158	Wal Mart Supercenter Harrison	23	Microbiological Monitoring - None Submitted	25

<i>PWS ID</i>	<i>PWS Name</i>	<i>Vio. Type</i>	<i>Definition</i>	<i>Population</i>
N0184	Chenal Valley Little Treasures	23	Microbiological Monitoring - None Submitted	90
T0009	AHTD - Dermott Rest Area	23	Microbiological Monitoring - None Submitted	25
T0021	Angelina's Restaurant	23	Microbiological Monitoring - None Submitted	25
T0026	American Legion Hut	23	Microbiological Monitoring - None Submitted	25
T0028	Anderson's Country Store	23	Microbiological Monitoring - None Submitted	25
T0057	Bain's Grocery	23	Microbiological Monitoring - None Submitted	25
T0065	Bass Haven Resort	23	Microbiological Monitoring - None Submitted	25
T0069	Bear Creek Springs Quick Stop	23	Microbiological Monitoring - None Submitted	25
T0083	Bogg Springs Baptist Camp	23	Microbiological Monitoring - None Submitted	25
T0085	Booger Hollow Chuck Wagon	23	Microbiological Monitoring - None Submitted	25
T0091	Brookhill Ranch	23	Microbiological Monitoring - None Submitted	25
T0092	The Store	23	Microbiological Monitoring - None Submitted	25
T0105	C & W Bait Shop	23	Microbiological Monitoring - None Submitted	25
T0106	El Toro Mexican Restaurant	23	Microbiological Monitoring - None Submitted	25
T0114	Camp Canfield Baptist Assembly	23	Microbiological Monitoring - None Submitted	25
T0121	Camp Mitchell	23	Microbiological Monitoring - None Submitted	25
T0125	Camp Tahkodah	23	Microbiological Monitoring - None Submitted	25
T0127	Center Point Wilderness Camp	23	Microbiological Monitoring - None Submitted	25
T0128	Camp Yorktown Bay	23	Microbiological Monitoring - None Submitted	25
T0133	Castaways Resort & Cafe	23	Microbiological Monitoring - None Submitted	25
T0143	Expressway Fuel Stop	23	Microbiological Monitoring - None Submitted	25
T0162	Country Junction Store	23	Microbiological Monitoring - None Submitted	25
T0172	The Crossover Club	23	Microbiological Monitoring - None Submitted	25
T0178	Crystal Mountain Mexican Restaurant	23	Microbiological Monitoring - None Submitted	25
T0195	Dogwood Lodge	23	Microbiological Monitoring - None Submitted	25
T0208	The Lakehouse	23	Microbiological Monitoring - None Submitted	25
T0213	Farindale, Inc.	23	Microbiological Monitoring - None Submitted	25
T0227	Fred's Truck Stop	23	Microbiological Monitoring - None Submitted	25
T0231	Gaston's White River Resort	23	Microbiological Monitoring - None Submitted	25
T0257	Hiwasse Dairy Freeze	23	Microbiological Monitoring - None Submitted	25
T0258	Holiday Hills Resort	23	Microbiological Monitoring - None Submitted	25
T0290	Razorback Restaurant	23	Microbiological Monitoring - None Submitted	25

<i>PWS ID</i>	<i>PWS Name</i>	<i>Vio. Type</i>	<i>Definition</i>	<i>Population</i>
T0295	Keller's Kove Resort	23	Microbiological Monitoring - None Submitted	25
T0297	Kettle Kampgrounds	23	Microbiological Monitoring - None Submitted	25
T0303	King Of Clubs	23	Microbiological Monitoring - None Submitted	25
T0311	Lake G. P. Concession	23	Microbiological Monitoring - None Submitted	25
T0317	Lakeside Grocery	23	Microbiological Monitoring - None Submitted	25
T0330	Little Fir Landing	23	Microbiological Monitoring - None Submitted	25
T0348	Maysville Cafe	23	Microbiological Monitoring - None Submitted	25
T0351	Mccanns Bread Basket	23	Microbiological Monitoring - None Submitted	25
T0362	Nashville Country Club Assn.	23	Microbiological Monitoring - None Submitted	25
T0371	Mcclard's Shopping Center	23	Microbiological Monitoring - None Submitted	25
T0373	Mountain Home Moose Lodge #1953	23	Microbiological Monitoring - None Submitted	25
T0374	Motor Center Motel	23	Microbiological Monitoring - None Submitted	25
T0391	Oark Gen. Store	23	Microbiological Monitoring - None Submitted	25
T0393	Haught's General Store	23	Microbiological Monitoring - None Submitted	25
T0408	Ozone Trading Post	23	Microbiological Monitoring - None Submitted	25
T0429	Pine Crest Camp	23	Microbiological Monitoring - None Submitted	25
T0439	Ponca Bible Camp	23	Microbiological Monitoring - None Submitted	25
T0451	Purifoy's Grocery	23	Microbiological Monitoring - None Submitted	25
T0465	River Valley Livestock Market	23	Microbiological Monitoring - None Submitted	25
T0472	Rocking Chair Ranch	23	Microbiological Monitoring - None Submitted	25
T0476	Roger's Boy Scout Camp	23	Microbiological Monitoring - None Submitted	25
T0487	Nashville Stockyards Cafe	23	Microbiological Monitoring - None Submitted	25
T0506	Angler's In	23	Microbiological Monitoring - None Submitted	25
T0513	Spring River Oaks Camp	23	Microbiological Monitoring - None Submitted	25
T0548	Carroll Co. Rec. Association	23	Microbiological Monitoring - None Submitted	25
T0550	Three Oaks Resort	23	Microbiological Monitoring - None Submitted	25
T0563	Timberline R.V. Park	23	Microbiological Monitoring - None Submitted	25
T0640	USCOE Dw13 Dublin	23	Microbiological Monitoring - None Submitted	25
T0751	USCOE Trwp101 Beaver Rec Area	23	Microbiological Monitoring - None Submitted	25
T0779	USFS Experiment Station	23	Microbiological Monitoring - None Submitted	25
T0808	USFS Richland Creek	23	Microbiological Monitoring - None Submitted	25
T0829	Lost Bridge Village Resort	23	Microbiological Monitoring - None Submitted	25

<i>PWS ID</i>	<i>PWS Name</i>	<i>Vio. Type</i>	<i>Definition</i>	<i>Population</i>
T0832	Wagon Wheel Restaurant	23	Microbiological Monitoring - None Submitted	25
T0850	White Hole Acres Resort	23	Microbiological Monitoring - None Submitted	25
T0870	Millwood Landing Golf & Rv Resort	23	Microbiological Monitoring - None Submitted	25
T0908	Marty's Grocery & Deli	23	Microbiological Monitoring - None Submitted	25
T0920	Gayle's Family Restaurant	23	Microbiological Monitoring - None Submitted	25
T0930	Wild Bill's Canoe Rental	23	Microbiological Monitoring - None Submitted	25
T0960	Branding Iron Family Steakhouse	23	Microbiological Monitoring - None Submitted	25
T0981	Tanyard Springs Village Resort	23	Microbiological Monitoring - None Submitted	25
T0984	Valentino's	23	Microbiological Monitoring - None Submitted	25
T0985	Jerry's Bar-B-Q	23	Microbiological Monitoring - None Submitted	25
T0991	Elizabeth Grocery	23	Microbiological Monitoring - None Submitted	25
T0992	Ozark Natural Science Center	23	Microbiological Monitoring - None Submitted	25
T1003	Cedar Falls Motel	23	Microbiological Monitoring - None Submitted	25
T1031	Sweet Basil Gourmet Shoppe	23	Microbiological Monitoring - None Submitted	25
T1053	USCOE NF Howard Cove Rec Area	23	Microbiological Monitoring - None Submitted	25
T1054	Riverlake Outdoor Center	23	Microbiological Monitoring - None Submitted	25
T1058	The Rock Station	23	Microbiological Monitoring - None Submitted	25
T1062	Ozan Country Club	23	Microbiological Monitoring - None Submitted	25
T1064	Statue Road Inn	23	Microbiological Monitoring - None Submitted	25
T1068	Norfolk Lake Estates - Mohr Addition	23	Microbiological Monitoring - None Submitted	25
T1069	P. J. 'S Resort	23	Microbiological Monitoring - None Submitted	25
T1075	Gravity Golf International	23	Microbiological Monitoring - None Submitted	25
T1076	Spillway Resort	23	Microbiological Monitoring - None Submitted	25
T1080	Johnson's Mr K Foods	23	Microbiological Monitoring - None Submitted	25
T1088	Crossroads Café	23	Microbiological Monitoring - None Submitted	25

Appendix - D

<i>PWS ID</i>	<i>PWS Name</i>	<i>Viol. Type</i>	<i>Definition</i>	<i>Population</i>
540	Shady Acres Mobile Home Park	25	Microbiological Monitoring - No Resamples Of Positive Sample	120
681	Morning Star Water Association	25	Microbiological Monitoring - No Resamples Of Positive Sample	1315
703	Mt Zion Water Association	25	Microbiological Monitoring - No Resamples Of Positive Sample	232
806	Wiederkehr Village Water Dept	25	Microbiological Monitoring - No Resamples Of Positive Sample	80
N0078	Phillips Spring Valley	25	Microbiological Monitoring - No Resamples Of Positive Sample	25
T0077	Blackburn's Resort	25	Microbiological Monitoring - No Resamples Of Positive Sample	25
T0188	Dequeen Country Club	25	Microbiological Monitoring - No Resamples Of Positive Sample	25
T0296	Hog Haven	25	Microbiological Monitoring - No Resamples Of Positive Sample	25
T0442	Oyster Bay Restaurant	25	Microbiological Monitoring - No Resamples Of Positive Sample	25
T0446	Peters General Store	25	Microbiological Monitoring - No Resamples Of Positive Sample	25
T0463	Rim Shoals Trout Resort	25	Microbiological Monitoring - No Resamples Of Positive Sample	25
T0558	Trails End Resort	25	Microbiological Monitoring - No Resamples Of Positive Sample	25
T0799	USFS Long Pool	25	Microbiological Monitoring - No Resamples Of Positive Sample	25
T1020	Roving Rambler's R.V. Park	25	Microbiological Monitoring - No Resamples Of Positive Sample	25
T1056	Conway Dinner Club	25	Microbiological Monitoring - No Resamples Of Positive Sample	25
T1087	Johnsville Grocery	25	Microbiological Monitoring - No Resamples Of Positive Sample	25

Appendix - E

<i>PWS ID</i>	<i>PWS Name</i>	<i>Violation Type</i>	<i>Definition</i>	<i>Population</i>
286	Hartman Waterworks	36	Swtr Monitoring	525
347	St Paul Waterworks	36	Swtr Monitoring	175
410	Wye Mountain Water Association	36	Swtr Monitoring	1120
442	Hector Waterworks	36	Swtr Monitoring	1300
511	Sebastian Lake Utility Co	36	Swtr Monitoring	505
567	Elkins Waterworks	36	Swtr Monitoring	1223
603	Danville Waterworks	36	Swtr Monitoring	913
605	Plainview Water Department	36	Swtr Monitoring	1000
660	Casa Water Dept	36	Swtr Monitoring	1290
669	Compton Waterworks	36	Swtr Monitoring	715
694	Crystal Springs Village	36	Swtr Monitoring	180
739	Timber Ridge Ranchs Of Ar	36	Swtr Monitoring	200
787	Little River Co Rda	36	Swtr Monitoring	1970
845	Central Logan County Pwfb	36	Swtr Monitoring	858
846	Tri County Rwdd-Moores	36	Swtr Monitoring	413
867	North Garland County Water District	36	Swtr Monitoring	813
T0361	Midway Park Restaurant	36	Swtr Monitoring	25
T0450	Promise Land Resort	36	Swtr Monitoring	25
T0821	USFS White Rock	36	Swtr Monitoring	25
T0963	Buffalo National River U4-02 Lost Valley Cg	36	Swtr Monitoring	25
T0965	Buffalo National River U4-08 Ozark Cg	36	Swtr Monitoring	25

Appendix - F

<i>PWS ID</i>	<i>PWS Name</i>		<i>Violation Type</i>	<i>Definition</i>	<i>Population</i>
003	Calico Rock Waterworks	41	Swtr Treatment Technique		1600
026	Big Flat Waterworks	41	Swtr Treatment Technique		500
030	Kingswood Estates Waterworks	41	Swtr Treatment Technique		95
076	Gray Rock Water Association	41	Swtr Treatment Technique		780
088	Amity Waterworks	41	Swtr Treatment Technique		951
136	Mulberry Waterworks	41	Swtr Treatment Technique		1525
394	Prescott Waterworks	41	Swtr Treatment Technique		4103
397	Jasper Waterworks	41	Swtr Treatment Technique		807
404	Camden Waterworks	41	Swtr Treatment Technique		15418
412	Perry Waterworks	41	Swtr Treatment Technique		261
413	Perryville Waterworks	41	Swtr Treatment Technique		1330
422	Glenwood Water Department	41	Swtr Treatment Technique		1783
498	Waldron Waterworks	41	Swtr Treatment Technique		2800
573	Prairie Grove Waterworks	41	Swtr Treatment Technique		3000
580	Pangburn Waterworks	41	Swtr Treatment Technique		2260
616	Oden - Pencil Bluff Water Association	41	Swtr Treatment Technique		350
626	Guion Waterworks	41	Swtr Treatment Technique		255
670	Deer Water Association	41	Swtr Treatment Technique		840
N0072	Alcoa Bauxite	41	Swtr Treatment Technique		25
T0119	Camp Joseph Pfeifer	41	Swtr Treatment Technique		25

Appendix - G

<i>PWS ID</i>	<i>PWS Name</i>	<i>Contaminant Type</i>	<i>Definition</i>	<i>Population</i>
170	Mc Gehee Waterworks	1025	Fluoride	5018
758	SDM Water Association	1025	Fluoride	251
N0072	Alcoa Bauxite	1025	Fluoride	25
N0121	Village Square Shopping Center	2985	Trichloroethene	2500
N0121	Village Square Shopping Center	2987	Tetrachloroethene	2500
N0134	N.S.C. International	2383	Pcbs	119
T0256	Hiwasse Country Store	1040	Nitrate	25

Appendix - H

<i>PWS ID</i>	<i>PWS Name</i>	<i>Contaminant</i>	<i>Definition</i>	<i>Population</i>
078	Holiday Island Waterworks	4010	Radium	2950
500	Leslie Water System	4010	Radium	678
680	Mt Sherman Water Association	4010	Radium	587
758	SDM Water Association	4010	Radium	251
815	South Mountain Water Association	4010	Radium	417