SAFE DRINKING WATER ACT VIOLATIONS 1998

NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER SUPPLY ADMINISTRATION
BUREAU OF SAFE DRINKING WATER

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Introduction

This is New Jersey's third annual report prepared to fulfill one of the statutory requirements of the 1996 Amendments to the Safe Drinking Water Act. The Safe Drinking Water Act requires States to prepare an annual report on violations of the national primary drinking water regulations by public water systems in the State. The first report covered the period January 1, 1996 through December 31, 1996 and was submitted to the U.S. Environmental Protection Agency (USEPA) in January 1998; the second report was submitted on July 1, 1998 and covers the period January 1, 1997 through December 31, 1997. This third report covers the period of January 1, 1998 through December 31, 1998. This full report will be made available to the public and allows all citizens in the State of New Jersey to have greater access to drinking water quality information for the State in a nationally standardized format. The information in this report is for violations of (I) maximum contaminant levels, (II) treatment requirements, (III) variances and exemptions, and (IV) monitoring requirements determined to be significant by the Administrator (of USEPA) after consultation with the States. Each state is required to publish and distribute a summary report that indicates where this full report is available for review. The statutory language is presented in Appendix A.

In New Jersey, copies of this full report for the period January 1, 1998 through December 31, 1998 will be sent to the state library for distribution through its system, and to the county and local health officers.

The Drinking Water Program: An Overview

USEPA established the Public Water System Supervision Program under the authority of the 1974 Safe Drinking Water Act. Under the Safe Drinking Water Act and the 1986 Amendments, USEPA sets national limits on contaminant levels in drinking water to ensure that drinking water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs). For some regulations, USEPA establishes treatment techniques in lieu of an MCL to control unacceptable levels of contaminants in water. USEPA also regulates how often public water systems (PWSs) monitor their water for contaminants and report the monitoring results to the States or USEPA. Generally, the larger the population served by a water system, the more frequent the monitoring and reporting (M/R) requirements. In addition, USEPA requires PWSs to monitor for unregulated contaminants to provide data for future regulatory development. Finally, USEPA requires PWSs to notify the public when they have violated these regulations. The 1996 Amendments to the Safe Drinking Water Act 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 Safe Drinking Water Act allows States and Territories to seek USEPA approval to administer their own Public Water Supply Supervision Programs. The authority to run a

Maximum Contaminant Level

Under the Safe Drinking Water Act, USEPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs). The regulated contaminants and their respective federal MCLs are listed in Table 1.

New Jersey laws outline specific procedures for setting drinking water standards in the State based on risk-based goals. New Jersey drinking water standards are required to be equal to or more stringent than federal standards. As a result of applying this New Jersey approach to drinking water contaminants, there are twelve regulated volatile organic compounds and one regulated synthetic organic compound listed in Table 2 with New Jersey MCLs that are more stringent than the federal MCLs. In addition, there are five volatile organic compounds regulated as primary contaminants by New Jersey that are not federally regulated. These contaminants are listed in Table 3. The remaining nine USEPA regulated volatile organic compounds share the same MCL, federal or state.

Treatment Techniques

For some contaminants, USEPA establishes treatment techniques in lieu of an MCL to control unacceptable levels of certain contaminants. For example, treatment techniques have been established for viruses, bacteria, and turbidity.

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 USEPA 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

Conclusions

A summary of drinking water MCL violations, treatment technique violations and significant monitoring/reporting (M/R) violations for New Jersey in 1998 is presented in Table 1. Individual water system MCL violation data for community and noncommunity water systems are presented in Appendices B and C, respectively. Appendix D lists community water systems action level violations of the Lead and Copper Rule; nontransient noncommunity Lead and Copper Rule violations are presented in Appendix E.

The greatest difference between 1997 and 1998 is the increase in the number of gross alpha MCL violations and radium 226/228 MCL violations. There was one gross alpha MCL violation in 1997 and nine in 1998, and one Ra 226/228 MCL violation in 1997 and five in 1998. The increase in number of these MCL violations is directly attributable to NJDEP's proactive compliance monitoring program and a cooperative investigation of the Kirkwood-Cohansey aquifer conducted with the U.S. Geological Survey (USGS). It should be noted that all gross alpha activity results were derived from a rapid analysis method in which the measurements were made within 48 hours of sample collection.

Following is a summary of 1998 violation data based on each contaminant group.

Microbiological

Total Coliform Rule:

Microbiological quality as measured by the total coliform test continues to yield very good results for the monitoring performed in 1998. Only 2.4% (106 out of 4,464) public water systems (PWS) had a total coliform MCL violation. Specifically, 105 PWS had a total of 113 non-acute (monthly) MCL violations; twenty-four of those 105 PWS also had one acute MCL violation each. One additional PWS had one acute MCL violation with no non-acute MCL violations. Of 20,387 total coliform test result summary reports sent to NJDEP, which summarize the results of between one and several hundred microbiological samples taken from each public water system either monthly or quarterly, there were only 138 (0.7 %) MCL violations. Therefore, 99.3 % of the time that public water systems sampled, the results were within standards.

Monitoring compliance continues to improve, but is still not as good as those states that provide the monitoring services for the water systems. Out of 4,464 PWS, 972 PWS (22%) missed sampling at least once during 1998, and 1,736 (8.5%) out of 20,387 total coliform test result summary reports were missed. This shows an improvement in the number of monitoring violations compared to previous years. The improvement continues to come from both the continued consolidation of small community systems and increased contact with noncommunity systems.

vulnerable areas of the State. These data were used to issue pesticide waivers for 1996-1998. There were no MCL or monitoring violations for SOCs in 1998.

Total Trihalomethanes:

There were no public water systems with an MCL violation for total trihalomethanes in 1998. This is an improvement over one MCL violation for total trihalomethanes in 1997. Monitoring compliance for total trihalomethanes remains very high; there are only four monitoring and reporting (M/R) violations for trihalomethanes in 1998. In New Jersey, there are 121 systems that serve either groundwater or surface water to more than 10,000 residents and smaller water systems serving surface water that are required to sample for trihalomethanes.

Inorganic Chemicals (IOCs)

IOC Rule:

Except for nitrate, there were no MCL violations for inorganic chemicals in 1998. In general, nitrate MCL violations have increased since 1993 when the frequency of monitoring changed from once every three years to annually. Nitrate MCL violations are much more likely to occur in noncommunity water systems than community water systems. As in 1997, no community water system had a nitrate MCL violation in 1998.

In general, the counties with the greatest number of nitrate MCL violations are the agricultural counties in the southern part of the State. There were 17 noncommunity water systems with nitrate MCL violations in 1998. This is a decrease from 19 noncommunity water systems with nitrate MCL violations in 1997. It should be noted that nine of the seventeen noncommunity water systems are transient systems. The rule allows these transient systems to have nitrate up to 20 mg/l with public notice if there is no exposure to infants and pregnant women.

During the last few years, the monitoring of noncommunity water systems for nitrate has improved. Although the number of systems with nitrate monitoring violations is high, there continues to be significant improvement over time. In 1997, 1035 PWS had a total of 1258 monitoring violations, while in 1998, 596 PWS had 696 monitoring violations. The Bureau of Safe Drinking Water will continue these improvements through additional contact with county and local health agencies and the water systems.

Asbestos monitoring was not required in 1998. Results in the prior compliance monitoring period (1993-1995) were excellent with no MCL violations and few monitoring and reporting (M/R) violations.

Summary:

In summary, the Bureau of Safe Drinking Water continues to make progress in addressing MCL, treatment technique and monitoring violations. Table 4 shows the total number of violations, by contaminant type, for 1998. There are several areas that still need improvement, with monitoring and reporting (M/R) for small water systems requiring the greatest improvement. The Bureau of Safe Drinking Water is formulating capacity development strategies to assist public water systems with a history of significant non-compliance to achieve compliance.

Table 1
Violations Table
(with SDWIS Codes)

State:	New Jersey
Reporting Interval:	January 1, 1998 - December 31, 1998

SDWIS Codes		MCL (mg/l)[i]	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							
2981	1,1,1-Trichloroethane	0.2*	0	0			490	181
2977	1,1-Dichloroethylene	0.007*	3	3			490	181
2985	1,1,2-Trichloroethane	.005*	0	0			490	181
2378	1,2,4-Trichlorobenzene	.07*	0	0			490	181
2931	1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0	0			0	0
2980	1,2-Dichloroethane	0.005*	3	3			490	181
2983	1,2-Dichloropropane	0.005	0	0			490	181

State:	New Jersey
Reporting Interval:	January 1, 1998 - December 31, 1998

SDWIS Codes		MCL (mg/l)[i]	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
2380	cis-1,2-Dichloroethylene	0.07	0	0			490	181
2031	Dalapon	0.2	Statewide waiver	Statewide waiver			Statewide waiver	Statewide waiver
2035	Di(2-ethylhexyl)adipate	0.4	Statewide waiver	Statewide waiver			Statewide waiver	Statewide waiver
2039	Di(2-ethylhexyl)phthalate	0.006	Statewide waiver	Statewide waiver			Statewide waiver	Statewide waiver
2964	Dichloromethane	0.005*	1	1			490	181
2041	Dinoseb	0.007	0	0			0	0
2032	Diquat	0.02	Statewide waiver	Statewide waiver			Statewide waiver	Statewide waiver
2033	Endothall	0.1	Statewide waiver	Statewide waiver			Statewide waiver	Statewide waiver
2005	Endrin	0.002	Statewide waiver	Statewide waiver			Statewide waiver	Statewide waiver

State:	New Jersey
Reporting Interval:	January 1, 1998 - December 31, 1998

SDWIS Codes		MCL (mg/l)[i]	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
2015	Methoxychlor	0.04	Statewide waiver	Statewide waiver			Statewide waiver	Statewide waiver
2989	Monochlorobenzene	0.1	0	0			490	181
2968	o-Dichlorobenzene	0.6	0	0			490	181
2969	para-Dichlorobenzene	0.075	0	0			490	181
2383	Total polychlorinated biphenyls	0.0005	Statewide waiver	Statewide waiver			Statewide waiver	Statewide waiver
2326	Pentachlorophenol	0.001	0	0			0	0
2987	Tetrachloroethylene	0.005*	4	4			490	181
2984	Trichloroethylene	0.005*	5	5			490	181
2996	Styrene	0.1	0	0			490	181
2991	Toluene	1	0	0			490	181
2979	trans-1,2-Dichloroethylene	0.1	0	0			490	181
2955	Xylenes (total)	10*	0	0			490	181

State:	New Jersey
Reporting Interval:	January 1, 1998 - December 31, 1998

SDWIS Codes		MCL (mg/l)[i]	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
2950	Total trihalomethanes	0.10	0	0			4	4
	Subtotal total trihalomethanes		0	0			4	4

State:	New Jersey
Reporting Interval:	January 1, 1998 - December 31, 1998

SDWIS Codes		MCL (mg/l)[i]	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
1035	Mercury	0.002	0	0			3	6
1040	Nitrate	10 (as Nitrogen)	17	17			696	596
1041	Nitrite	1 (as Nitrogen)	0	0			2	2
1045	Selenium	0.05	0	0			0	0
1085	Thallium	0.002	0	0			9	4
1038	Total nitrate and nitrite	10 (as Nitrogen)	see SDWIS code 1040	(see SDWIS code 1040)			(see SDWIS code 1040)	(see SDWIS code 1040)

State:	New Jersey
Reporting Interval:	January 1, 1998 - December 31, 1998

SDWIS Codes		MCL (mg/l)[i]	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							
21	Acute MCL violation	Presence	25	25				
22	Non-acute MCL violation	Presence	113	105				
23,25	Major routine and follow up monitoring						1736	972
28	Sanitary survey[ii]						0	0
	Subtotal Total Coliform Rule		138	106			1736	972

State:	New Jersey
Reporting Interval:	January 1, 1998 - December 31, 1998

SDWIS Codes		MCL (mg/l)[i]	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							
51	Initial lead and copper tap M/R						50	20
52	Follow-up or routine lead and copper tap M/R						0	0
58,62	Treatment Installation				1	1		
65	Public education				0	0		
	Subtotal Lead & Copper Rule				1	1	50	20

[i] Values are in milligrams per litre (mg/l), unless otherwise specified.

[ii] Number of major monitoring violations for sanitary survey under the Total Coliform Rule.

* See Tables 2 and 3. Some New Jersey drinking water standards are more stringent than the federal drinking water standards. The MCL violations are based on New Jersey drinking water standards.

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 USEPA 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: USEPA 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 USEPA's schedule or methodology is in violation [40 CFR 141].

States must report monitoring violations that are significant as determined by the USEPA 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 90% 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. USEPA 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. USEPA 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.

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 USEPA.

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 sanitary survey is not performed.

Treatment Techniques: A water disinfection process that USEPA 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

Table 2

Volatile Organic Chemicals Regulated as Primary Contaminants by NJDEP and USEPA

Contaminant	New Jersey MCL (ug/l)	USEPA MCL (ug/l)
Benzene	1	5
Carbon Tetrachloride	2	5
Chlordane	0.5	2
1,2-Dichloroethane	2	5
1,2-Dichloroethylene	2	7
Methylene Chloride	3	5
Monochlorobenzene	50	100
Tetrachloroethylene	1	5
1,2,4-Trichlorobenzene	9	70
1,1,1-Trichloroethane	30	200
1,1,2-Trichloroethane	3	5
Trichloroethylene	1	5
Xylenes	1,000	10,000

Table 3

Volatile Organic Chemicals Regulated as Primary Contaminants by NJDEP that are not Federally Regulated

Contaminant	New Jersey MCL (ug/l)
Meta-Dichlorobenzene	600
1,1-Dichloroethane	50
Methyl tertiary Butyl Ether	70
Napthalene	300
1,1,2,2-Tetrachloroethane	1

Appendix A

The Safe Drinking Water Act Amendments of 1996 includes the following as a specific requirement:

(A) ANNUAL REPORT BY STATE-

Section 1414 (c)(3)(A)(I)

IN GENERAL. - Not later than January 1, 1998, and annually thereafter, each State that has primary enforcement responsibility under section 1413 shall prepare, make readily available to the public, and submit to the Administrator an annual report on violations of national primary drinking water regulations by public water systems in the State, including violations with respect to (I) maximum contaminant levels, (II) treatment requirements, (III) variances and exemptions, and (IV) monitoring requirements determined to be significant by the Administrator (of USEPA) after consultation with the States.

Section 1414(c)(3)(A)(ii)

DISTRIBUTION -- The State shall publish and distribute summaries of the report and indicate where the full report is available for review.

Appendix B: Community Water System 1998 MCL and Treatment TechniqueViolations
New Jersey Department of Environmental Protection

PWSID	System Name	Fac	Contaminant Name	Conc	Viol Date	Tr	Comments
1431001	PEQUANNOCK TWP WATER DEP	-	Coliform	-	01/01/1998	E	Monthly MCL violation; RTC 2/28/98
1435003	PICATINNY ARSENAL-ARDC	-	Coliform	-	12/01/1998	E	Monthly MCL violation; RTC 1/31/99
1613001	N.J.D.W.S.C. WANAQUE NO.	01	Lead/Copper		/ /		ACO requires corrosion control treatment by 9/30/01
1904007	COLBY WATER CO	-	Coliform	-	09/30/1998	N	Monthly MCL violation; RTC 10/31/98
1905002	CULVER LAKE WATER COMPAN	-	Coliform	-	07/31/1998	I	Monthly MCL violation; RTC 11/30/98
1905002	CULVER LAKE WATER COMPAN	-	Coliform	-	08/31/1998	I	Monthly MCL violation; RTC 11/30/98
1905002	CULVER LAKE WATER COMPAN	-	Coliform	-	09/30/1998	I	Monthly MCL violation; RTC 11/30/98
1905002	CULVER LAKE WATER COMPAN	-	Coliform	-	10/31/1998	I	Monthly MCL violation; RTC/11/30/98
1915001	NEWTON WATER & SEWER UTI	01	Turbidity		12/31/1998		Filtration system to be on-line by 11/30/03
1916001	OGDENSBURG W DEPT	-	Coliform	-	12/31/1998	E	Monthly MCL violation; RTC 1/31/99
1918008	ROAMIN ACRES WATER SYSTE	-	Coliform	-	10/31/1998	N	Monthly MCL violation; RTC 11/30/98
1922014	GREAT GORGE TERRACE ASSO	-	Gross Alpha Particle Activity	60.6	06/24/1998	R	Unresolved; PN issued
1922014	GREAT GORGE TERRACE ASSO	-	Combined Radium (226 & 228)	47.2	06/24/1998	R	Unresolved; PN issued
1922028	VALLEY VIEW APARTMENTS	-	Gross Alpha Particle Activity	46.5	06/24/1998	E	PN issued; RTC 12/22/98
2110003	HARKER'S HOLLOW WATER AS	-	Coliform	-	11/30/1998	N	Monthly MCL violation; RTC 12/1/98

Appendix C: Noncommunity Water System 1998 MCL Violations
New Jersey Department of Environmental Protection

PWSID	System Name	Contaminant Name	Conc (ppb)	Viol Date	Tr	Comments	Status
0808307	GIANT STEPS NURSERY SCHO	Coliform	-	10/19/1909		Monthly MCL violation; RTC 11/13/98	
0808310	OASIS BALLROOM	Coliform	-	10/19/1998		Monthly MCL violation; RTC 11/13/98	
0811319	DEVONES FAMILY TAVERN	Coliform	-	09/11/1998		Monthly MCL violation; RTC 11/25/98	
0818461	DAIRY QUEEN	Coliform	-	02/24/1998		Monthly MCL violation; RTC 6/10/98	
0820300	HUNTSMAN GROVE CORP	1,2-Dichloroethane	5.00	07/07/1998		1st samp; bttld wtr for drink; qterly mon; will close sys in '99	
1021305	HUNTERDON MED CTR-WELL #	Coliform	-	11/01/1998		Monthly MCL violation; RTC 12/1/98	
1021305	HUNTERDON MED CTR-WELL #	Coliform	-	11/30/1998		Acute MCL violation; RTC 12/1/98	
1022310	SALEM INDUSTRIAL PARK	1,1 - Dichloroethylene	5.00	01/16/1998	E	Trtmnt not maintained properly;ordered to provide bttld wtr & PN	
1022357	SALEM INDUSTRIAL PARK	1,1 - Dichloroethylene	4.90	01/16/1998	E	Trtmnt not maintained properly;ordered to provide bttld wtr & PN	
1022361	SALEM SQUARE	1,1 - Dichloroethylene	23.1	03/13/1998	E	Trtmnt not maintained properly;ordered to provide bttld wtr and PN	
1101309	MAIN LINE CHRYSLER PLYMO	Nitrate	-	08/20/1998		New well installed; RTC 1/6/99	
1106320	BRISTOL MYERS, SQUIBB CO WELL	Coliform	-	03/31/1998		Monthly MCL violation; RTC 7/98	
1106338	PENNINGTON HAPPY SCHOOL	Trichloroethylene	9.95	02/04/1998		9.5, ND, ND, ND; RTC 11/6/98	
1106373	PUBLIC WORK FACILITY	Coliform	-	01/07/1998		Monthly MCL violation; RTC 9/16/98	
1106373	PUBLIC WORK FACILITY	Coliform	-	04/01/1998		Monthly MCL violation; RTC 9/16/98	
1113308	PRINCETON ARMS STRIP STO	Nitrate	-	12/30/1998	I	Treatment installed; RTC 6/17/98	
1309320	MERCHANTS WAY SHOPPING CTR	Coliform	-	10/02/1998	N	Monthly MCL violation; RTC 12/4/98	
1309328	DELICIOUS ORCHARD MARKET	Coliform	-	01/01/1998		Monthly MCL violation; RTC 2/27/98	
1309328	DELICIOUS ORCHARD MARKET	Coliform	-	03/01/1998		Monthly MCL violation; RTC 4/30/98	
1309328	DELICIOUS ORCHARD MARKET	Coliform	-	10/01/1998		Monthly MCL violation; RTC 12/31/98	
1309328	DELICIOUS ORCHARD MARKET	Coliform	-	11/01/1998		Monthly MCL violation; RTC 12/31/98	
1319337	SALLY D'S	Coliform	-	09/16/1998	N	Monthly MCL violation; RTC 9/30/98	
1319389	HOWELL OFFICE PLAZA	Coliform	-	04/20/1998	N	Monthly MCL violation; RTC 5/22/98	
1319389	HOWELL OFFICE PLAZA	Coliform	-	04/20/1998	N	Acute MCLviolation; RTC 5/22/98	
1326325	OLD TENNENT-SCOTTS HALL	Coliform	-	06/22/1998	N	Monthly MCL violation; RTC 7/17/98	
1328302	FIRESIDE LOUNGE	Coliform	-	07/13/1998	N	Monthly MCL violation; RTC 9/14/98	
1332314	M & M REST HOME	Coliform	-	05/08/1998	N	Monthly MCL violation; RTC 6/8/98	
1336310	ASSOCIATED HUMANE SOCIET	Coliform	-	08/13/1998	N	Monthly MCL violation; RTC 11/13/98	
1336310	ASSOCIATED HUMANE SOCIET	Coliform	-	10/13/1998	N	Monthly MCL violation; RTC 11/13/98	
1406307	CHESTER PROF. BLDG	Coliform	-	01/14/1998		Monthly MCL violation; RTC 3/11/98	

Appendix C: Noncommunity Water System 1998 MCL Violations
New Jersey Department of Environmental Protection

PWSID	System Name	Contaminant Name	Conc (ppb)	Viol Date	Tr	Comments	Status
1710315	INDIAN RUN FAMILY CAMPGR	Nitrate	-	02/26/1998	N	System inactive 4/8/99	
1714301	T.A.M.C.A.	Nitrate	-	02/19/1998	N	MCL ongoing; public notice issued *	
1808316	OAKHURST DAY CAMP	Coliform	-	04/07/1998		Monthly MCL violation	RTC 7/30/98
1808316	OAKHURST DAY CAMP	Coliform	-	06/10/1998		Monthly MCL violation	RTC 7/30/98
1902301	HOLIDAY MOTEL	Coliform	-	07/17/1998	N	Monthly MCL violation	RTC 12/31/98
1902301	HOLIDAY MOTEL	Coliform	-	10/21/1998	N	Monthly MCL violation	RTC 12/31/98
1902301	HOLIDAY MOTEL	Coliform	-	10/21/1998	N	Acute MCL violation	RTC 12/31/98
1902317	RAYS INN	Coliform	-	09/02/1998	I	Monthly MCL violation	RTC 2/26/98
1902320	REDEEMER LUTHERAN NURSERY	Coliform	-	07/22/1998	N	Monthly MCL violation	RTC 11/03/98
1904340	SCORE BOARD	Coliform	-	05/22/1998	N	Monthly MCL violation	RTC 7/30/98
1904356	LAKE LACKAWANNA CADDY SHACK	Coliform	-	04/30/1998	N	Monthly MCL violation	RTC 1/1/98
1905321	BRANCHVILLE IGA	Coliform	-	07/16/1998	N	Monthly MCL violation	RTC 10/22/98
1905321	BRANCHVILLE IGA	Coliform	-	07/16/1998	N	Acute MCL violation	RTC 10/22/98
1905325	DALES MARKET	Coliform	-	04/24/1998	N	Monthly MCL violation	RTC 4/28/98
1905325	DALES MARKET	Coliform	-	04/24/1998	N	Acute MCL violation	RTC 4/28/98
1905328	THE PINES INN/PINES RETI	Coliform	-	09/29/1998	N	Monthly MCL violation	RTC 11/27/98
1905328	THE PINES INN/PINES RETI	Coliform	-	09/29/1998	N	Acute MCL violation	RTC 11/27/98
1908300	GREEN TWP. MUNICIPAL BLD	Coliform	-	09/03/1998	N	Acute MCL violation	RTC 10/31/98
1909300	THE MARKET PLACE	Coliform	-	06/08/1998	N	Monthly MCL violation	RTC 7/13/98
1910329	MC DONALDS	Coliform	-	09/30/1998	N	Monthly MCL violation	RTC 10/31/98
1910329	MC DONALDS	Coliform	-	09/30/1998	N	Acute MCL violation	RTC 10/31/98
1911305	HAYLOFT RESTAURANT	Coliform	-	01/01/1998	N	Monthly MCL violation	RTC 3/8/98
1911336	HARDYSTON GARAGE	Coliform	-	04/22/1998	N	Monthly MCL violation; inact, not a PWS	
1911339	WINNER'S	Coliform	-	01/21/1998	N	Monthly MCL violation	RTC 3/5/98
1911339	WINNER'S	Coliform	-	02/09/1998	N	Monthly MCL violation	RTC 3/5/98
1914302	TRI-STATE MALL (WELL 2)	Coliform	-	06/30/1998	N	Monthly MCL violation	RTC 7/13/98
1914303	MCDONALD'S RESTAURANT	Coliform	-	12/22/1998	N	Monthly MCL violation	RTC 2/28/98
1914303	MCDONALD'S RESTAURANT	Coliform	-	12/22/1998	N	Acute MCL violation	RTC 2/28/98
1914313	HIGH PT ST PK-SAWMILL CAMP SIT	Coliform	-	07/29/1998	N	Monthly MCL violation	RTC 10/15/98
1914313	HIGH PT ST PK-SAWMILL CAMP SIT	Coliform	-	08/31/1998	N	Monthly MCL violation	RTC 10/15/98

Appendix C: Noncommunity Water System 1998 MCL Violations
New Jersey Department of Environmental Protection

PWSID	System Name	Contaminant Name	Conc (ppb)	Viol Date	Tr	Comments	Status
2104312	L.E. WALTERS AND SONS, INC.	Coliform	-	09/18/1998		Monthly MCL violation; RTC 9/29/98	
2105321	VICTAULIC INC.	Nitrate	-	06/03/1998	N	MCL ongoing; instructed to provide contin PN	
2106308	BIG K GENERAL STORE	Coliform	-	11/12/1998	N	Monthly MCL violation; RTC 12/29/98	
2109306	PRINCETON BLAIRSTOWN CTR	Coliform	-	06/02/1988	N	Monthly MCL violation; RTC 7/16/98	
2111308	THELNN AT MILLRACE POND	Coliform	-	10/19/1998	N	Monthly MCL violation; RTC 12/3/98	
2112310	RIVIERA BAR & GRILL	Coliform	-	06/01/1998	N	Monthly MCL violation; RTC 10/30/98	
2112310	RIVIERA BAR & GRILL	Coliform	-	09/03/1998	N	Monthly MCL violation; RTC 10/30/98	
2112322	INDEPENDENCE COMMUNITY C	Coliform	-	10/12/1998	N	Monthly MCL violation; RTC 10/22/98	
2112324	GREAT MEADOWS REGIONAL	1,2-Dichloroethane	8.50	12/14/1998		RTC after softener disconnected; RTC 3/23/99	
2113321	GULF TRUCK STOP	Coliform	-	10/20/1998	N	Monthly MCL violation; RTC 10/28/98	
2122327	WASHINGTON DRIVING RANGE	Coliform	-	05/11/1998		Monthly MCL violation; RTC 8/5/98	
2122327	WASHINGTON DRIVING RANGE	Coliform	-	05/11/1998		Acute MCL violation; RTC 8/5/98	

KEY: Conc = Concentration: Volatile organic chemical concentration is expresses as parts per billion or ppb; Viol Date = Violation Date; Tr = Treatment status: R = Required but not installed, N = Not required, I = Installed, E = Existing; Comments: RTC = Return to Compliance, PN = Public Notice, CWS = Community Water System

Appendix D: Community Water System 1998 Action Level Violations
New Jersey Department of Environmental Protection

PWSID	System Name	Cont Name	Conc	Viol Date	Tr	Comments
2117002	VALLEY VIEW ESTATES	Lead	.033	12/31/1998	R	Corrosion control treatment to be provided shortly

KEY: Cont Name = Contaminant name; Conc = Concentration in parts per million or ppm; Viol Date = Violation date; Tr = Treatment Status: R = Required, N = Not required, I = Installed, E = Existing; HD = County, Regional or Local Health Department.

Appendix E: Nontransient Noncommunity Water System 1998 Action Level Violations
New Jersey Department of Environmental Protection

PWSID	System Name	Cont Name	Conc	Viol Date	Tr	Comments
0215300	ENGLEWOOD HOSPITAL	Copper	4.4000	06/30/1998	R	Notice of violation10/2/98; no receipt of corrosion control
0258300	SADDLE RIVER DAY SCHOOL	Lead	.01900	12/31/1998	R	Notice of violation3/1/99; pub notice rec'd 3/5/99; awaiting
0332322	MAC-N-TOTS NURSERY	Copper	1.7550	12/31/1998	R	Letter sent 6/29/99 requiring treatment
0435367	THOMAS RICHARDS SCHOOL	Lead	.04440	12/31/1998	N	Letter sent on 2/99. Public notice posted on 3/10/99. 1st half
0435381	MUNICIPAL BUILDING	Copper	2.0950	06/30/1998	N	Letter sent on 3/2/99
0436327	ROSADO JOHN & CECILIA #1	Copper	8.2730	12/31/1998	N	TRANSIENT SYS; no further monitoring required
0436327	ROSADO JOHN & CECILIA #1	Lead	.10100	12/31/1998	N	TRANSIENT SYS; no further monitoring required
0436448	ROSADO JOHN #3 (RENTAL S	Lead	.02600	12/31/1998	N	Transient system; no further monitoring required
0511348	CEDAR SQUARE LIMITED	Copper	1.7850	06/30/1998	R	Conducting corr ctrl study acc'd to ltr rec'd by Bur on 4/5/99
0605301	FAIRFIELD TWP INTERMEDIA	Copper	1.7000	12/31/1998	R	Ltr sent on 7/15/99 to correct w/in 45 days or referral to Enf
0605309	FAIRFIELD TWP PRIMARY SCHOOL	Copper	1.9000	12/31/1998	NR	1st viol; ltr sent 3/2/99 reqs add'l samp
0607302	HOPEWELL CREST SCHOOL	Copper	5.5000	12/31/1998	I	Trtmnt installed but not wking properly; conducting corr ctrl
0607311	DEVEROUX FOUNDATION	Copper	5.6500	12/31/1998	R	Ltr sent on 7/15/99 to correct w/in 45 days or referral to Enf
0608300	MYRON POWELL SCHOOL	Copper	2.6000	06/30/1998	I	RTC 12/31/98
0614321	EAST VINELAND SCHOOL	Copper	1.9000	12/31/1998		
0805339	MEREDITH FARMS/KETTLE-COOK CHI	Copper	2.2000	12/31/1998	N	Letter sent on 3/2/99 to require add'l sampling
0805342	FRANKLINVILLE ADULT TRAINING	Copper	6.3850	12/31/1998	N	Letter sent on 3/20/99 to require add'l sampling
0805342	FRANKLINVILLE ADULT TRAINING	Lead	.09380	12/31/1998	N	Letter sent on 3/20/99 to require add'l sampling
0805344	MARYVILLE ALCOHOL REHAB	Copper	2.6450	12/31/1998	R	As above
0805344	MARYVILLE ALCOHOL REHAB	Copper	1.7600	06/30/1998	R	2/6/98 letter sent. 6/29/99 letter requires treatment in 45 days
0805388	TWP OF FRANKLIN	Lead	.03885	06/30/1998	E	Treatment was existing; 1st half 1999 result is below MCL
0805388	TWP OF FRANKLIN	Lead	.07245	12/31/1998	E	As above
0809311	LOGAN GENERATING PLANT	Copper	1.6150	12/31/1998	N	Letter sent on 3/4/99 to require additional sampling
0811331	EARLY DISCOVERIES CHILD	Copper	4.2700	12/31/1998	R	Letter sent on 3/22/99. Working to correct problem; may
0817301	KINGSWAY REGIONAL SCHOOL DISTR	Copper	1.5500	06/30/1998	N	Letter sent on 9/9/98. 2nd half 1999 result is below MCL
0818429	CLASSIC TOYOTA	Copper	11.200	06/30/1998	I	Results are after treatment. Health dept going to check.
0818429	CLASSIC TOYOTA	Copper	11.300	12/31/1998	I	As above
0818430	CHRIS KOCH FORD/HYUNDAI	Copper	3.7350	12/31/1998	N	Letter sent on 3/14/99 to require add'l sampling. Planning to
0818430	CHRIS KOCH FORD/HYUNDAI	Lead	.23350	12/31/1998	N	
1001303	DELAWARE VALLEY REGIONAL	Lead	.02350	12/31/1998		Follow-up sampling being conducted
1006339	UNITED TEL OF N.J.	Copper	1.4000	06/30/1998		Follow-up sampling being conducted
1006353	GREY ROCK VILLAGE	Lead	.10870	06/30/1998	NR	Two rounds of samples below action level

Appendix E: Nontransient Noncommunity Water System 1998 Action Level Violations
New Jersey Department of Environmental Protection

PWSID	System Name	Cont Name	Conc	Viol Date	Tr	Comments
1518361	M & K ASSOCIATES	Copper	8.5000	12/31/1998		
1518361	M & K ASSOCIATES	Lead	.17350	06/30/1998		
1520316	OCEAN CO VO-TEC SCHOOL	Copper	3.2000	06/30/1998		
1520316	OCEAN CO VO-TEC SCHOOL	Lead	.02800	06/30/1998		
1523308	NATIONAL GUARD UTES	Copper	1.8600	12/31/1998		
1530321	BELL ATLANTIC/MANAHAWKIN	Lead	.04110	06/30/1998		
1530321	BELL ATLANTIC/MANAHAWKIN	Copper	5.1600	06/30/1998		
1530327	STAFFORD SQ SHOPPING/SHO	Copper	3.5000	06/30/1998		
1530327	STAFFORD SQ SHOPPING/SHO	Lead	.06500	06/30/1998		
1532304	NAT'L GUARD TUCKERTON	Copper	2.5800	12/31/1998		
1532304	NAT'L GUARD TUCKERTON	Lead	.03840	12/31/1998		
1602307	JIN-A CHILD CARE CENTER	Lead	.09000	06/30/1998	R	Notice of violation 2/26/99;pub notice received 3/23/99;
1611320	DARET INC. WELL #1	Lead	.09250	12/31/1998	R	Notice of violation 2/26/99; pub notice received 3/16/99;
1615316	UNIT METH CHURCH-NEWFOUNDLAND	Lead	.02250	06/30/1998	I	Treatment installed 1997. Letter sent 6/28/99; no other info
1615337	GILGAL BIBLE CHAPEL	Lead	.01550	06/30/1998	I	RTC 1/99; treatment installed; notice of violation issued by
1615353	ESCO PRODUCTS	Lead	.02050	06/30/1998	R	Cont from 1997 vio. No record of Pub notice. Use bottled
1615353	ESCO PRODUCTS	Copper	3.1650	12/31/1998	R	present; Enf action by county 6/25/98; consent order signed
1705306	REMSTERVILLE LEARNING CT	Copper	9.8500	12/31/1998	R	Sys to install treatment; temporarily using bottled water
1714300	MATER DEI NURSING HOME	Lead	.09050	06/30/1998	I	Treatment installed; RTC 1st half 99
1910302	CAMP AUXILIUM	Lead	.06300	12/31/1998	N	
1910302	CAMP AUXILIUM	Copper	1.7600	12/31/1998	N	Was in compliance; furhter monitoring required
1910302	CAMP AUXILIUM	Copper	1.5300	06/30/1998	N	Was in compliance; further monitoring required
1922355	MY SCHOOL	Lead	.02250	12/31/1998	N	Was in compliance; further monitoring required
1924303	BEN FRANKLIN WELL	Lead	.04620	06/30/1998	R	Needs treatment

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